

SELF-EFFICACY AND WORK-READINESS OF DISADVANTAGED FEMALES

by

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(Under the Direction of Jay Rojewski)

ABSTRACT

The Personal Responsibility and Work Reconciliation Act (PRWORA, HR 3734), passed by the 104th U.S. Congress in 1996, replaced Aid to Families with Dependent Children (AFDC) with Temporary Assistance for Needy Families (TANF). TANF requires all welfare recipients, except the elderly and disabled, to enroll in a workforce welfare program after receiving government assistance for 24 months. The passage of PRWORA shifted the emphasis of federal policy away from cash assistance toward a *Work First* or employment approach. The *Work First* approach to welfare raises important training considerations that need to be addressed to better position TANF recipients for employment. Specifically, counselors responsible for training TANF recipients need to know what key factors are most important in identifying training participants' job-readiness. Job-readiness as indicated by an individual's ability to demonstrate the technical skills and interpersonal behavior necessary for employment (Overtoom, 2000).

Using a correlational research design, the relationship of perceived employment self-efficacy and other selected factors to job-readiness for TANF recipients was examined. Based on Bandura's Social Cognitive Theory, a significant relationship between perceived employment self-efficacy and job-readiness was expected.

Participants in this study were 94 female students enrolled in the New Connections to Work (NCTW) program. Results indicate a statistically significant relationship between perceived employment self-efficacy, education and job-readiness. Thus, training and counseling activities with disadvantaged females would be enhanced by including a measure of perceived employment self-efficacy to assess job-readiness.

INDEX WORDS: Self-efficacy, Job-readiness, Disadvantaged, TANF

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B.B.A., Howard University, 1982

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A Dissertation Submitted to the Graduate Faculty of The University of Georgia in Partial
Fulfillment of the Requirements for the Degree

DOCTOR OF PHILOSOPHY

ATHENS, GEORGIA

2005

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ACKNOWLEDGEMENTS

There are numerous individuals I am grateful to for their support and assistance that allowed me to accomplish this endeavor. I would first like to acknowledge my mother who is not here today to read my final dissertation, but laid the foundation for me to accomplish this task. Her dedication and belief in education and lessons on perseverance were the impetus for my determination to succeed. I thank my father, brothers and sisters for their continuous support and encouragement, even when I became tired and wanted to take a break. My son Blair, who believed his mother, could do anything she focused on, and put the time and effort into accomplishing, along with his supportive father and stepmother. I thank my close friends and extended family that constantly gave me encouragement and prayers.

I am indebted to my committee for their untiring support and guidance. I especially thank my chair, Dr. Jay W. Rojewski, for establishing high standards and never growing tired during this extensive process. My advisory committee's expertise and dedication was key to my success. I am grateful for the knowledge I received from Dr. Hill, Dr. Courtenay, Dr. Womble, Dr. Jones, and Dr. Hall on job-readiness, theory, and program development for the disadvantaged. I truly appreciate all of the time they committed over the years.

I thank Dr. Berman Johnson and his staff for allowing me to conduct my research at Dekalb Technical College's New Connection to Work Program. I am truly grateful to Dr. Johnson for his words of wisdom and professional guidance.

Most of all I thank God, for blessing me with the opportunity to complete this research. I pray that it can be used as a catalyst for creating opportunities for others.

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CHAPTER 1

INTRODUCTION

Rationale

The Personal Responsibility and Work Reconciliation Act (PRWORA, HR 3734), passed by the 104th U.S. Congress in 1996, replaced Aid to Families with Dependent Children (AFDC) with block grants to states called Temporary Assistance for Needy Families (TANF). TANF requires all former welfare recipients, except the elderly persons with disability, to enroll in a workforce welfare program after receiving governmental assistance for 24 months. The PRWORA gave individual states more control over the type and degree of assistance given to welfare recipients. The budget for TANF is fixed and, depending on a state's expenditures, eligible applicants can be denied assistance due to a lack of available funding (MacCurdy & O'Brien-Strain, 1997). In order for a state to receive allotted federal block grants, TANF recipients must meet specified work requirements within designated timeframes. To meet these federal work requirements, states must offer job-training programs that will expeditiously prepare TANF recipients to become active in the workforce.

State sponsored job-training programs provide job training skills and job search assistance to TANF participants, to quickly transition them to self-sufficiency via employment. Consistent with most states, Georgia has implemented several job-training programs to assist TANF recipients. One such program is the New Connections to Work program (NCTW) administered through Georgia's 33, 2-year technical colleges and 4-year colleges with technical divisions. NCTW provides TANF recipients with job training, counseling, and placement

assistance through a series of accelerated courses. The program provides services to single parents, displaced homemakers, single pregnant women, TANF recipients, and others. TANF recipients in the job preparation program are primarily disadvantaged females with limited work experience. As a result of their inexperience, these women typically require a multifaceted training approach. To be effective in the abbreviated time period specified by law, counselors responsible for training TANF recipients need to know which program components yield the best employment results. The question is, “What factors are most important for employment success and how best can training accentuate these factors and enhance program success?” In an attempt to focus on one specific aspect of this complex question, this study addressed the question, “How can we capitalize on the literature about job training participants’ self-efficacy and ability to assimilate in the workplace?” More specifically, “How can this information be applied to TANF recipients’ participating in job-training programs? Can this information be used to identify those who may have a greater chance of employment success?”

Previous studies (Lent & Hackett, 1987; Lent, Brown, & Larkin, 1987; Rooney & Osipow, 1992; Schunk, 1984) have provided insight into self-efficacy as it pertains to academic achievement and career decision-making. Results of these past studies indicate that individual self-efficacy is very useful in predicting career-related and academic achievement behaviors. Additional studies (e.g., Barling & Beattie, 1983; Eden & Aviram, 1993; Locke & Latham, 1990; Taylor, Locke, Lee, & Gist, 1984; van Ryn & Vinokur, 1992; Wanberg, Watts, & Rumself, 1996) have focused on the role that self-efficacy plays in work performance, although these studies have focused primarily on white middle-class males. Even with a myriad of studies, there is still little known about the role of self-efficacy with disadvantaged females preparing for employment.

Limited empirical research has examined how self-efficacy affects the job readiness of socioeconomically disadvantaged, racial-ethnic minority, and disabled populations. Although limited, several studies have investigated the career development, career decision-making, and self-efficacy of women from diverse cultures (Chartrand & Rose, 1996; Gainor & Lent, 1998; Hackett & Byars, 1996; Rivera, Anderson, & Middleton, 1999; Tang, 2001) and disabled populations (Fabian, 2000; Mowbray, Bybee, Harris, & McCrohan, 1995; Regenold, Sherman, & Fenzel, 1999; Strauser, 1995). These studies have focused on how self-efficacy, an integral construct in social cognitive career theory (SCCT), interacts with unique factors that affect the career development of individuals from diverse cultures, at-risk situations, and disabled populations. Most of these findings revealed that self-efficacy is a predictor of career-related outcomes. However, they offer little insight as to how self-efficacy affects the job-readiness of individuals from disadvantaged populations.

Bandura (1995) explained that as individuals explore occupational options, they calculate the advantages and disadvantages of each option. Typically, the option perceived as providing the greatest opportunity of successful attainment is selected. This finding reflects the notion of self-efficacy. Self-efficacy, according to Bandura (1986), refers to people's judgments or beliefs in their capabilities to organize and execute the courses of action necessary to achieve designated types of performances. Self-efficacy formed the conceptual basis for this study. Hackett (1995) and Hackett and Betz (1992) confirmed that women's self-efficacy is indicative of their career pursuits and choice of an academic major in college. According to Hackett and Betz (1981), self-efficacy will also determine how a woman copes with and manages internal and external career-related barriers. Thus, self-efficacy is extremely important for understanding the career development of women.

One way to define job-readiness is by using the skills identified in the 1991 Secretary's Commission on Achieving Necessary Skills (SCANS, 1991) report. The SCANS panel included representatives of education, business, labor, and state government who were charged with identifying a common core of skills that constitute *job readiness* (Copple, 1992). The U.S. Secretary of Labor directed SCANS to (a) define the skills needed for employment, (b) propose acceptable levels of proficiency, (c) suggest effective ways to assess proficiency, and (d) develop a dissemination strategy for the nation's schools, businesses, and homes (O'Neil, Allred, & Baker, 1992).

In June 1991, the Commission issued a report that addressed the first two directives, (a) three foundational skills—basic, thinking, and personal qualities, and (b) five competencies—interpersonal skills, information, resources, systems, and technology. The report also identified future skills, termed *high performance skills* that require an ability to manage resources, work productively with others, acquire and use information, master complex systems, and work with a variety of technologies.

Although technical skills are important for establishing workplace readiness, interpersonal and self-management skills are most likely to contribute to problematic work-related performance for economically disadvantaged women (Cains & Woodard, 1993). To address this concern, I assessed the SCANS foundational skills with the Becker (1989) Work Adjustment Profile (BWAP). The BWAP focuses on skill development in four domains—work habits/attitudes, interpersonal relations, cognitive skills, and work performance skills—to derive a composite score reflecting individual work-readiness.

The BWAP measures several key foundational elements identified by the SCANS report as necessary to perform effectively in the workplace, including basic skills, thinking skills, and

personal qualities (Resnick & Wirt, 1996). Ultimately, the workplace readiness skills proposed by the SCANS report go beyond the basic academic skills of reading, writing, and mathematics and concentrate on the thinking and personal qualities considered necessary in an increasingly competitive and global economy (Linn, 1996). Today, employers are increasingly requiring their workers to be capable of thinking and functioning in a dynamic workplace. Thus, workplace readiness programs, like NCTW, include program components designed to improve participants' workplace adaptability.

Results of this study provide a useful assessment of employment self-efficacy that can contribute to the preparation of disadvantaged females for successful employment. Information presented may be incorporated into training programs as a work-readiness assessment measures trainers may use to focus their efforts on developing critical employment behaviors and individualized plans to assist trainees in continuously improving these behaviors.

Purpose of Study

The purpose of this study was to examine the relationship between several independent variables—NCTW participants' perceived employability self-efficacy (PES) as defined by Houser and Oda (1990), age, education, work experience, and number of children—and a dependent variable, work-readiness for economically disadvantaged women. Work-readiness as defined in the SCANS (1991) report, was measured using the BWAP (Becker, 1989) composite job-readiness score, which reflects work habits, interpersonal relations, cognitive skills, and work performance skills. The importance of this study is identifying participants' perceived employment self-efficacy and establishing its usefulness in determining job-readiness. Knowledge gained of how perceived employability and other demographic factors relate to job-readiness can assist job-training program developers, job-training counselors, trainers, and

coordinators in of effectively preparing disadvantaged females for gainful employment. The importance here is the identification of key factors that are instrumental in training participants' job-readiness.

Research Objectives

1. Describe the demographic characteristics (age, education, work experience, and number of children), and the perceived employability self-efficacy (PES)—belief in ones' ability to successfully perform the necessary tasks/behaviors needed to secure and maintain employment—of TANF participants.
2. Describe the dependent variable, job-readiness, as measured by a composite score for work habits, work attitude, cognitive skills, and work performance skills, for TANF participants.
3. Determine the relationship between job readiness and selected independent variables (inc., perceived employability self-efficacy, age, education, work experience, and number of children).

Conceptual Framework

Social Cognitive Career Theory

Social cognitive career theory (SCCT), derived primarily from Bandura's (1986) general social cognitive theory, is based on a triadic reciprocal model of causality. This model holds that personal attributes such as internal cognitive and affective states, external environmental factors, and overt behavior each operate as interactive sets of variables that mutually influence one another. SCCT highlights three intricately linked variables by which individuals regulate their own career behavior; self-efficacy beliefs, outcome expectations, and personal goals (Lent & Brown, 1996). Self-efficacy beliefs refer to peoples' judgments of their capabilities to organize and execute courses of action required to attain designated types of performance. Outcome

expectations refer to beliefs about consequences or the outcome of performing particular behaviors. Personal goals play a central role in career choice and decision-making because they define an intention to engage in certain activities or produce particular outcomes (Bandura, 1986). Of all three SCCT components, self-efficacy is viewed as key to career performance. This is representative of the level of attainment individuals achieve in their work tasks (e.g., measures of success or proficiency) and the degree to which they persist despite obstacles (Lent & Brown, 1996). Due to the central role self-efficacy plays in career and work performance, self-efficacy theory as it relates to job-readiness provided the conceptual framework for this study.

Self-Efficacy and Job-Readiness Skills

Bandura's (1986) self-efficacy construct refers to personal judgments of one's capabilities to organize and execute courses of action required to attain designated types of performances. Wood and Bandura (1989) later expanded this definition by adding that self-efficacy refers to beliefs in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet situational demands. Bandura believed that the relationship of self-efficacy to performance serves as a behavioral predictor. In essence, people are successful at performing tasks they believe they are capable of doing or have strong self-efficacy for accomplishing. Wood and Bandura believed the opposite also held true. When people lack self-efficacy for a task, they do not persevere for successful achievement of a task.

Self-efficacy has been shown to influence a variety of behaviors, including coping, fear reactions, addictive behaviors, work achievement and performance (Barling & Beattie, 1983; Campbell & Hackett, 1986; Gist, 1987; Wood & Bandura, 1989). Self-efficacy theory postulates that people with higher levels of self-efficacy in a particular task or area will take action toward the goal in that area and persist in their action even in the face of setbacks (Bandura, 1986). This

conceptual basis has helped self-efficacy theory emerge as a significant foundation for work motivation and employment performance research (Eden & Aviam, 1993; Gist, Schwoerer, & Rosen, 1989; Stumpf, Brief, & Hartman, 1987; van Ryn & Vinokur, 1992). Although studies conducted by Gist (1987; Gist & Mitchell, 1992) revealed the importance of self-efficacy for predicting and improving work performance, there is limited knowledge about how self-efficacy beliefs apply to the job success of disadvantaged females. In the past, studies pertaining to self-efficacy and career development programs leading to work were based primarily on white middle-class males (Harmon, 1994). Because of this, little is known about how the self-efficacy of disadvantaged females affects career development and job-readiness eventually leading to successful employment.

Research conducted by Strauser (1995) on disadvantaged individuals suggests that to improve job readiness and employment rate, job placement programs should develop effective job seeking skills that build on several psychological variables: (a) self-efficacy, an individual's belief in their ability to perform tasks to achieve a desired goal, (b) self-concept, an individual's sense of their own self-worth, and (c) self-management, an individual's ability to feel in control of their own actions or behavior. These characteristics have been identified as integral for the successful integration of disadvantaged or minority populations into the workplace. Thus, training programs targeted at disadvantaged females must identify the best methods of assessing and enhancing participants' job-readiness.

Although there are numerous methods of assessing job-readiness, I focused on workplace skills and performance as the knowledge, skills, and attitudes required in the 21st century workplace (Overtoom, 2000). To this end, one of the most recognized descriptions of workplace readiness is the Secretary's Commission on Achieving Necessary Skills (SCANS, 1991). SCANS

is often acknowledged as the national benchmark for defining workplace skills and defining employability. The SCANS report identified two major skill areas considered essential to achieving success in the workplace: foundation skills and skill competencies. Skill competencies focus on managing or using resources such as interpersonal skills, information systems, and technology. The foundation skills component focuses on basic skills, thinking skills, and personal qualities. Basic skills include reading, writing and arithmetic. Thinking skills include decision-making, problem solving, knowing how to learn, and reasoning. Personal qualities include individual responsibility, self-esteem, sociability, self-management, and integrity. The SCANS report further highlighted skills that will be needed in the future. These future skills were presented as *high performance skills*. They include an ability to manage resources, to work productively with others, to acquire and use information, to master complex systems, and to work with a variety of technologies.

Keim and Strauser (2000) investigated the importance of the skills highlighted in SCANS (1991) and concluded that employers who hire disadvantaged individuals feel they are trainable in required technical skills, but need more preparation in non-technical or interpersonal skills. Nontechnical skills—necessary for acquiring, maintaining, and excelling on the job—received the most concern because of the dynamic nature of today's workplace and the need for workers to adapt quickly. As a result of the need for workplace adaptability, job-training participants need focused training on personal quality skills. According to SCANS, these skills are essential to acquire and maintain jobs and include workplace behaviors such as self-management, personal accountability, responsibility, dependability, cooperation, respect, motivation, and initiative.

Due to the limited research that has been conducted on self-efficacy and disadvantaged females' job-readiness, this study's intent was to bridge the gap between what we know about

disadvantaged females' self-efficacy and job-readiness. The importance of self-efficacy as an influencing factor and its effect on the job-readiness of disadvantaged females in the NCTW program were highlighted. Ultimately, the study results provide NCTW job training program developers, counselors, and trainers additional information to enhance participants' job-readiness skills.

Delimitations

The following delimitations were identified during the process of the study and may impact the generalization of research findings.

1. NCTW participants may have experienced challenges interpreting or completely understanding the questionnaire, due to their unfamiliarity with this type of survey. To minimize this potential problem, I remained with participants and was available to clarify any questions pertaining to the questionnaire.
2. The instructors assessing job-readiness had an abbreviated period (8-12 weeks) to work with participants. Results may be difficult to generalize to job readiness training programs with extended periods (beyond three months).
3. The NCTW program I studied was located in an urban and primarily minority community, and may not be applicable to other settings or participants.

Significance of Study

The primary intent of the Personal Responsibility and Work Opportunities Reconciliation Act (PRWORA) was to shift individuals from welfare to work. This Act precipitated a need for research on aspects of job training programs that are important to the employment success of individuals leaving welfare. According to Kunz and Kalil (1999), most studies that have examined this question have focused on welfare participants' labor market experiences and

human capital characteristics, and not on psychosocial aspects involved in getting and keeping a job. However, psychosocial characteristics (e.g., self-esteem or self-efficacy) are becoming increasingly recognized as important factors in the job search, acquisition, and maintenance process.

This study emphasized the role employment self-efficacy plays in influencing disadvantaged females' job-readiness, and augments the paucity of existing information available on self-efficacy as it relates to job-training for disadvantaged populations. By utilizing past research (Eden & Aviam, 1993; Gist, 1987; van Ryn & Vinokur, 1992) results provide a useful basis for theoretical and practical application on how self-efficacy beliefs can be instrumental in modifying work performance and behavior. More specifically, by focusing on the potential influence that self-efficacy has on work performance its utility in short-term training is considered a key component needed for preparing disadvantaged women in the NCTW job-readiness program.

Prior studies have found that enhanced or higher levels of mastery for a task, or self-efficacy, were related to reduce welfare reliance (Maynard, 1997; Parker, 1994). Individuals with high levels of self-efficacy are likely to engage in tasks while individuals with low self-efficacy for specific tasks are more likely to avoid them (Bandura, 1986). Accordingly, in the NCTW job-training program, self-efficacy may provide a mechanism to identify participants who are most likely to benefit from programs, like NCTW, that prepare individuals for successful employment.

In the *Work First* approach to welfare reform, time limit provisions raise the importance of quickly moving participants out of job training and into rewarding employment. However, in order for individuals to be considered job-ready, they need to demonstrate proficiency in basic,

interpersonal, and social skills, and possess personal qualities that allow for successful employment (Cains & Woodard, 1993).

The integration of self-efficacy into job-readiness training has future training development implications. Information revealed via this study could potentially be used to facilitate training participants' ability to meet demanding time limits and work requirements sanctioned by PRWORA. Prior welfare-to-work studies have advocated that self-esteem and self-efficacy are essential to the successful transition of women from welfare-to-work (Kunz & Kalil, 1999; Pavietti, Olson, Nightingale, Duke, & Isaacs, 1997; Popkin, 1990). The purpose of this study was to add to the research literature pertaining to the role self-efficacy plays in preparation for work when faced with difficulties and required to confront job search and maintenance challenges.

In sum, this study investigated how employment self-efficacy and other factors may be determinants of job-readiness. Results have practical and theoretical implications for developing training programs aimed at better identifying and developing disadvantaged female's employment potential and successful transition into work.

CHAPTER 2

REVIEW OF LITERATURE

To understand how the construct of self-efficacy relates to career development, work performance, and job-readiness, existing studies and theories are discussed and form the basis for this chapter. There are numerous studies that have been conducted that offers a rich contextual framework for understanding the influence of self-efficacy on career decision-making and work performance (Anthony, 1994; Barling & Beattie, 1983; Eden & Aviram, 1993; Fitzgerald & Betz, 1994; Fouad & Smith, 1996; Gist, 1987; Hackett & Betz, 1981; Krumboltz & Worthington, 1994; Lent, Brown, & Larkin, 1986; Mitchell & Krumboltz, 1987, 1990; Taylor & Betz, 1983; van Ryn & Vinokur, 1992). The majority of these career decision-making and work-related studies were conducted with white middle-class males as participants (Harmon, 1994). As a result, little is known about the role self-efficacy plays in the career decision-making and employment process of other populations, particularly the economically disadvantaged females. Employment outcomes for disadvantaged females have become increasingly important with passage of the PRWORA in 1996.

Economical disadvantage or individuals considered poor at the time of PRWORA, was defined as a family of four earning below \$16,400 per year (U.S. Department of Labor, 1997). The literature currently available does very little to address the work and career development needs of individuals that match this definition. Thus, additional research is needed to enrich the current literature by unveiling some of the unique challenges economically disadvantaged women face in the career development and employment processes.

Several studies have investigated career development, career barriers, and career self-efficacy of African American, Asian, and Hispanic women. Chartrand and Rose (1996) studied how social cognitive career theory (SCCT) could be used for understanding and facilitating the career development of at-risk groups. Their study focused on adult female offenders and used SCCT theory to explain the influence of differential learning experiences on self-efficacy expectations and subsequent career development outcomes. SCCT theory posits that gender and ethnicity are socially constructed aspects of people's experience. Thus social, cultural, and economic conditions help shape the learning opportunities to which individuals are exposed, the interpersonal reactions (supportive or non-supportive) they experience for performing certain activities, and the future outcomes they anticipate (Brown, Brooks, & Associates, 1996). The tenets of SCCT capture the contextual, socialization, and learning influences that form female offenders' career decision-making process because of the complexities of their environments. Similarly, Hackett and Byars (1996) and Ganior and Lent (1998) concluded that intervention programs that enhance self-efficacy are conduits for positive changes in the career choice and expectations of African Americans.

Rivera et al. (1999) used a case study scenario to examine the complexities involved in the career choice and decision-making process of Mexican American women. These women were struggling to maintain their traditional values, cultural obligations, and self-efficacy, while trying to make career decisions and choices. Findings revealed that career decision-making self-efficacy was a major factor in their ability to transition into careers and work outside the home. They concluded that the career development process of Mexican-American women is different than Mexican American men and white non-Mexican-American women. Mexican-American women's career development process is influenced by social issues and culture. Social issues

create or hinder the career opportunities for Mexican women. Culture influences values and participation in education, labor, and the economy and their career choices.

Tang (2001) studied Asian American students located on various college campuses to analyze how SCCT applied to their career choices. They concluded that the higher one's acculturation (the ability to adopt the cultural traits and social patterns of others) led to higher self-efficacy and vocational interest in non-stereotypical roles. They recommended the use of theoretical models, like SCCT, to help Asian American clients understand their environment and the factors that are involved in career choice and decision-making.

Lent and Brown (1996) identified social cognitive career theory (SCCT) as a useful framework to explore the effects of environmental factors on the career development process for disadvantaged individuals. Environmental factors—defined by Vondracek, Lerner, and Schulenberg (1986) as physical, cultural, material, and social features—provide experiences and information that affects the career choice process. Lent, Hackett, and Brown (1996) extensive research on how the interaction of personal attributes, external environmental factors, and learning experiences combine to influence self-efficacy beliefs and outcome expectations culminated in social cognitive career theory (SCCT). SCCT is grounded in Bandura's (1986) social cognitive theory and emphasizes the role personal agency, i.e., an individual's capacity for self-direction, plays in the career decision-making process. The theory acknowledges the importance of mutually interacting influences between people, their behavior, and the environment. Further, the theory highlights situations where people are not allowed opportunities to make career choices due to economic needs, educational limitations, lack of familial support, or other conditions that inhibit their pursuit of certain career interest or goals. As a result of limiting environmental factors or barriers some individuals may prematurely eliminate

potentially rewarding occupations because of low self-efficacy and outcome expectations. Bandura (1986) defined self-efficacy beliefs as “people’s judgements of their capability to organize and execute courses of action required to attain designated type of performance” (p. 391) and outcome expectations are the anticipated effects or outcomes of taking that action.

Hackett and Betz (1981) revealed how differential socialization processes and the internalization of events pertaining to them can be used to explain why women may be less likely than men to pursue certain types of careers. They were the first researchers to apply Bandura’s (1977a) self-efficacy theory to career behavior. They found that self-efficacy was useful in understanding how traditional gender role socialization influenced women’s career choices and how a women’s self-efficacy is a predictor of their career-related pursuits. Similarly, in this study, self-efficacy theory will be applied to examine how disadvantaged women’s career choice behaviors and work performances are influenced by environmental factors (e.g., gender, ethnicity, socioeconomic status).

SCCT provides a rigorous framework for conceptualizing and operationalizing how environmental factors or influences affect career choice and decision-making. SCCT explains how ones personal goals form an important intermediate link between interests and actions; it also identifies self-efficacy and outcome expectations as shapers of interest patters and as co-determinants of choice. Research using SCCT as it applies self-efficacy and career development has expanded at an impressive rate (Lent et al., 1996). Still, because of the paucity of research that explains the role environmental factors play in the career development and choice process for disadvantaged individuals, Lent and Brown (1996) recommended that more research on different populations be conducted. Despite a sparsity of empirical studies, several informative

studies have been conducted (Chartrand & Rose, 1996; Fitzgerald & Betz, 1994; Hackett & Byars, 1996; Harmon, 1994; Lent, Brown, & Hackett, 1994) that add to our knowledge.

SCCT's contextual variables—such as gender, race/ethnicity, physical, health/disability, genetic endowment, and socioeconomic status—is applicable to understanding the constraints faced by some groups—women, people of color, and other socioeconomic groups -- when involved in career choice and decision-making (Kerka, 1998). Its main theoretical assumptions incorporate aspects that explain how the interaction of personal attributes, external environmental factors (e.g., perceived barriers, socialization, and sex-role models) and how behavior affects career choice and decision-making. SCCT utilizes Vondracek et al. (1986) idea of contextual affordance and Astin's (1984) opportunity structure constructs as defined later, to help explain how environmental influences or factors operate. In the model, contextual affordance refers to the resources one perceives as being provided by one's environment in the form of physical, cultural, material and social features (Brown et al., 1996).

Opportunity structure focuses on two types of environmental influences depending on their relative proximity to career choice: (a) more distal background influences, the ones that precede and shape interest and cognition, and (b) proximal influences such as ones that come into play during the active phase of career choice-making. The more distal environmental influences help shape social cognition and interests early in the career choice process (gives one opportunity for initial skill development). Proximal environmental influences are closer to the actual career choice or decision-making occurrence. If proximal influences are positive (e.g., presence of ample support, few barriers, absence of discrimination, or supportive cultural practices) they can be beneficial to career development. In summary, distal and proximal

environmental influences are keys to understanding the outcome for one's career choice and decision-making process (Lent & Brown, 1996).

Hackett and Byars (1996) findings support how differential learning experiences affect the career development of poor African American women. They found that various environmental factors (e.g., limited exposure, unsupportive schools and social environments) may contribute to a lack of self-efficacy and career development for minority women in certain science and mathematics-related fields. Supporting their findings, Hackett and Betz (1981) study suggest that perceived career-related barriers along with gender socialization may prevent women from pursuing certain careers. Similarly, Chartrand and Rose (1996) found individuals of at-risk and lower socioeconomic status were more likely to encounter limited opportunities in jobs, education, and work environments that impact their career choice and decision-making to enter into certain fields.

The self-efficacy construct is a useful framework for developing training strategies to empower minority and disadvantaged women to exercise their efficacy expectations to achieve personal career goals. Self-efficacy's beliefs are seen as constituting the most central and pervasive mechanism of personal agency (Bandura, 1989). These beliefs induce particular career and work-related performances that are essential to the minority and disadvantaged populations' sustained employment. Self-efficacy theory furthers us in understanding how and individual's efficacy expectations can influence their employment-related behaviors. Since research is lacking on individuals who are permanently unemployed or underemployed, which is typically the case for disadvantaged populations (Fitzgerald & Betz, 1996), in this study we attempt to address some specific issues facing this population.

Bandura (1986) asserted that self-efficacy, the beliefs one has about the ability to perform certain tasks/behavior to achieve a desired outcome evokes generative capabilities. Self-efficacy in the SCCT model is seen as the most central and pervasive mechanism of personal agency (Bandura, 1989). The primary information sources of self-efficacy are: (a) personal performance accomplishments – those situations in which one's performance is judged in some way, (b) vicarious learning – situations where modeled activities are relevant to the observer's ability to learn, (c) social or verbal persuasion – encouraging and positive verbal feedback, and (d) physiological states and reactions – feelings and emotions that cause action. Personal performance accomplishments are viewed as exerting the greatest influence on self-efficacy (Lent & Brown, 1996). Successful accomplishments tend to raise self-efficacy beliefs within a given performance domain. Conversely, failures tend to lower self-efficacy for a given domain (Bandura, 1982). Research information as to how one's self-efficacy expectations provide them with the resources to organize implement and sustain career-related goals, despite adversities useful to the TANF's disadvantaged population

TANF was established in 1996, to replace Aid to Families with Dependent Children (AFDC), a federally-regulated cash assistance program for economically disadvantaged citizens. Stipulations of TANF grants require all former welfare recipients, except the elderly or disabled, to enroll in a workforce welfare program after receiving assistance for 24 months (Personal Responsibility and Work Opportunity Reconciliation Act [PRWORA], 1996). The employment process is facilitated primarily through the assistance of state-sponsored job search and training programs. In Georgia, the New Connections to Work (NCTW) program is a state-sponsored job search and training program that offer job skills training along with self-improvement techniques to increase TANF recipient's job-readiness. The NCTW program offers TANF recipients a

sequence of seminars, customized training classes, workshops providing career-related activities, academic preparation, and life skills management, and self-help skills, including self-efficacy and self-esteem building.

This literature review focuses on three primary areas of research; career choice/development emphasizing the application of SCCT, employability or work readiness, and Work First Welfare (WFW) reform. Particular emphasis is given to the utility self-efficacy theory offers for improving the employment potential of former welfare recipients. Three most dominant theories of career development will be reviewed. Initially, an overview of the two prominent theories will be discussed. Later, in-depth analysis of the most applicable career theory for the disadvantaged, SCCT, will be reviewed.

The remaining discussion in this chapter focuses on how SCCT's self-efficacy construct may be particularly useful in assisting the career and employment efforts of disadvantaged women. The application of self-efficacy theory to women and training will be extensively reviewed.

The next section will be an overview on job-readiness and how certain aspects of self-efficacy relate to career choice, employment preparation, and work performance. The connection between self-efficacy and work performance is essential to understanding how self-efficacy expectations can be applied to the career and employment process.

Culminating this chapter will be a brief analysis of the *Work First* approach to welfare reform and the implications and challenges it presents to individuals involved in a career and employment search. More importantly, it focuses on the utility self-efficacy may have in training TANF recipients to becoming work-ready and ready to secure long-term, and productive careers.

Career Theories

There is voluminous literature available that highlights the complexities involved in career choice and development. Current theories of career choice and development include structural/trait and factor, developmental and social cognitive approaches (Sharf, 1997). These theories include: Super's (1990, 1994) developmental theory, Miller-Tiedeman & Tiedeman's (1990) developmental theory, Holland's (1985a, 1985b) theory of personality types and occupational environments, Krumboltz' (1994) social cognitive career theory, and Lent and Brown's (1996) social cognitive career theory. Of all the aforementioned career theories, Super's (1953, 1957, 1980, 1990, 1994) developmental theory of vocational choice along with Holland's (1959, 1985a, 1997) theory of personality types and occupational environments have been the most widely used in empirical studies (Fouad & Arbona, 1994).

Lent, Brown and Hackett's (1994) social cognitive career theory (SCCT) has gained popularity among practitioners and researchers alike for addressing the unique career development needs of diverse groups. Critics of major career development theories (e.g., Fitzgerald & Betz, 1994; Leong, 1995; Naidoo, 1998) charge that most theories are based on homogenous groups, of white, middle-class, adolescent males. Unlike SCCT, traditional career development theories make certain assumptions (including, relative affluence, access to education and occupational information, free and open labor markets, work as a central value) that fail to address crucial structural and cultural variables and include concepts and suppositions that are most applicable to white males (Kerka, 1998). For these reasons, SCCT was used to provide the conceptual framework for this study, which examined the role self-efficacy plays in predicting the job-readiness of disadvantaged females.

Two leading career theories -- Super's (1990) developmental theory of vocational choice and Holland's (1985a) theory of personality types -- have made a significant impact on the study of career choice and development. These two theories have been researched and used extensively in vocational counseling and assessment. In the next section, the contributions of various other theories to the career choice and development process are discussed to gain a better understanding of their approaches and assumptions.

According to Johnson (2002), there are two major types of career development theories, structural and developmental. Structural and developmental career theories take two distinct approaches to explain how career choices and decision-making occurs. The first type is referred to as structural or the trait and factor theory. His perspective focuses on individual characteristics and occupational tasks. The two major assumptions of trait and factor theory are (1) that individuals and job traits can be matched and (2) matches are positively correlated with job success and satisfaction. This approach is what Holland (1959, 1985a) described as the vocational personalities and environments.

Holland asserted that individuals' (personality) and job trait (environments) can be matched and that the closer the matches are the more satisfied individual are with their job and environment. Holland's (1959, 1985a) theory of vocational personalities and environments suggests that people function and develop best and find job satisfaction in work environments that are compatible with their personalities. Holland classified personality types and work environment into six major types or categories, including realistic (R), investigative (I), artistic (A), social (S), enterprising (E), and conventional (C); the acronym used most often to describe these is RIASEC. People typically search for environments that are consistent with their personalities, skills, and work behavior (Holland, 1997). Using the six personal styles and

occupational environments, Holland developed a hexagonal model to illustrate how the key concepts in his theory--consistency, differentiation, identity and congruence -- operate to determine how people orient themselves toward certain work environments and away from others. A more in-depth description and discussion of Holland's career and vocational behavior theory is located in a later section.

The second major explanation of career choice/behavior has been categorized as developmental theories. These theories focus on human development across the life span (ICDM, 1996). One of the most popular theories that subscribes to the developmental approach is Super's (1990) life stages and sub-stages segmental model of career development. Super (1990) identified a pattern of changes that people go through as they mature and struggle to seek career satisfaction through work roles in which they can express themselves, workplaces where they can implement and develop their self-concepts. As one goes through patterns of changes they develop career maturity. Career maturity is a main concept in Super's developmental theory. Career maturity as a concept is manifested in the successful accomplishments of vocational tasks encountered at different ages and stages of development across ones life span (Johnson, 2002). Career maturity refers to the culmination of development or growth experienced at various ages and life-stages.

According to Super (1990), the major life stages, or maxi-cycles, and the mini-cycles associated with the later are generally, influenced by an individual's parental socioeconomic level, mental ability, educational skills, personality characteristics, and career maturity. Career maturity, as a psychosocial construct, is an important determinant of how individuals cope with career changes. It denotes an individual's degree of vocational development along the continuum of life's maxi-stages, mini-stages and the developmental tasks associated with their career

changes (Brown et al., 1996). For example, the growth life stage involves interests, fantasies, and curiosity mini-cycles. Super believed that the extent to which one is ready and able to cope with the tasks associated with and indicated by each stage represents their career maturity.

Super (1996) called his developmental theory a “segmental theory”, meaning Super’s explanation of career behavior is a loosely unified set of theories that deal with specific aspects (or segments) of career development. The segments of career development are described as two unique life dimensions—space and time. Life-space dimensions are depicted as the social situations in which an individual lives. These could pertain to environment or other outside factors. Conversely, life-time dimensions focus on how people change and make transitions as they prepare for, engage in, and reflect upon their life and work roles over time (i.e., childhood, or adolescence; Brown et al., 1996).

Life-time dimensions are exemplified by how individual vocational preferences, competencies, the situations where people live and work, and self-concepts change with time and experience. The process of continual change is captured in a series of life stages (called maxi-cycles) characterized as a sequence of growth, exploration, establishment, maintenance, and decline/disengagement. Within each of these maxi-cycle life stages are mini-cycles which take place during career transitions from one stage to the next or each time an individual’s career focus has to be re-established because of illness, or job loss. Thus, individuals may recycle through growth, exploration and establishment depending on their job situations. Super (1990) suggested that, when people evolve through the life stages or maxi-cycles of growth, exploration, establishment, maintenance, and decline, they encounter various developmental tasks. These vocational development tasks are crystallization (ages 14-18), specification (ages 18-21), implementation (ages 21-24), stabilization (ages 24-35) and consolidation (ages 35+).

Developmental tasks evolve around vocational or career decision-making for particular ages in the life cycle.

In general, career developmental theories help explain causal factors and other determinants that affect career development and choices. Other career theories support the effects of socioeconomic factors on career development. Sociologists and economists provide detailed explanations on how culture, family background, social and economic conditions, and other factors outside of individual control can influence career behavior and choice (Johnson, 2002). Two of the most recognized theories based on the social economic approach are SCCT and Krumboltz' (1994) social learning theory. Both theories are based primarily on how social learning or environmental conditions, life events, genetic influences and various experiences influence career development, but each approach still has its unique components.

Krumboltz (1994) emphasizes the importance of learning experiences and task-approach skills in choosing and maintaining a career. His theory focuses on teaching people career decision-making techniques that are needed in selecting career alternatives. Conversely, SCCT, discussed later, focuses more on how social economic conditioning plays a major factor in career development (Brown et al., 1996).

A majority of career theories attempt to explain how personal characteristics, such as interest, family, abilities and experiences, along with external factors such as work and the economic environment are involved in the process of choosing and implementing a career. Overall, the importance and primary benefit of career theories are their ability to provide a perspective on how developmental stages, tasks, identification of personality types, corresponding work environments, and other factors can help to assess, identify, interpret, and guide to an individual's career development and behavior (Ireh, 2000).

Because of their extensive application and numerous research citations, Holland's (1959, 1996) typology of vocational behavior and Super's (1957, 1990) developmental theory are reviewed at length in the following sections.

Super's Career Development Theory

Initially, Super's (1953) life-span theory of career development identified the process of career choice and development as essentially the process of implementing self-concept —how individuals view themselves and their situation. Later, in 1963, Super further refined the idea of vocational self-concept, as “The constellation of self-attributes considered by the individual to be vocationally relevant and that the major dimensions of self-concept are traditional personality traits” (p. 20). This statement recognizes the fact that an individual's vocational likes, desires, and abilities are not static. One's self-concept changes with time and experience and makes vocational choice and adjustment a continuous process. As one's vocational self-concept develops, career changes take place, with that, each occupation requires a certain pattern of abilities, interests, and personality traits suitable for fulfilling the job requirements.

Super (1990, 1994) further refined his approach to career development to acknowledge the possible influences of race, ethnicity and socioeconomic status (SES) on the career development process. He proposed that socioeconomic-environmental factors may condition career development in at least two ways: by opening or closing opportunities, and by shaping occupational concepts and self-concepts. The recognition of the influence these factors was an update to Super's earlier research, which had concentrated primarily on developmental stages and tasks involved in one career development. Recent research conducted indicates that Super's theory may have some cross-cultural validity measurement concerns (Fouad & Arbona, 1994). In

the next section there is a brief overview of Super's career development theory and its basic presuppositions.

Super's career development process is divided into a series of life stages. At the center of the theory is self-concept--how individuals view themselves and their environment--along with other personal and situational factors, which are seen as determinants of occupational choices. Super posited that in expressing a preference for an occupation an individual operationalizes their idea of the kind of person they are and their situation. The process of developing and choosing an occupation is, therefore, conceived as involving a matching of self and occupation or *congruence* between an individual's view of self and occupation. How individuals perceive themselves and act on that perception is a reflection of personality, needs, values, and interests. These perceptions change over an individual's life span. As a result of these changes, self-concept continues to develop throughout one's life.

Super's (1990) vocational choice theory describes a career development process that is divided into a series of life stages: growth, exploration, establishment, maintenance, and decline. These life stages have general age ranges: (1) growth stage-birth to age 14 years, (2) exploration stage-age 15 to 24 years, (3) establishment stage-age 25 to 44 years, (4) maintenance stage-age 45 to 64 years, and (5) disengagement stage-age 65 years and older. The growth stage involves psychological as well as physical growth. At this stage self-concept undergoes development while at the same time life experience provides knowledge of the world of work, preparing the individual for the next stage exploration.

The exploration stage is characterized by an individual starting to explore and investigate various career options. It is during the exploration stage when an individual usually gains a better idea of occupational information, chooses a career, evaluates alternatives,

tentatively decides on an occupation, and starts working. The exploration stage consists of the developmental tasks characterized by tentative, trial (tentative investigations), and stabilizing trial (more committed) sub-stages: At the tentative mini-cycle of the exploratory stage, the individual idealizes and explores several tentative career possibilities. The number of alternatives is gradually eliminated to focus on goals that the individual can reach and in which opportunities exist. Hence, preparing them for the next stage--establishment. The establishment stage consists of several mini-cycles or sub-stages: consolidation, frustration and advancement. In these sub-stages of the establishment maxi-cycle is where an individual tries to determine whether or not career choices and decisions made during the exploratory stage are realistic and viable. Furthermore, if the career decisions are feasible and stable in the establishment stage the individual can begin to develop career maturity. This becomes the basis for settling into work that is likely to be longer-term. Individuals move beyond the career establishment stage into the next stage, the maintenance stage.

The final two stages—maintenance and disengagement is where an individual begins to cease advancement and starts preparing to withdraw from the workplace. In the maintenance stage, individuals may encounter mini-cycles of career stagnation, lack of advancement or creativity, depending on their work status and career focus. Additionally, in this stage an individual may experience their career peaks begin to level off as they prepare for disengagement from the workplace. The complete withdrawal maybe prefaced with several mini-cycles of deceleration and disengagement. In the final stage, disengagement, an individual starts to disengage from work due to various factors, such as a lack of up-to-date knowledge or skills, physical or health conditions, family, and other job-related factors.

Concurrently, with the occurrence of life stages, vocational developmental tasks occur. Developmental tasks are intervals where an individual's career choice and decision-making change based on age and experience. In general, there are five major vocational developmental tasks: (a) crystallization (ages 14-18), where one develops and plans a tentative vocational goal, (b) specification (ages 18-21), where an individual firms their vocational goal, (c) implementation (ages 21-24), where training for and obtaining employment begins, (d) stabilization ages (24-35) where working and confirming a career choice takes place, and (e) consolidation (ages 35 and over), where one seeks advancement in their career. Super (1957) originally presented the life stages and vocational developmental tasks in a sequential manner, but later represented them as a cycle, whereby individuals can recycle through life stages as they adapt or things change in their lives and careers.

Individuals' career situations differ depending on personal needs and labor market demands. Hence, it is difficult to apply strict age ranges to career development stages. Isaacson (1986) cited this type of evidence as the basis for adding an additional stage between the establishment stage and the maintenance stage called the renewal stage. The renewal stage takes place from ages 35 and 45 years, where an individual reconsiders earlier goals to move in other directions with a mid-life career change (Gies, 1990). The need for a renewal stage has become more evident in the age of changing workforce demands and economies. Individuals find themselves in precarious positions due to lay-offs, company restructuring, downsizing, and increasing family demands. Thus, in the midst of establishment and maintenance stages they must reevaluate prior career decisions and choices. Super (1990) injected the need for a mini-cycle termed "holding" that falls between the two maxi-cycles of establishment and maintenance

stages. This stage allows one the time for additional consideration before moving into a more permanent career.

Super's (1990, 1996) career development theory emphasized the role of self-concept in occupational preferences and choices. He asserted that the process of career development is essentially that of developing and implementing occupational self-concept. The process is a compromise, where the self concept is a product of the interaction of inherited aptitudes, physical makeup, opportunity to observe and play various roles, and evaluations of the extent that meets with the approval of workplace management and co-workers (Brown et al., 1996). Super (1990) further operationalized self-concept implementation by examining the degree of similarity (congruence) between self and occupational roles within specific contexts. He suggested that instead of self-concept theory, a better term might be "personal construct theory" to emphasize the individual's dual focus on self and situation. This notion acknowledges the role personality traits such as self-esteem clarity, certainty, and realism have on career decision-making.

Gottfredson (1999) challenged what he saw as Super's vague self-concept theory by stressing the need for a more systematic analysis of what promoted occupational self-concept. The idea of occupational self-concept, Gottfredson asserted, has immense intuitive appeal, but is simply too broad in its potential meaning to be useful either theoretically or practically without careful definition and specification in career development applications. Super (1990) supported this suggestion himself, acknowledging that the breath of his self-concept was too immense to be operational and reflected in the renaming of self-concept to personal construct theory to show the dual focus on self and situation. To be operational, self-concept would need a delineation of specific aspects of global self-concept that specifically relates it to designated career behavior

and environments. Researchers (Gottfredson, 1999; Osipow, 1987, 1990; Pryor, 1985) have expressed a need for a conceptual link between self-concept and vocational/career development in order to make occupational self-concept more measurable and applicable in counseling and career guidance.

The operational problem with Super's (1990) self-concept theory was a lack of delineation of the specific aspects of a global self-concept that relates to career behavior. To be used by counselors and researchers, such delineation would be more amenable to measurement and to theoretical assessments about the relationship of a specific aspect of self-concept and what happens in vocational development throughout the life span (Betz, 1992). To address this issue, Osipow (1987) called for the formulation of a conceptual link between self-concept and vocational behavior. Taking it one step further, he recommended self-esteem and career self-efficacy as these conceptual links. Self-esteem was recommended because women who feel good about themselves are more able to actualize their abilities, interests, and occupational choices. Likewise, career-related self-efficacy expectations, according to Hackett and Betz (1981), are individuals' beliefs concerning their ability to perform successfully a given behavior that influences choice, performance, and persistence in career-related domains. Thus, by using self-esteem and career self-efficacy as conceptual links, it would be useful for career practitioners to operationalize occupational self-concept as it relates to beliefs about career-related abilities.

Holland's Career Theory

Holland's (1959) theory of vocational personalities and work environments introduced the notion of congruence or fit between individual's interests, skills, and work settings. Holland asserted that individuals flourish in work environments when a good fit exists between personality type and characteristics of the work environment. Lack of congruence between

personality and environment leads to dissatisfaction, unstable career paths, and lowered work performance. Holland's (1973) theory of careers incorporates a hexagonal model to coordinate and specify the degree of congruence (or fit) among personality types and environments for different occupational classifications and provides specific methods for measuring these theoretical constructs.

Holland's (1985a) developed a typology to characterize people according to their resemblance to six personality types and to characterize the environments according to six ideal work environments. Holland characterized persons and work environments on the basis of shared psychological features into six meaningful categories: Realistic (R), Investigative, (I), Artistic (A), Social (S), Enterprising (E), or Conventional (C). These are often referred to as the RIASEC model. The more an individual's personality and work environments are congruent, the more likelihood of satisfaction, stability of career path, and achievement. When an individual chooses a career, their personality seeks consistency in one of the six environments: (1) Realistic-person enjoys activities requiring strength, is aggressive, possesses good motor organization, lacks verbal and interpersonal skills, prefers concrete to abstract problems, and is unsociable; (2) Investigative-person is task-oriented, thinks through problems, and attempts to organize and understand the world; (3) Social-person prefers roles which allow them to use their interpersonal skills in close interpersonal situations(e.g. therapeutic or teaching situations; (4) Conventional-person performs structured verbal and numerical activities and subordinate roles, and achieves goals through conformity; (5) Enterprising-person prefers verbal skills in situations that provide opportunities for dominating, selling, or leading others; and, (6) Artistic-person prefers indirect relationships and dealings with environmental problems through self-expression artistic media.

An individual's personality (i.e., interests, values, abilities, fantasies) can be assessed by considering their fit or congruence to the work environment

Holland's (1985b) idea has evolved to include personality types and occupational environments and is considered a trait and factor theory. The theory assumes that individuals are most satisfied and stable in work environments that are congruent with their personality types. Two basic assumptions of Holland's theory maintains that (a) individuals in the same vocation have similar personalities, and (b) persons tend to choose actual occupational environments (or college majors) that are consistent with their personality orientations (Miller, 2002). To this end, individuals seek careers where the two-- personality type and environment are compatible.

Holland (1985b) theory is popular among vocational counselors and other practitioners because it provides a simple schema for classifying personality as well as work environments and the congruency between them into the six meaningful categories: realistic, investigative, artistic, social, enterprising, and conventional. In order to accomplish this categorization, Holland uses vocational interest measures, as well as personality measures to assess social skills and individual drives necessary to succeed in selected occupations (Furnham, 2001).

Holland (1985b) distinguishes between three different measures of vocational interest and personality: consistency, differentiation, and congruency. First, he measures consistency, the relatedness of types within a person or environments. Next, he uses the concept of differentiation to examine how clearly and coherently defined are individuals' work environments and personality types. For example, in a well-differentiated work situation there is an uneven balance of work environment and personality type. Individual may experience difficulty in managing the imbalance between their personality traits and work environment. In contrast, an undifferentiated environment would produce a uniform profile--an even balance of personality and work

environment. Of all three measures, congruency is the primary concept being measured when looking at the personality and environment fit. Congruency refers to the compatibility of personality and environment. Conversely, the secondary concepts of consistency and differentiation refer specifically to the profile for the person or environment, providing no information concerning compatibility or relationship between the two. As a result, congruency has been predominant in Holland's career theory.

Holland (1997) expanded the congruence theory, suggesting that most individuals have a personal career theory (PCT) about careers or work. PCT is a collection of beliefs, ideas, assumptions, and knowledge that guides individuals as they choose careers based on one or more of the following: (1) personal characteristics, (2) occupational knowledge, or (3) translation units. Holland's PCT provides a way of explaining career decision-making, i.e., the matching process of persons and environments. Counselors use the PCT along with Holland's RIASEC typology to assess career congruence and personality characteristics for certain careers.

Career counselors take a client's top three personality RIASEC codes and provide a brief summary of what a person is like and their career fit for certain occupational groups (Miller, 2002). For example, the three-letter code of CER suggests that a person has a dominant Conventional personality, but also possesses the Enterprising and Realistic characteristics to a lesser degree. Hence, a career counselor would use this information to assist a client by providing them with career decision-making information for occupations compatible with CER characteristics.

Two of the primary measures of vocational interest, personality types and congruence, are the Self-Directed Search (SDS; Holland, 1994), and the Vocational Preference Inventory (VPI; Holland, 1985b). The main emphasis for testing has been on congruence between

expressed and assessed interest that can provide the most useful information in understanding a client's PCT. The SDS three-letter codes, and the occupations associated with these codes, are used to understand the client's ability to apply their PCT to the career decision-making process. Additionally, practitioners use personality characteristics reflected in the client's three-letter RIASEC code to understand career situations (Savickas & Gottfredson, 1999)

Holland (1997) views most PCT as having elements of the RIASEC typology such as how personality characteristics relate to occupational structures, as well as beliefs and strategies for achieving work and non-work aspirations. Along with congruency, Holland looked at the application of the typology classification system to explain clients' readiness for applying their PCT to career decision-making. Secondary constructs he defined were vocational identity, aspirations/continuity of careers, consistency, differentiation, commonness, and professional judgments (Holland, 1996).

Vocational identity is a clear and stable picture of one's goals, interests, personality, and talents. Identity in Holland's theory refers to both the clarity and stability of a person's goals and self-perceptions. For example, a high vocational identity score on My Vocational Situation (MVS; Daiger & Power, 1980) could indicate relatively untroubled decision-making and confidence in one's ability to make good decisions in the face of some inevitable environmental ambiguities. A low score indicates that the opposite may apply. Overall, vocational identity is helpful in studying what being undecided about an occupation or career means psychologically (Savickas & Gottfredson, 1999).

Career aspirations and continuity are viewed as an individual staying in the same occupational category or having the same vocational aspirations over an extended period of time. Bartling and Hood (1981) found that work histories provided a useful explanation of the stability

of occupational choice and became more stable over long periods of time and with age. In essence, aspirations and interest provide useful explanations of the stability of work histories and the continuity of ones career long-term.

Consistency is viewed as a personality pattern or interest profile where the ideal types in Holland's hexagon are closely related. High consistency is a positive sign and typically correlates with more stability in work history and career choice (Gottfredson, 1999). Individuals demonstrate consistency when there are similarities in their personality pattern as revealed by the relationship between the first two letters of the personality type summary codes on the Self Directed Search (SDS; Holland, 1994).

Differentiation refers to the level of definition or distinctness in a personality or occupational profile (Goffredson, 1999). Different levels of distinction in a person's personality profile may call for unique approaches to work environments. Hence, individuals with an uncommon code measured by SDS, may require additional counseling which entails unique career development actions on the part of the counselor.

Commonness refers to the frequency with which a given code is observed. An individual may have a personality type that is considered rare or infrequent. People who have unusual code combinations on the SDS may require counseling to further the development of their interest pattern for effective career decision-making and development.

Holland (1996) study found that interests and personality provide useful explanations of the continuity observed in careers and personal characteristics, but focus little attention on environmental/cultural factors. To address this deficit, and attempt to extend Holland's (1985a) theory of vocational choice to different cultures and applied settings Alvi, Khan, Hussain, and Baig (1990) conducted a study in Pakistan using Holland's theory. Due to major cultural

differences, they had to revise many of their measurement items and were limited in their ability to draw concrete conclusions. In a similar attempt, studies applying Holland's theory to Asian-Americans employees (Haverkamp, Collins, & Hansen, 1994) and African-American high school students (Ryan, Tracey, & Rounds, 1996) revealed mixed and limited support for Holland's theory in cross-culture applications. These negative results were primarily attributable to a need to change the psychometric properties of the measurement instruments when applying them in settings they were not validated or tested.

As an alternative to Holland's theory for diverse populations, there is social cognitive career theory (SCCT). SCCT is a career development theory whose foundation is based on self-efficacy theory. Self-efficacy theory addresses some of the difficulties found in the cross-culture application of Holland and Super's career theories.

Self-Efficacy Theory

Bandura's (1977a, 1986) self-efficacy theory provides a useful theoretical framework for addressing career choice and decision-making for diverse populations. Self-efficacy refer to a person's belief concerning his or her ability to successfully perform a given task or behavior to achieve a desired outcome. Bandura (1982) postulated that self-efficacy expectations are major mediators of behavior and behavior change. He suggests that low self-efficacy expectations regarding a behavior or behavioral domain lead to avoidance of those behaviors, while high efficacy expectations lead toward those behaviors. The work of Bandura and his associates (Bandura, 1977c, 1982, 1986; Bandura & Adams, 1977; Bandura, Adams, Hardy, & Howell, 1980; Wood & Bandura, 1989) have clearly established that changes in efficacy expectations and changes in behavior are positively correlated, suggesting that alterations in efficacy expectations may mediate the observed behavioral changes. Studies have been directed toward predicting

changes in behavior and determining if concomitant changes in self-efficacy would occur.

Hence, self-efficacy's behavior- mediating abilities can be used to enhance career self-efficacy and may prove to be instrumental in changing career-related behavior.

Self-efficacy is an important predictor of career decision- making and vocational outcomes (Anthony, 1994; Anthony & Jansen, 1984; Arns & Linney, 1993; Solberg, Good, Fischer, Brown, & Nord, 1995). Lent et al. (1987) found self-efficacy was an important predictor of career behavior. Their study supported Bandura's belief that individuals who have poor career self-efficacy may be reluctant to perform the necessary career-related activities-- career investigation, choice and development-- necessary to obtain a career. Individuals with high levels of career decision-making self-efficacy are likely to engage in those tasks, while individuals with low career decision-making self-efficacy are more likely to avoid them (Bandura, 1977b). Self-efficacy was used as a basis for the Career Decision-Making Self-Efficacy scale (CDMSE; Taylor & Betz, 1983), which is one of the extensively used measurements of career decision-making self-efficacy. The instrument is designed to measure the degree of belief that an individual can successfully complete tasks necessary to making career decisions. Taylor and Betz's instrument is based on Crites' (1978) model of career maturity where the items pertain to accurate self-appraisal for career decision-making, (b) gathering occupational information, (c) goal selection, (d) making plans for the future, and (e) conducting the problem-solving necessary for career decision-making. Taylor and Betz examined self-efficacy expectancies with regard to the skills and activities necessary for effective career decision-making and found that self-efficacy for career decision-making was predictive of career indecision in college students.

Students who reported low levels of career decision-making self-efficacy were less likely to have made career choices, in comparison to students who scored higher on the CDMSE.

The usefulness of self-efficacy theory in understanding how efficacy expectations can influence career and employment search/outcome is still evolving. To get a better understanding, there is distinct value in discussing the foundational principles of self-efficacy theory and how these self-efficacy theoretical principles can be used to advance the work of vocational counseling and practitioners.

Two philosophies have helped create and shape self-efficacy theory, social learning theory and social cognitive career theory. A major force in self-efficacy development has been social learning theory (Bandura, 1977a). Social learning theory is based on a behaviorist approach—people learn from the effects that a particular behavior has on individuals and the environment (Davis & Luthans, 1980). Bandura (1977b) asserted that the best explanation of behavior is in terms of a continuous reciprocal interaction between cognitive, behavioral, and environmental determinants. Social learning theory further posits that the environment and person do not function as independent units, but instead determine each other in a reciprocal manner. Hence, social learning theory explains that it is largely through their actions that people produce the environmental conditions that affect their behavior in a reciprocal fashion. The experiences generated by behavior also partly determine what a person becomes and can do which, in turn, affects subsequent behavior (Bandura, 1977b).

According to Davis and Luthans (1980), social learning theory addresses the need for a comprehensive theory that incorporates the interactive nature of all the variables of organizational behavior—the behavior itself, environment, and organizational participants (including their internal cognition). Previous conceptualizations of vocational behavior such as

expectancy theory and operant conditioning theory were too limiting, providing only partial explanations of the dynamics involved in the process. Social learning theory provides a more comprehensive and integrated explanation of how an individual's, behavior, personal factors and environment all interact.

Self-efficacy, a key element in Bandura's (1977b, 1978) social learning theory is the belief in one's own capability to perform a task or behavior. Self-efficacy theory maintains that all processes of behavioral change operate through the alteration of an individual's sense of personal mastery of efficacy (Bandura, 1977a). Personal mastery of efficacy is viewed as a regulatory process that works through belief in one's capabilities to mobilize the motivation, cognitive resources, and courses of action needed to exercise control over events in their lives (Bandura, 1986).

Self-efficacy not only helps to determine an individual's behavior or performance, but also how much effort will be expended in performing the behavior and how long an individual will persist in the behavior, despite obstacles and adverse experiences (Bandura, 1986). People persist in activities that are subjectively threatening as long as their self-efficacy expectations about the performance of the task or behavior are positive. Wood and Bandura (1989) further concluded that individuals who demonstrate strong self-efficacy are more likely to undertake challenging tasks, persist longer, and perform more successfully than those with lower self-efficacy. Hence, perceived self-efficacy serves as a behavioral predictor.

Bandura (1977a, 1982) identified four sources of self efficacy: (1) *performance accomplishments*, meaning successful performance of a particular task or behavior in the past, (2) *vicarious learning* derived from observing others successfully perform the task or behavior, (3) *emotional arousal*, being able to reduce the negative physiological state associated with

performing the task or behavior, and (4) *verbal persuasion* that entails being encouraged, convinced, or persuaded that a given task or behavior can be performed.

Bandura (1982) indicated that a common theme in his research on self-efficacy was the emphasis given to people's sense of personal efficacy to produce and regulate events in their lives. According to self-efficacy theory, the primary determinants of human behavior change are self-efficacy expectancies and outcome expectancies. Self-efficacy expectancies refer to the belief that a given task or behavior can be performed successfully. This belief can vary on dimensions of level, strength, and generality. Level refers to the degree of task difficulty that an individual feels capable of attempting. Strength refers to the durability of efficacy expectations when confronted with obstacles. Generality is the degree that expectations of self-efficacy transfer to different behavioral domains (Bandura, 1977b).

Outcome expectations are the belief that the performance of a particular behavior or task will lead to a specific outcome. By definition, outcome expectations refer to the consequences of behavior. In contrast, an efficacy expectation is a belief concerning the performance of the behavior itself. Low self-efficacy expectations may prevent a person from attempting to perform a task even if they are relatively certain that performance will lead to the desired outcome (Hackett & Betz, 1981). Self-efficacy expectations are considered one of the primary cognitive determinants of whether or not individuals will attempt a given task or behavior.

There is a substantial body of research that supports the fact that self-efficacy expectations are positively correlated with changes in behavior (Bandura & Adams, 1977; Bandura et al., 1980; Stumpf et al., 1987; Usaf & Kavanagh, 1990), career-decision making-related behaviors (Luzzo, 1993; Mathieu, Sowa, & Niles, 1993; Niles & Sowa, 1992; Taylor & Betz, 1983), career salience (Matzeder & Krieschok, 1995) and math and task achievement (Lent

et al., 1987; Rooney & Osipow, 1992; Schunk, 1984). This is a small representation of the vast amount of research studies that have attempted to validate the self-efficacy construct.

The self-efficacy concept has been applied in a variety of domains of behavior such as reducing length of time spent unemployed (Eden & Aviram, 1993), career choice (Betz & Hackett, 1981, 1987), African American women (Hackett & Byars, 1996), task persistence following failure (Jacobs, Prentice-Dunn, & Rogers, 1984), job search behavior, task performance (van Ryn & Vinokur, 1992), and task performance (Barling & Abel, 1983). Eden and Aviram (1993) found that increasing an individual's job search self-efficacy caused an intensification of job search activity and increased an individual's chance of obtaining employment. They found that intervention programs designed to increase unemployed Israeli workers general self-efficacy (GSE) increased their job search activity. Thus, they contended that raising individual self-efficacy beliefs increases job search performance and reemployment potential.

Hackett and Betz (1981) found that self-efficacy is predictive of academic and career-related choices. They found consistent sex differences in self-efficacy with regard to traditional versus non-traditional (for females) occupations. Hackett and Byars (1996) confirmed that the socialization process and learning experiences of minority African-American women were major influences on their career decision-making self-efficacy. Jacobs et al., (1984) indicated that self-efficacy expectancies were a better predictor of persistence in problem-solving tasks than outcome expectancies or self-awareness. van Ryn and Vinokur (1992) explored the effect cognitive factors have as mediators for hard-to-employ individuals' job search behavior. The researchers used intervention programs that emphasized self-efficacy as the primary mediator of behavior change (Bandura, 1986). They reported a positive relationship between self-efficacy

and related intentions and behavior. Thus, self-efficacy plays a major role in behavior mediation for increased job search efforts for the unemployed. Barling and Abel (1983) explored the effect of self-efficacy beliefs on predicting task performance for a group of insurance salesmen. Individuals with the higher self-efficacy performed better at selling insurance. Thus, task performance was predicted using self-efficacy for the task.

Overall, results of self-efficacy research are generally positive and suggest that efficacy expectations are useful in predicting behavior change, independent of the different types of interventions or treatment approaches used. Other useful consequences involved in the behavior change aspect of self-efficacy include setting higher personal goals and achieving higher task performance (Bandura, 1986; Locke & Latham, 1990; Wood & Bandura, 1986). There is substantial body of literature that supports a positive relationship between self-efficacy, goal setting, and task performance (Hackett & Betz, 1992; Lee & Bobko, 1994; Rooney & Osipow, 1992). The positive inter-relationship that has been found in previous studies between self-efficacy expectations, goal setting, and task performance provide a valuable foundation for understanding factors related to how individuals are successful at performing tasks necessary for obtaining a job and developing a career (Solberg et al., 1994).

The career decision-making enhancement aspect of self-efficacy is particularly applicable to women in the TANF program and their pursuits to establish themselves in occupations and develop careers. In many instances, disadvantaged women in training programs like TANF have had little opportunity to observe individuals like themselves obtain successful careers due to years of alienation and marginalization (Ntiri, 2000). As a result, they lack the role models needed to provide the vicarious experiences that help develop self-efficacy and self-esteem (East, 1999). The absence of successful career role models for disadvantaged females and the

need for vicarious modeling may contribute to a diminished self-efficacy that impedes successful career choice and work performance. To better understand the role self-efficacy can play in increasing women career opportunities and work performance, a closer examination of women and their career self-efficacy is discussed in the next section.

Career Decision-Making Self-Efficacy Theory

Career decision-making self-efficacy refers to the role self-efficacy plays in how career decisions are made (e.g., the nature of exploration and decision-making activities). Hackett and Betz (1981) first introduced self-efficacy theory and its application to the career development and counseling of women. They postulated that self-efficacy expectancies might prove useful in explaining two continuing problems related to women's career development; continued underrepresentation of females in male-dominated career fields, and the serious under-utilization of women's abilities and talents in career pursuits (Betz & Hackett, 1986). Through research, Hackett and Betz confirmed that the lack of female representation in certain fields was largely a result of socialization experiences. As a result of traditional gender role socialization experiences, women lack strong expectations of personal efficacy in relationship to many career-related behaviors and, thus fail to fully realize their capabilities and talents in career pursuits. Betz (1992) found that career-related self-efficacy expectations were lower, weaker and less generalized among women than men. The long-term result of this difference helps to explain why so many women fail to consider non-traditional career options in math, engineering, and science (Fitzgerald & Crites, 1980).

Taylor and Betz (1983) used Crites' (1978) model of career maturity to research women's self-efficacy, specifically emphasizing behavior pertinent to (a) accurate self-appraisal, (b) gathering occupational information, (c) goal selection, (d) making plans for the future, and

(e) problem solving. Their findings supported the idea that self-efficacy for career decision-making was predictive of career indecision, i.e., participants who reported low levels of career decision-making self-efficacy were also more likely to be career-indecisive or unable to complete career exploration and decision-making activities.

Several studies have been conducted primarily on women and their career pursuits, career decision-making, and the role self-efficacy plays in the process of career choice (Betz, 1992; Lent et al., 1987; Lent & Hackett, 1987). This section of the literature review is key to understanding how societal practices have influenced the self-efficacy of women and their career-related decision-making. The studies reviewed here are used to help establish the connection between the career decision-making process and environmental influences (e.g., female socialization and sex discrimination) on women. Hackett and Betz (1981) study was foundational in establishing the application of self-efficacy to the career behavior and career choice options of women. They found that largely as a result of socialization experiences women lack strong expectations of personal efficacy in relationship to a variety of career-related behaviors and domains. Thus, women often fail to realize their full potential and talents in career pursuits. Betz (1992) recommended additional empirical studies aimed at understanding how self-efficacy as a mediating variable affects the career development of racial-ethnic minority groups and socioeconomically disadvantaged individuals.

Hackett and Betz's (1981) findings indicated significant and consistent differences in the self-efficacy of male and female students regarding traditional versus non-traditional occupations. Nontraditional occupations, according to the U.S. Department of Labor (1999), are occupations where one gender makes up 75% or more of all workers. Due to the nature of the work involved in non-traditional occupations for women such as unionized, manufacturing, and

skilled labor with higher wages, nontraditional jobs offer the greatest opportunity for disadvantaged women to increase their economic status (Burge, 1997). The potential of increased earning power for women in nontraditional occupations makes it important for career counselors to develop ways to improve disadvantaged women's career decision-making self-efficacy toward non-traditional jobs.

Solberg et al. (1995) suggested that career counselors may better serve individuals seeking careers or making career changes by focusing on career self-efficacy expectations rather than on personality traits. Bandura (1986) argued that self-efficacy expectations could be improved through active intervention programs that emphasize the four sources of self-efficacy experiences: mastery experiences, vicarious experience, persuasion experiences, and physiological feedback. By using these four sources of self-efficacy experiences in training programs for disadvantaged women, counselors may enhance women's self-efficacy, which may lead to increased chances for attaining economic self-sufficiency.

Self-efficacy is the most central and pervasive mechanism of personal agency. Personal agency involves beliefs about one's capabilities to exercise control over events that affect his or her life (Bandura, 1989). Because of self-efficacy's influence on personal agency, one's self-efficacy expectations are integral in determining their choice of activities, environments, interests and persistence in difficult situations. In essence, to be successful, one not only must possess the required skill but also be resilient due to self-belief when faced with difficulties. Thus, two people may possess the same skills, but experience different outcomes based on their self-beliefs or efficacy for the task (Wood & Bandura, 1989).

Self-efficacy has been used to develop the social cognitive career theory (Lent et al., 1994). The basic model of social cognitive career theory emphasizes the role of self-referent

thinking in guiding human motivation and behavior. Self-referent thought mediates the relationship between knowledge and action. It makes the connection between how people judge their capabilities and how their self-perceptions of efficacy allow for generative capability. Efficacy involves a generative capability in which cognitive, social, and behavioral sub-skills must be organized into integrated courses of action to serve innumerable purposes. Bandura (1986) asserts that success is often attained only after generating and testing alternative forms of behavior and strategies, which requires perseverant effort. Hence, self-doubters are quick to abort this generative process if their initial efforts prove to be deficient. The generative aspect of self-efficacy has particular application to the career development and employment process of disadvantaged women. In striving to gain and maintain employment, people's generative capabilities may dictate success or failure. Thus, social cognitive career theory provides an exemplary conceptual framework to explore how self-efficacy beliefs may enhance career choice and development.

Social Cognitive Career Theory

Social cognitive career theory (SCCT; Lent et al., 1994) presents a rich framework for understanding and explaining the unique needs and circumstances involved in the career development of special populations—women, ethnic minority groups, economically disadvantaged, and people with disabilities (Fabian, 2000). The SCCT model adopts Bandura's (1986) reciprocal model of causality. In this model, the interactions of people with behavioral and environmental factors influence career choice, goals, and performance. The internalization of learning experiences along with other environmental factors influence how individuals view career choice and decision making. Person input variables (e.g., gender or racial-ethnicity) interact with environmental or contextual variables (e.g., socioeconomic status and socialization)

to mediate different learning experiences that are used in forming self-efficacy beliefs and outcome expectations used in career choice (Fouad & Smith, 1996).

SCCT focuses on the process of career decision-making and three intricately linked variables that help individuals regulate their own career behavior: self-efficacy beliefs, outcome expectations, and personal goals (Lent, et al., 1996). According to Lent et al. (1994), the variable that is the most influential in the career development and employment process is self-efficacy. SCCT postulates that person variables and contextual variables (e.g., gender, ethnicity, and socioeconomic status) affect learning experiences that subsequently influence self-efficacy beliefs. These self-efficacy beliefs are seen as the most pervasive of all three variables (abilities, self-efficacy, outcome expectations) when identifying the most important link to particular performance domains such as task, academic, and work achievement. Key to this notion is an understanding of how learning experiences help shape self-efficacy and in turn, self-efficacy is an impetus for career choice and development. As a consequence, career development can be impeded or facilitated by learning experiences resulting from one's environmental factors such as culture and socioeconomic status (Lent et al., 1994). For example, Fouad and Smith (1996) found that girls were not inherently less self-efficacious in math, but performed more poorly in math than boys because of different socialization and teaching practices that led to different learning opportunities.

The impact of environmental factors on learning experiences affecting self-efficacy can be applied to economically disadvantaged individuals. Disadvantaged individuals may not be less self-efficacious because of natural causes, but more so because of their learning experiences, lack of role models, positive performance attainment, or limiting factors (Harmon, 1994). In the social cognitive view, self-efficacy is not a singular static, passive, or global trait, but rather

involves a dynamic self-belief that is linked to particular performance domains (Fabian, 2000; Lent et al., 1994). Hence, SCCT provides a useful framework for identifying issues that disadvantaged individuals may encounter in the job search process.

Literature on the career concerns of economically and occupationally disadvantaged persons strongly recommends applying SCCT (Brown et al., 1996; Chartrand & Rose, 1996; Harmon, 1994) for examining this population's unique career-related issues and challenges. The contextual component of SCT recognizes that many disadvantaged individuals have not had the resources or information necessary to plan and choose a preferred career. The reason the process of career choice and decision-making for the disadvantaged is constricted entails a multiplicity of factors. Disadvantaged individuals' limited career planning may be the result of environmental and societal problems resulting from a lack of needed positive support and guidance or other low socioeconomic barriers/limitations. SCCT is particularly promising for understanding the career choice process for disadvantaged groups, because the theory goes beyond acknowledging personal characteristics (e.g., gender, race) and incorporates constructs that explain how these characteristics are related to environmental factors, as well as outcomes that specifically relate to disadvantaged populations (Strauser, 1995).

The component of SCCT that most exemplifies the uniqueness of the career choice process for economically disadvantaged women is the interactive model of persons, behavior, and environmental factors. Specifically, environmental factors (e.g., socioeconomic status, socialization, and role modeling) influence how and what individuals internalize, consequently affecting the person and their subsequent behavior. The contextual variables in SCCT represent both supportive and hindering environmental conditions. Hindering or negative environmental conditions affecting choice of career can be either perceived or real barriers. Often, career choice

barriers relate to negative environmental conditions that are a result of economic or social conditions. Disadvantaged women encounter barriers to career choice and decision making because of environmental factors resulting from poverty, discrimination, different socialization, and the stereotypes associated with gender and ethnic membership (Chartrand & Rose, 1996). The learning experiences associated with these barriers act as reinforcements to them.

Perceived Barriers to Career Choice

The career choice process for disadvantaged women involves several unique career development barriers. Swanson and Woitke (1997) defined career barriers as events or conditions, either within the person or in the environment that makes career progress difficult.

One major career barrier relates to gender and the effect socialization has on disadvantaged women and their ability to develop self-efficacious expectations in the career choice and development process (Betz, 1992). Gender differences primarily attributable to different socialization and teaching processes present a problem for women when it comes to acknowledging the marketable skills they may possess that will assist them in the career choice process. Lent et al. (1996) propose that individual difference variables, such as gender, interact with background contextual variables to form self-efficacy and outcome expectations differently for females than for males. Their finding is supported by a study conducted by Fouad and Smith (1996) with middle school boys and girls. In their research, they found that the manner in which women are socialized along with other socioeconomic and environmental factors affect their learning experiences in turn influences their self-efficacy. The socioeconomic factors affecting the disadvantaged population such as, domestic abuse, unemployment, underemployment, family problems, poor social support, low self-esteem and self-efficacy are all factors that may contribute to them underestimating their actual job skills.

To overcome barriers posed by gender and different socialization, SCCT theory posits the concept of *coping self-efficacy*. Coping self-efficacy is the capability to negotiate particular situational features that obstruct or complicate performance (Brown et al., 1996). An example of how coping self-efficacy works, is that of a young Black woman who may perceive that racial and gender bias pose formidable obstacles to becoming an engineer. However, access to potent role models, adequate financial resources, and significant others who share her dreams, help her cope despite expectations of encountering career barriers such as racism and sexism. In this example, coping self-efficacy empowers her with the ability to persist.

A second set of barriers pertains to the economic and social issues these women confront when seeking employment. Disadvantaged women, in particular, are confronted with issues centered around socioeconomic class, low educational level, discrimination, sex roles stereotypes, and negative societal messages which may affect their career choice and employment performance (Reixach, 1995). Meara, Davis, and Robinson (1997) found that, when counseling low-income individuals, some aspects of the career choice process, such as planning, held very little relevance. In many cases, the primary interests of these clients were on obtaining necessities such as food and shelter. In essence, because of their socio-cultural and economic situation, disadvantaged individuals often view work as a source of income rather than a source of self-realization (Fitzgerald & Betz, 1994).

A third set of barriers pertains to a lack of employability skills. Often, poor disadvantaged females lack marketable job skills necessary to compete in a changing job market. The world of work is becoming technologically complex and the need for an educated workforce is increasing (Chartrand & Rose, 1996). Many of the women who did possess the appropriate employability skills (technical, personal, and self-management) had a tendency to

underestimated their skills. Swanson and Lease (1990) found that women were more likely to give other women higher ratings than they gave themselves. Conversely, men tended to rate themselves higher than they rated other men. These findings suggest two issues: (a) women don't readily identify their marketable job skills, and (b) women are prone to avoid or underestimate the development of the skills they do have. Both of these issues can pose a challenge for counselors and job placement personnel when trying to establish intervention strategies aimed at modifying women's perception of their skills and their ability to enhance existing skills.

The ultimate intent of the current research was to explore and investigate factors that may assist in understanding disadvantaged women's employability through self-efficacy enhancement, key demographics and other career-related developments. To this end, I used the self-efficacy construct and SCCT as a theoretical basis. Lent et al. (1994) posit that self-efficacy is integral in understanding why individuals with different socioeconomic backgrounds, and socialization processes develop different self-beliefs about their ability to achieve certain tasks. Hence, self-efficacy through its ability to link learning experiences, self-belief, and task achievement provides an ideal construct for better understanding the issues involved in the successful long-term employment of disadvantaged women.

SCCT is concerned with two primary aspects of the performance of disadvantaged women in overcoming career-related barriers. First, the self-efficacy component explains how the level of attainment individuals achieve in their work tasks is guided by their belief about their ability to be successful. Second, the self-efficacy construct helps explain the degree of individual persistence despite obstacles. Self-efficacy, outcome expectations, and performance goals influence task and behavior performance. Self-efficacy, when congruent with assessed competencies, promotes effective performance behavior (Lent & Brown, 1996). Thus, assessing

self-efficacy for job search and performance behavior is key to understanding potential employability.

Gist (1987) discovered three major aspects of social cognitive theory particularly relevant to performance: The development of cognitive, social, and behavioral competencies through mastery modeling; the cultivation of people's beliefs in their capabilities so that they will use their talents effectively; and the enhancement of motivation through goal systems. Development of competencies through mastery modeling explains how people can expand their knowledge and skills on the basis of information conveyed through successful accomplishments. Successful task performance is the paramount source of strong career self-efficacy (Hackett & Betz, 1981). Performance accomplishments can be used to increase efficacy by developing mastery of work and job seeking skills (Strauser, 1995). The impact of mastery of work is particularly critical to the success of disadvantaged populations seeking employment. Through training programs, disadvantaged individuals can gain a sense of mastery of job search and maintenance skills (Rak & O'Dell, 1994). Job search skills such as completing applications, interviewing, and demonstrating skills necessary for obtaining a job can be imparted through observational learning and the practice of those skills needed to successfully complete a training program. To ensure successful completion of a training program, job/career search self-efficacy enhancements should also be incorporated.

The second aspect of SCCT applicable to performance is the cultivation of people's beliefs in their capabilities so they will use their talents effectively. Bandura (1986) and Bandura and Wood (1989) conducted studies finding that, when individuals were given proper incentives, resources, and empowered, their self-efficacy beliefs were indicative of performance. In an effort to clarify the relationship of self-efficacy and performance, perceptions of efficacy serve as a

behavioral predictor. Wood and Bandura further concluded that individuals who demonstrate strong self-efficacy are more likely to undertake challenging tasks, persist longer, and perform more successfully than those with lower self-efficacy beliefs.

Lastly, people seek self-satisfaction from fulfilling valued goals. In essence, individuals are motivated by discontent with substandard performances and strive to reach their goals (Bandura & Wood, 1989). Discrepancies between behavior and personal standards generate self-reactive influences, which serve as motivation and a guide for action to achieve goals. Goals can provide motivation, a sense of purpose and direction, and they raise and sustain a level of effort needed to achieve them. Thus, New Connections to Work (NCTW) program participants' discontentment with their inability to be self-sufficient, along with the urgency due to the abbreviated time limits for receiving cash assistance, may be sources of motivation. This motivation, in turn, may be channeled into action to achieve a desired goal—sustained employment. The pursuit of sustained employment as a goal, may not only guide and motivate performance but, according to Bandura and Wood (1989), it helps build people's belief in personal capabilities (self-efficacy) to achieve desired outcomes.

Job Readiness

According to Carnevale, Gainer, and Meltzer (1990) most adults struggle to keep up with a constant demand for new job skills. Even routine jobs are evolving as demands of the workplace expand. Competitive pressures compel employers to shift employees between jobs and responsibilities, putting a premium on the ability to absorb and process new information quickly and effectively. The new economy of the 21st century demands a new way of proactive thinking and a more flexible worker. The complexity, amount, and ready access of information for decision-making increase the need for workers to learn and apply facts and information

quickly. The knowledgeable worker who demonstrates a highly skilled, adaptive blend of technical and human relations ability will be recognized by employers (Overtoom, 2000). One of the fundamental guiding principles of instructional programs aimed at employability or job readiness-training is the need to teach generic foundational skills that are applicable to a variety of situations rather than occupation-specific skills (McLaughlin, 1995). Job-specific technical skills in a given field are no longer sufficient as employers scramble to fill an increasing number of interdependent jobs (Askov & Gordon, 1999). Hence, individuals who possess employability skills that are flexible, allowing them to work in varied work environments, are viewed as valuable in today's workplace.

Employers in several studies (Lankard, 1990; Roessler, Johnson, & Schriener, 1987) stress the importance of teaching more fluid skills such as job keeping, interpersonal and communication skills, self-esteem, and positive work behaviors. Overtoom (2000) synthesized employability skill definitions declaring that employability skills are transferable core skills that represent essential, functional, and enabling knowledge, skills, and attitudes required by the workplace. It is predicted that only highly skilled workers—people with the capacity and will to use their minds as well as their hands in order to overcome workplace challenges—would be considered work-ready. Several studies have been conducted to identify the work-ready skills. The ASTD and SCANS (1991) studies have become the foundational for defining and identifying employability skills. They are used as benchmarks or beginning points for other international, national, state, regional, and local employability studies. ASTD emphasized six major categories of employability skills: (1) *basic competency skills*-reading, writing, etc.,

(2) *communication skills*-speaking and listening, (3) *adaptability skills*-problem solving and thinking creatively, (4) *developmental skills*-self-esteem, motivation and goal setting, career planning, (5) *group effectiveness skills*-interpersonal skills, teamwork and negotiation, and (6) *influencing skills*-understanding organizational culture and sharing leadership.

The SCANS (1991) report identified the same employability skills as ASTD, but also advanced the framework. SCANS identified five general workplace competencies: resources, interpersonal skills, information, systems, and technology. These competencies can be thought of as skills, strategies, habits of mind, or dispositions displayed by students in their work.

Additionally, SCANS identified three foundational competencies considered essential to success in any work environment: basic skills, thinking skills, and personal qualities. Basic skills include reading, writing, and arithmetic. Thinking skills include decision-making, problem solving, knowing how to learn, and reasoning. Personal qualities include individual responsibility, self-esteem, sociability, self-management, and integrity. The SCANS report also highlighted skills that will be needed in the future. These future skills were termed *high performance skills* that allow workers to manage resources, work productively with others, acquire and use information, master complex systems, and work with a variety of technologies. Though the high performance skills are not typically taught in most high schools, they are now essential for workers to thrive and succeed in today's high-performance workplaces.

Halperin (1998) studied the application of SCANS skills by high school students leaving school for high performance workplaces and concluded that teaching and learning employability skills are consistent with the emerging needs of a worker who is capable of thinking and responding to various work situations. Halperin found that in order to successfully impart appropriate employability skills, teaching and learning approaches need to integrate the five

principles of effective learning (Bailey, 1997). Tasks and jobs are integrated through broad job definitions or cross-functional teams. This experiential learning is key to the integration of knowledge and application.

1. Workers are given more initiative and take more responsibility when this approach is used. They become active participants in the process.
2. Employees solve problems in non-routine situations, allowing for increased stimuli and an increased understanding.
3. There is an emphasis on continuous improvement. An integration of various approaches to solving problems provides opportunity for collaborative and creative learning.
4. Workers are expected to understand their function within the context of the broader purpose and goals of the organization. New strategies are grounded in solid research supporting contextual learning. It has an emphasis on continuous improvement.

The employability skills that SCANS emphasize as functional and enabling skills are the skills needed to compete in the emerging economy (Richens & McClain, 2000). The key to employability skills is based on the SCANS foundational skills of reading and writing, thinking, and the personal qualities needed to assimilate into the workplace. Often, these foundational skills are a major impediment keeping disadvantaged workers from entering job training and postsecondary educational programs. Thus, teaching and learning employability skills can only be effective if training programs serving disadvantaged populations address their foremost need: that of a basic education. Strawn (1998), investigating basic education programs serving welfare recipients, concluded that most of the programs succeeded in substantially increasing participant's basic education. Thus, welfare-to-work programs provide an important avenue for

many welfare recipients to get basic education services they would have not otherwise obtained. Hence, the job-training outcome of most of the major programs such as Greater Avenues for Independence (GAIN) in California, Women's Initiative for Service and Empowerment (WISE) in Denver and Education for Gainful Employment in New York (EDGE) have been positive.

Job-Readiness, SCANS and TANF Recipients

Since the late 1980s, the rapid changes and challenges of competing in a world market with massive technological advancements have necessitated a redesign of the workplace into an innovative work environment known as a high-performance workplace. Advanced work environments require workers to display behaviors and work orientation that go beyond routine task performance to one of a thinker and decision-maker (Richens & McClain, 2000). Because of the information intensive environments workers at all levels are required to solve problems, create ways to improve the current work methods, and engage effectively with their coworkers (Bailey, 1997; Packer, 1998). Thus, the foundational skills an employee needs in this new environment, to successfully compete are problem solving, cognitive, and interpersonal skills that form a basis to be successful in a high-performance workplace (SCANS, 1991).

Several studies have examined the impact of high performance environments on disadvantaged populations, and the challenges they face due to the current welfare-to-work "Work First" approach. Some researchers contend that the emphasis of Work First programs has shifted training away from strategies that encourage people to build skills toward strategies that require people to find jobs quickly (Ellwood, 1996; Pauly, Long, & Martinson, 1992; Strawn, 1998). Researchers advocate that these programs are inconsistent with what is needed for participants to increase their earnings and secure long-term employment. The most successful programs have a mixed strategy approach where employment and skill building is the focus. The

primary focus of a mixed strategy approach is to offer participants an environment to apply learning in a work context while preparing for long-term employment.

The mixed strategy approach offers a full range of employment and training services and, as a result, it is the most effective for successful employment preparation. The SCANS foundational skills (basic skills, thinking, and personal qualities) that were identified as key to successful workplace integration are the skills identified as major barriers to the successful employment of disadvantaged persons. In a study conducted by Pavetti (1997) with welfare receipts, using the Army entrance examination, two-thirds of the individuals tested, scored in the bottom fourth quartile of all women tested for their particular age group on a test of basic skills. Low basic skills prohibit disadvantaged individuals from entering job training or postsecondary educational programs that would prepare them for better paying positions. Subsequently, job-training programs aimed at preparing disadvantaged participants for jobs must incorporate training that teaches these basic foundational skills identified in SCANS.

Strawn (1998) investigated the importance of the skills highlighted in the 1991 SCANS report to the employment success of disadvantaged workers. When employers hired individuals from government training programs they viewed women and minorities as trainable in technical skills, but were not job ready when it came to the necessary non-technical skills or personal qualities (e.g., personal responsibility, integrity, self-management, and dependability). Employers viewed non-technical skills as essential for maintaining and excelling on the job. More specifically, job training program participants' lack of personal quality skills were a major reason for job dissatisfaction and attrition.

Lundgern and Cohen (1999) examined mismatches between employers' needs and low-income employees' skills. Their findings were that the SCANS (1991) foundational skills were

the ones most lacking. Employers were especially critical of the inability of public training programs to adequately prepare disadvantaged participants for job-readiness. Lundgren and Cohen's research highlighted reasons urban employers gave for not wanting to hire public job training workers participating in the Jobs Training Partnership Act (JTPA) and the Job Opportunities and Basic Skills Training Program (JOBS). Participants of these programs were viewed and evaluated by urban employers as having poor work habits and lacking other pertinent personal qualities (e.g., self-management and dependability) necessary to meet hiring needs. In the study, employers associated workers' skills mismatch with their race, inner-city low-income status, and public job training preparation.

Keim and Strauser (2000) studied the effects of a comprehensive job readiness training program on its participant's perceptions of their job readiness behaviors. The researchers examined the congruence between participants' perceptions of their job readiness and that of their instructors. They used the job readiness self-efficacy variable to measure perceptions of job readiness behaviors, e.g., filling out job applications, and interacting with supervisors. Workers' perceptions of their job readiness were higher than instructors' perception. Instructors rated women and African Americans significantly lower in job readiness than these participants rated themselves.

Keim and Stauser (2000) posited that biases based on gender and culture may lead to difficulties in disadvantaged females maintaining employment. They found that if there is incongruence between the employers' views and workers' views of the job-readiness, the worker, may fail to achieve the necessary level of performance needed for long-term employment. Further, the results of their study suggest that job readiness programs are not completely

effective in developing job-readiness skills, particularly the social and interpersonal skills needed to achieve tenure.

Results of Keim and Strauser's (2000) study are consistent with prior findings. Janikowski, Bordieri, and Musgrave (1992) found that vocational training participants tended to overestimate their aptitudes, and job-training participants' self-assessment of their job-readiness was higher than that of their instructors. In essence, there was incongruence between the job-readiness perceptions of participants and instructors. This was particularly applicable for African Americans and women.

Tesolowski (1994) suggested that traditional job readiness training programs focus more on teaching social and interpersonal skills. Hence, they place too little emphasis on experiential practice of work skills and when it is appropriate to use them. In experiential training settings, behaviors are demonstrated through role playing, modeling, and feedback with a focus on successful application and delivery of desired and appropriate behaviors (Keim & Strauser, 2000). Participants in experiential learning settings are required to generalize job readiness skills by acknowledging environmental cues as to when to apply the appropriate skills. Experiential training, in turn, allows training participants opportunities to practice using the non-technical skills needed to successfully transition into and sustain employment.

Halperin (1998) looked at disadvantaged youths and the employment opportunities available to them, concluding that there was a need for increased emphasis on teaching non-technical employability skills and personal qualities to assist them in obtaining employment. This need is becoming more critical with the increase in the number of individuals belonging to minority and disadvantaged populations. Job training programs that focus on job acquisition and career development of persons from low income and culturally diverse groups need to be unique

in their approach (Daniels, D'Andrea, & Gaughen, 1998). More importantly, with the increased demand for developing training programs aimed at preparing individuals with the skills necessary to transition from welfare to work, increased emphasis need to be job-readiness skills (Imel, 2000).

Studies pertaining to vocational training assert that job acquisition, retention, and advancements are heavily influenced by the non-technical, social, and interpersonal skills of workers, as well as their technical skills (Hanley-Maxwell, Bordieri, & Merz, 1996; Strauser, 2000). Employers need employees that possess personal career management skills, interpersonal skills, and an ability to work toward achieving company goals through teamwork. Miles (1997) investigated students entering the workforce for the first time and revealed that the traits employers preferred most in entry-level workers included good technical skills, self-directness, professional behavior, and solid personal qualities such as a sense of responsibility, dependability, cooperation, respect motivation and initiative.

Job readiness skills are provided to TANF recipients through the New Connections to Work (NCTW) program. NCTW was established to provide job-training participants with career assessment, job counseling, job readiness/retention skills, life skills management workshops, and post-employment training (NCTW, 2001). Individuals participating in NCTW go through a structured training program specific to their needs for obtaining and maintaining employment. The training program begins with an assessment by a training coordinator to identify which of several different specialized programs, e.g., introduction to computers, medical information clerk, in-home care, transportation management, culinary arts, or home repair, would be the most useful for participants seeking employment. Assessments involve looking at an individual education, prior work history, job interest, and job requirements. After assessment, participants

are assigned to a specific training program that involves job search activities. These activities include skill identification, development, and job search techniques tools (e.g., resume writing , interviewing skills).

NCTW's Life Skills Management class synthesizes several components, including job-specific skills training (e.g., computers, medical information and office administration), personal development, job search activities, and placement. The program's job counselors have determined that building and reinforcing employability skills in the NCTW's training classrooms is where students can develop the appropriate workplace skills and behaviors through role-playing and constructive feedback. Job counselors give students instructional material and case scenarios to understand confrontational and unpleasant situations that they may have to deal with in the workplace. As a reinforcement tool in the class, students role-play and are assessed on their ability to employ basic skills, thinking skills and personal qualities within a workplace setting. Trainers evaluate participants on their ability to pick up on environmental cues, assimilate and apply technical/non-technical skills. The expected outcome of the life skills management class is to impart work-readiness qualities and self-management skills needed to succeed in the workplace.

Becker Work Application Profile (BWAP) and SCANS

There are a limited number of instruments available to measure SCANS foundational skills. One available instrument, the Becker Work Application Profile (BWAP), has been used extensively in vocational training settings (Becker, 1989). The BWAP was constructed to assess vocational rehabilitation participants' and disadvantaged individuals' ability to apply foundational work-related skills similar to the ones identified in SCANS. SCANS three foundational components--basic skills, thinking skills and personal qualities--are measured by

the BWAP. The SCANS basic skills consist of arithmetic/mathematics, reading, and writing; the thinking skills consist of creative thinking, decision-making, problem solving, visualizing, knowing how to learn and reasoning; personal quality skills include an individual's responsibility, self-esteem, sociability, self-management, and integrity.

BWAP, as a work-readiness assessment, is useful to individuals conducting job-training and in ascertaining the preparedness of individuals to enter the workplace. Its ability to emulate the skills identified in SCANS is important for job search and placement. Gbomita (1997) identified the criteria used for hiring and employment retention for companies using the employability skills or workplace competencies identified in SCANS (1991). She found that the SCANS foundational components--basic, thinking and personal qualities skills--were critical for new employees entering the work force, if they are seeking long-term employment and successful career advancement. Halperin (1998) confirmed these findings by investigating what employers saw as necessary skills. In his study, the employment skills deemed necessary by employers were the personal qualities of self-management, responsibility, teamwork, information, and integrity, along with basic and thinking skills. Employers' recommendations were that basic skills and thinking skills were modifiable, but personal quality skills were the most pertinent to the successful assimilation of disadvantaged workers into the workplace and for their long-term employment success.

The BWAP (Becker, 1989) is an instrument developed specifically to assess the disabled and disadvantaged populations' workplace readiness, including work habits, attitudes, behavior and performance skills. The BWAP is completed by individuals familiar with a job-trainee's work skills and behavior, e.g., a job counselor, vocational trainer, teacher or vocational counselor. Scale items center around four domains: (a) Work Habits-Attitudes—attendance,

punctuality, personal hygiene, motivation, and work posture; (b) Interpersonal Relationships—social interaction, emotional stability, and cooperation; (c) Cognitive Skills—knowledge, reasoning, recognizing, judging, and functional academics; and (d) Work Performance Skills—motor, job responsibilities, communication, and work efficiency. The four domain scores are summarized to comprise one composite work-readiness score.

Field testing of the psychometric properties of BWAP was conducted to translate it into a Chinese version. The test was conducted using a sample of 98 participants (58 males, 40 females) diagnosed as having mild or moderate mental retardation from five sheltered workshops (Portney & Watkins, 1993). Testing was based on training that could be closely observed by the same staff member continuously for one month to evaluate participants' job-readiness. Ultimately, the evaluation was to identify deficits in participants' work behavior that could be remediated in vocational training facilities. The BWAP had satisfactory content, criterion, and construct validity, internal consistency, test-retest reliability, and inter-rater reliability. It is a good measure of work readiness and vocational competence (Li & Tsang, 2002).

Work First Approach to Welfare Reform

In August, 1996, when President Bill Clinton signed the Personal Responsibility and Work Opportunity Reconciliation Act (PRWORA-H.R.; Davies, 1997), welfare changed from a system that gave cash assistance to one that promotes self-sufficiency through employment. The welfare system before 1996 had its roots in the Aid to Dependent Children (ADC) program, which originated as part of the Social Security Act of 1935. ADC was based on the belief that society should support a single mother while she cared for her young children (Stoesz & Karger, 1994). By 1962, when ADC became Aid for Families with Dependent Children (AFDC), the system began to acknowledge the fact that some children along with their mothers had fathers in

the household but still needed assistance. Thus, more emphasis was put on the family as opposed to only mothers and children. In 1996, when PRWORA was enacted and AFDC was replaced with the Temporary Assistance for Needy Families program (TANF), emphasis again shifted, this time to work as opposed to cash assistance.

Prior to TANF, state spending on welfare programs was stringently reviewed and monitored by the federal government. The federal government regulated how funds were spent and what programs would receive funding. Under the TANF program, states have more flexibility with their spending and resource allocations. Individual states can now decide how the block grant funds received from the federal government are allocated and appropriated. Because of the process of receiving yearly block grants, states can combine funding for welfare benefits with other programs (e.g., emergency assistance and administration costs) that have no impact on or relationship to welfare assistance (MacCurdy & O'Brien-Strain, 1997). State decisions about eligibility for assistance are one of the unique components of TANF. In essence, there is no set entitlement to cash subsidies for participants. Technically, since TANF program funds are in the form of fixed block grants set at certain yearly levels, states can deny eligible applicants assistance due to a lack of available funding.

Another major change in TANF from prior welfare acts is the stipulation that—in order for states to receive federal funding in the form of the block grants targeted for a particular year—certain participant work requirements must be met. Under the Work First components of PRWORA, states are encouraged to move TANF recipients into employment as soon as possible. Under PRWORA, families cannot receive TANF cash aid for more than 2 years without working, and there is a 5-year lifetime limit of eligibility for TANF assistance (MacCurdy & O'Brien-Strain, 1997). The PRWORA emphasizes economic self-sufficiency through a work-

first approach. The work-first approach assumes the best preparation for work is work itself and that welfare recipients will gain experience in entry-level jobs and move on to better work (Castellano, 1998). As a result of the work first approach, states provide short-term job training, job search support, and other job search support services to TANF recipients. In Georgia, TANF recipients can receive short-term intensive training through the New Connections to Work program (NCTW, 2001).

NCTW operates in collaboration with the Georgia Department of Human Resources, the Georgia Department of Labor, Georgia Department of Technical and Adult Education, businesses and industry, and other agencies. The program provides training and employment programs through the 33 technical colleges and four colleges with technical divisions in Georgia. The program is funded through the federal government. NCTW is targeted at helping, (a) single parents, (b) single pregnant women, (c) displaced homemakers, (d) TANF recipients striving for self-sufficiency and in need of education, training, or employment, and (e) others in transition in need of assistance through training.

The program offers two levels of participation, including Work Opportunities Training (WOT) designed to provide certificate training specifically to TANF recipients and assessment/testing, job readiness/retention workshops, life skills, and job placement assistance to TANF recipients. Additionally, NCTW offers Noon NetWorking. This is a program for non-TANF individual, including single parents, displaced homemakers, and nontraditional students. Noon NetWorking offers a sequence of seminars on stress management, communications skills, parenting, life management, and self-esteem building through self-improvement (NCTW, 2002). Overall the primary focus of NCTW is to provide short-term, work-oriented assistance to get poor families with children employed. Due to the current emphasis in welfare reform on job-

search assistance and job placement, Work First programs form the core of most states' efforts to meet the PWORA work requirements (Pavetti & Wemmerus, 1999). Work First programs subscribe to the view that any job is a good job and, therefore, their efforts are geared toward helping recipients enter the labor force as quickly as possible. This abbreviated training push has been an impetus for programs such as NCTW to be successful at identifying instructions that will make participants work-ready quickly.

NCTW's training programs originated in 1995 through the Georgia Department of Technical and Adult Education (GDTAE) Division of Special Services in corporation with the Georgia Department of Human Resources, Child Support Enforcement (CES), and several partnering state and local agencies to provide the necessary training to move persons from welfare to self-sufficiency. The goal of the NCTW program was to address the demands for short-term intensive and job-readiness Work First training while contributing to the economy and tax base by moving former welfare recipients to work and self-sufficiency primarily through expeditious collaborative job training (NCTW, 2001).

Manski and Garfinkel (1994) evaluated welfare to work participant job placement and found that education and training through high cost services components are necessary to provide people with the skills needed to raise their earnings. In their study, many programs lacked the necessary high skills job training needed to prepare participants for work that would raise them above the status of the working poor. Given the number of TANF recipients with very low basic skills, it will be a challenge for states to successfully transition them from welfare to jobs that will provide for their complete self-sufficiency (Olson & Pavetti, 1996).

The Work First Approach to welfare reform and implications for future training and career development of TANF recipients is critical. Time limits have raised the stakes for welfare

to work programs and increased the importance of moving participants into and through work-related program activities quickly (Pavetti & Wemmerus, 1999). A majority of states, heads of household are required to look for work when their youngest child turns 1 year old. However, in 12 states they are required to look for work when their youngest child turns 3 months old (Gallagher, Gallagher, Perese, Schrieber, & Watson, 1998). Similarly, states are pressured by the federal government to emphasize work. PRWORA requires states to meet steadily increasing work participation rates to receive their full TANF federal allocation. In FY 1997, states were required to have 25% of their single parents receiving support participating in work activities for a minimum of 20 hours per week. By FY 2002, participation requirements increased to having 50% of the caseload participating in work activities for a minimum of 30 hours per week (Pavetti & Wesmmerus, 1999). Because of the demands for higher work participation rates, the need for more effective and expeditious job training techniques is amplified. To assist job counselors in meeting the need for developing effective jobs skills training programs, it has become critical to understand training participants' job-readiness and the skills that need to be developed to sustain their employment.

The Manpower Demonstration Research Corporation (2001) sampled a group of former welfare recipients from eight state welfare programs who were successful at finding and keeping jobs beyond one year. Results showed four major characteristics:

- (1) *Education and basic skills.* The most successful people had the highest levels of education and skill levels. Almost three-quarters of participants had received their high school diploma or GED. Successful individuals were more likely to have a post-secondary technical or 2-year degree.

- (2) *Employment and welfare history.* Individuals who had experienced continuous/long periods of employment and the shortest periods of time on welfare were more likely to succeed.
- (3) *Personal barriers.* Individuals with limited barriers to employment such as depression, family and personal problems, family attachment (preference to stay home with children rather than returning back to work), and greater internal locus of control were more likely to succeed.
- (4) *Other demographic characteristics.* Individuals who found work were notably different across groups in terms of age, ethnicity, marital status, and number and age of children. Women in the study, who were younger, had fewer children, and non-minority had a higher percentage of employment success.

New training programs specifically designed for TANF recipients to obtain and keep jobs, according to Ellwood (1987), must move participants beyond conventional adult education themes of training and address motivational and psychological retraining to advance them beyond the realms of the working poor. Training programs for TANF recipients must reach into psychosocial realms and enable women to change their total sense of self and create a more positive view and empower themselves (Ntiri, 2000). A study conducted by Kunz and Kalil (1999) with young women in federally-assisted programs, revealed low levels of self-esteem and self-efficacy were precursors to welfare use. They contended that little attention has been given in the literature or in practice to the link between self-efficacy and the implications of the new Work First welfare reform. Additional studies need to be conducted to explore how PROWA's stringent time limits and work-oriented approach have advanced the need for more sophisticated training techniques. Further, it is essential that work-readiness training programs for TANF

recipients incorporate techniques for enhancing self-efficacy and other personal qualities needed to expedite successful long-term employment.

An evaluation of the results of two popular program models—San Diego’s Saturation Work Initiative Model (SWIM) and California’s Greater Avenues to Independence (GAIN) program --provides some insights into what might be expected from successful programs. An analysis of these training models suggests one major outcome: Programs that emphasize quick job entry can decrease the need for welfare benefits and increase earnings. At the same time, many of the participants have a difficult time keeping jobs and making the transition from welfare to self-sufficiency work (Pavetti et al., 1997). To encourage the transition into work and sustained employment for TANF recipients, all but 10 states have implemented earned income-disregard policies. These policies allow TANF recipients to keep more of their earned income, in addition to their TANF benefits for a longer period of time in an effort to encourage to increased earned-income (Pavetti & Wemmerus, 1999).

States have combined program elements in various ways to meet the immediate need for TANF recipients to quickly transition individuals into employment. Key components of successful programs like the Riverside GAIN program is characterized by a very strong emphasis on quick employment implemented through a mixed program model. This model uses a combination of job search, basic education, and vocational training to prepare welfare recipients for employment (Pavetti, 1997).

Another successful training program that demonstrates a successful model is the Women’s Initiative for Services and Empowerment (WISE) located in Denver Colorado. WISE was established to address some of the hidden barriers facing women being forced into the workplace without the proper tools to become self-sufficient. The WISE program emphasizes the

healing of attitudes and empowerment along with practical work skills. To achieve these ends, WISE takes a multifaceted approach including counseling, workshops, group support, educational training, leadership, and self-esteem and self-efficacy development, all in an effort to enhance women's voices and attitudes about themselves (East, 1999). A program similar to WISE is Noah, a program funded by the U.S. Department of Housing and Urban Development (1999). Noah is a partnership of local housing tenants, along with a federal government administrator to assist in managing the project. They acquire deteriorating public housing developments, establish computer labs, and provide childcare and other facilities for learning. Trained staff lives on site to assist residents to transition from welfare to work. Residents complete a mandatory training program of attitude adjustment job-seeking skills development, and specialized training for successful job placement.

One of the most popular justifications for the time limits and early work requirements of the PRWORA was the need to transform the nature of the welfare system from one that depletes recipients' self-esteem and self-worth (Castellano, 1998). The former system allowed mothers to receive welfare without work requirements or self-improvement activities. The current PRWORA fosters self-motivation and independence (Ellwood, 1987; Mead, 1992). Nichols-Casebolt (1986), Popkin (1990) and Parker (1994) all investigated welfare recipients and found a lower sense of personal efficacy among welfare recipients. Mothers with a lower sense of personal efficacy were less likely to mention work as an alternative than were mothers with self-efficacy. The new time limit policies have increased interest in the factors that help explain why some individuals are more successful at leaving welfare than others. Self-esteem and self-efficacy and other psychosocial factors are worth analyzing for their utility in helping individuals become successful employees (Ntiri, 2000).

Characteristics of an Effective Work First Program

The primary characteristic of an effective Work First program design is that it incorporates an array of components. It is a mixed strategy approach, that offers job search, education, job training, and work (Strawn, 1998). According to Imel (1995), for training geared toward helping disadvantaged individuals to be considered effective, it must help participants achieve higher earnings and employment retention. One major assumption is that a strong foundation of literacy and basic skills is critical for the disadvantaged to have a successful transition to employment and self-sufficiency (National Institute for Literacy, 1994).

Traditionally, the educational skill levels of individuals with economic disadvantages have been lower than that of the general population. Typical adult education programs are not designed to improve employability skills of disadvantaged adults attending them. Instead, their primary focus is on providing opportunities for participants to become literate and acquire basic skills. Pauly et al. (1992) studied the Jobs Opportunities and Basic Skills (JOBS) programs in five states finding that, although adult education institutions with adult training programs are often willing to serve JOBS clients, they do not wish to disrupt established practices to tailor programs specific to teaching the job-readiness skills they need to obtain and keep a job. Similarly, Chrisman and Woodward (1992), in their study on job readiness programs for welfare recipients concluded that to achieve the employment mission, JOBS basic education must have a far different set of goals than the standard courses for adult education. JOBS programs that were most effective had (a) tailored program components to the specific needs of participants, (b) linked basic skills instruction to occupational training or to other work, and (c) provided additional support services for participants to seek, acquire, and maintain employment.

Murphy and Johnson (1998) conducted a nationwide search for exemplary welfare to work programs and found eight programs that demonstrated the most effective employability training. Common characteristics included (a) a focus on employment-related goals, (b) hands-on work experiences, (c) collaboration with welfare agencies and other community organizations, (d) early intervention and personal attention in addressing problems, and (5) commitment to continuous staff development. The authors concluded that states that integrate training and work participation with other support services experienced better job placement and retention results.

More recently, a review of literature on welfare-to-work programs conducted by the Fagnoni (1999) found that training approaches with a strong employment focus were most effective for participants' long-term self-sufficiency. The study suggested several guidelines that should be followed when implementing welfare-to-work programs.

1. *Collaborate with local agencies.* Interagency collaboration is a necessary ingredient of successful programs. It can provide a forum for interpreting and implementing state and local policies in ways that are favorable to education (Hayes, 1999), and also serve as the medium for providing essential support services such as transportation and child care. Interagency collaboration promotes service integration that, in turn, enhances the retention of participants (McIntire & Robinson, 1999).

2. *Focus on training for jobs that have higher earnings potential and available in local labor markets.* Program developers must understand the local labor market so that they can target training for jobs that have relatively high earnings, opportunity for advancement, and potential for growth in the local market (Grubb, Badway, & Castellano, 1999). Unfortunately, the availability of low-skill, entry-level jobs in the current job market plus the narrow scope of funding for education and training in most states welfare reform policies have resulted in the

placement of many welfare-to-work participants in occupations with limited opportunity (McIntire & Robinson, 1999). Educators should strive to overcome these limitations by working with local employers and officials responsible for economic development.

3. Include a combination of academic and occupational learning experiences designed to lead to further education and training of participants. Evaluations of welfare-to-work programs conducted during the last decade show clearly that the most effective programs are those that mix job search, basic skills education, job training through the development of occupational skills, and paid and unpaid work experience (Fagnoni, 1999). These elements should be integrated with the intensity of academic and occupational training tailored to targeted jobs. Furthermore, these programs should be structured so that they lead to opportunities for further educational and training when participants are ready (Grubb et al., 1999).

4. Attend to instruction. Instruction should be linked to the workplace and to further education and training (Castellano, 1998). Unfortunately, instruction in many of the existing programs is delivered by inexperienced instructors or those who have no training in linking instruction to work (Grubb et al., 1999). Therefore, professional development of instructors must be a priority (Murphy & Johnson, 1998).

5. Work to change current policies. Finally, adult and vocational educators should work to change current policies that focus on ending welfare to those that are oriented to ending poverty (D'Amico, 1999; Hayes, 1999). Although a work-first approach might be a short-term solution to reducing the current welfare rolls, it does not represent the needs of learners and educators, nor does it address the underlying structural problems that lead to poverty and joblessness (D'Amico, 1997).

These suggestions were affirmed by a review of welfare to work training programs conducted by Cohen (1998). The review revealed that, in general, work-based programs resulted in better placement and retention of welfare recipients than either job search or classroom education alone. These results suggest that education and training might best be provided in conjunction with actual work experience or employment, rather than before welfare recipients are placed on a job. The issue of job readiness has been a concern of opponents of the Work First component of Temporary Assistance for the Needy (TANF) welfare reform. Opponents advocate that to be most effective in the long run, welfare reform programs need to integrate education and work experience. A study conducted by the U.S. Department of Housing and Urban Development (1999) reported similar findings on the effectiveness of education and work programs. The success of job training programs were their ability to integrate several components—address participants' training needs for employment, offer other support services (e.g. childcare and post-employment training), offer a mixed strategy approach that combined job search, training and work as a continuous model.

Current job readiness programs for the disadvantaged operate using an array of components. The key to program success is the ability to integrate the components of welfare to work programs in a manner in which job training, work and services are complementary (Knell, 1997). Beyond integrating the components of the program the delivery system must be accommodating to participants and their needs. Two primary types of delivery systems have developed to accommodate welfare-to-work participants in their employment efforts. The first type is comprehensive and the second type is a networking system. The comprehensive system is one in which all employability services-- education, training, support services, job search, job readiness, coaching, mentoring, job placement, work activities, jobs, and post-employment

services-- are provided through one entity. For example, a community college might provide the educational and training program and have a day care, support services, employment services, community-based organizations, and outreach programs. In contrast, the network delivery system in which a public school, community-based organization, or training center specializes in providing one or more of the program components but collaborates with other agencies and programs to deliver other services. For example, a public school might provide adult education, job/vocational training, and job preparation to adults but might develop collaborative partnerships with organizations that provide support services and jobs. Irrespective of the mechanism by which services are delivered, Knell (1997) recommended some common components that job readiness programs incorporate, such as assessment, adult education, vocational training/job readiness, job search skills, support services, and post-employment follow-up services.

Implications for Practice

The implications for practice derived from studying self-efficacy theory as it relates to job-readiness and career decision making were highlighted by a qualitative study by Wikelund (1993). The researcher studied 27 Career Life Planning JOBS participants and found that they experienced positive changes in their concepts of self, skills, and sense of choice and personal efficacy regarding progress toward self-sufficiency as a result of the program. The program worked on developing and changing participants' perceptions of themselves and their opportunities for developing their skills and becoming economically self-sufficient. Wikelund concluded that the program worked because it unknowingly focused on something she labeled the concept of perceived opportunity structure. She defined *perceived opportunity* as individual expectations about what kind of situations will arise and what their outcomes will be. This

concept can be linked to self-efficacy theory by integrating the idea of perceived efficacy expectations, i.e., individuals' beliefs in their ability to perform the necessary tasks or behavior (self-efficacy) needed to attain the desired outcome (outcome expectations) that can lead to successful employment. Westra (2000) indicates that self-efficacy enhancement interventions introduced appropriately in Welfare to Work training programs have lead to positive employment outcomes.

Additional research conducted by Estioco (1998) indicates that the success of TANF recipients in the workplace was related to their level of competency, self-esteem, and belief in their ability to perform the tasks (self-efficacy) which ultimately led to their sustained employment. Ntiri (2000) through her work with preparing women to move from welfare to work, suggested that in order for training programs to work they must be designed to move participants beyond the conventional adult education themes and address motivational and psychosocial retraining. Effective preparation must not only incorporate training that includes basic education (literacy and technical skills), but also, more importantly, work on changing the way that participants interact with and within their immediate work environments. This would involve training welfare recipients so that their total sense of self or self-reality may assume an imperative transformation.

The literature supports the notion that self-efficacy has an important influence on job readiness and the career search. This chapter has described findings from empirical studies on how self-efficacy influences one's work performance, job search activities, career search and career decision-making and how that can be used to improve job readiness training programs for the economically disadvantaged population.

Research indicates that, to accomplish this, the traditional adult training programs with their current focus on teaching basic skills will have to refocus training to accommodate teaching job-related and social skills to TANF recipients. Traditional adult job-readiness programs, described by Teslowski (1994), as those that focus on teaching social skills and place little emphasis on experiential practice of social skills, will now have to reorient their approach to emphasize application of job skills in a variety of work environments. Hence, training implications for the application of self-efficacy theory for job readiness is promising.

CHAPTER 3

METHOD

Introduction

This study examined the relationship of perceived employability self-efficacy to workplace readiness for women of low socioeconomic backgrounds participating in the New Connections to Work (NCTW) job training program. Bandura's (1977a, 1982, 1986) self-efficacy theory provided the theoretical foundation for explaining how job-readiness is influenced by self-efficacy. Self-efficacy offers an understanding about one's willingness to commit to highly demanding pursuits, that allow them the capacity to mobilize the physical, intellectual, and emotional resources needed to attain success in their designated goal. Self-efficacy is a set of cognitions and feelings that provide the generative capabilities to perform necessary actions and persist in adverse conditions in order to attain a predetermined goal.

Individuals' beliefs in their ability to successfully perform necessary tasks involved in seeking, preparing for, and maintaining employment is called employability self-efficacy (McIntyre, 1999). Further, perceived employability self-efficacy is determined by assessing employability self-efficacy in a stimulated work situation, where several competencies and skills that relate to job seeking, performance, and maintenance can be performed. Research by Farley, Bolton, and Little (1990) suggests that job-ready individuals possess positive work orientation and motivation, along with adequate job search and job maintenance skills. Mastery of these skills is conveyed through basic job-search activities, work habits, job performance, conflict resolution, interpersonal skills, and a positive work attitude. Employability self-efficacy is

integral to understanding an individual's perceived ability to initiate and perform these and other tasks for long-term employment. Because of the importance of job-readiness skills to long-term employment, the primary focus of the NCTW training program is on job-readiness skills.

The perceived employment self-efficacy of NCTW participants was measured along with other factors related to job-readiness. Perceived employment self-efficacy was defined as individual beliefs about the ability to successfully deal with situations involved in preparing for, obtaining, and maintaining employment, and to act in ways that facilitate career development (Betz, 1992; Innes & Thomas, cited in Daniels et al., 1998). Perceived employment self-efficacy is based on Bandura's (1989) theory of self-efficacy and career decision-making self-efficacy (CDMSE; Taylor & Betz, 1983). The Perceived Employability Self-efficacy Scale (PES; Houser & Oda, 1990) was developed to address the specific needs of poor individuals coming from diverse cultural, ethnic, and racial backgrounds that previous instruments, based on middle-class university students, did not address. Indicators of perceived employability self-efficacy, along with other demographic factors, may be useful in understanding job preparation approaches used with individuals from low socioeconomic backgrounds and explain, at least in part, how well individuals perform the tasks required to secure and maintain employment.

Prior research has shown that the number of years of education, age, years of work experience, number of children, and family/childcare support influence welfare recipients participation in the workforce (Brady-Smith, Brooks-Gunn, & Waldfogel, 2001; Harris, 1993; MDRC, 2001). The primary focus of this study was to examine the perceived employability self-efficacy of disadvantaged females and analyze its relationship to employability or job-readiness skills. Participants were in a government-sponsored program, Temporary Assistance for the Needy (TANF), which provides employment training through the NCTW. NCTW training

programs are administered throughout metropolitan Atlanta and its surrounding suburbs, conducted through local technical colleges in a concerted effort to prepare women on welfare for employment. The NCTW training program provides intensive short-term (less than 4 months) job readiness training aimed at moving participants quickly into the workforce.

A causal comparative research design was used to study trainees enrolled in NCTW at one of Atlanta's largest training locations, Dekalb Technical College. The causal comparative design was selected because it is the simplest approach to determine if a possible causal relationship exists between two different phenomena. In this study, perceived employability self-efficacy and job-readiness were the phenomenon of interest.

A core component of NCTW training is Work Opportunities Training (WOT) which encompasses several courses. WOT provides academic training for certificates in basic computer skills, customer relations, and pharmacy technology work. In addition, NCTW provides assessment/testing, job readiness/retention, life skills, and job placement assistance classes (NCTW, 2001). The Life Skills Management classes stress work concept, self-efficacy, self-esteem, and self-management, along with other skills such as negotiation and conflict resolution. Assessments analyze participants' work-readiness behaviors used in developing plans for corrective actions and implement improvements strategies.

Individuals participating in Life Skills Management classes have completed the majority of their job-training program. The survey instruments were administered at this stage. Training participants were given an overview of the study's purpose and, with their consent, the Perceived Employability Self-efficacy Scale (PES; Houser & Oda, 1990) was administered, along with a demographic questionnaire. Scores on the PES reflect an individual's employability self-efficacy. Training instructors completed the Becker Work Adjustment Profile (BWAP; Becker,

1989) for each trainee, to assess job-readiness based on demonstrated work habits and job-related performance/skills. Scores across the four domains of the BWAP were totaled to reflect a global construct, job-readiness.

Design

The causal-comparative research design was used to study the relationship between job-readiness and five variables, including perceived employability self-efficacy, age, education, number of children, and years of work experience. In order to ascertain the magnitude of the relationship among these variables, correlational analysis was conducted.

The causal-comparative approach may be one of the simplest quantitative designs to explore cause-and-effect relationships between phenomena. It has some limitations associated with it in the interpretation of results. According to Gall, Borg and Gall (1996) the purpose of correlational research designs is to discover relationships between variables, but occasionally the correlational relationship between two variables is due to outside sources. Therefore, the design has limited ability to establish true cause-and-effect relationships between variables. In this study, participants' job-readiness may result from factors not included. For example, increased job-readiness may be a result of increased family support or more effective training methods. Hence, concluding that employment self-efficacy and the other selected factors are the true cause for improved job-readiness is not possible.

Participants

This study was conducted with the assistance of DeKalb Technical College's New Connections to Work (NCTW) job training program coordinator. The sample was drawn from ten classes totaling 94 disadvantaged female participants enrolled in the Life Skills Management course from November 2003 to October 2004. Life Skills Management courses are mandatory

for all participants in the NCTW program. The class provides a forum for participants to learn and apply life and work skills (e.g., relationship building, negotiation, money management, work performance attainment, and conflict resolution) needed to acclimate to the workplace and gain financial independence. Several teaching techniques are used during the class. Role-playing is used to emphasize the application of appropriate decision-making and relationship management skills. Workplace simulations are used to replicate situations where trainees may have to resolve workplace conflict. Instructors evaluate participants' actions and performance in order to offer constructive feedback as to various ways workplace scenarios might be handled.

A convenience sample was used because of limited accessibility, and limited numbers of the target population i.e., disadvantaged female participants enrolled in the NCTW training program. According to Creswell (1994), convenience samples are appropriate when an entire population of individuals cannot be easily identified or randomized, but a group reflective of the population is available and accessible at the time of data collection. Ease of access to the NCTW participants at DeKalb Technical College was also a consideration in choosing convenience sampling. A disadvantage of convenience sampling is that the selection process may not produce a representative sample of the entire population because people are only selected for the sample if they can be conveniently or easily accessed (Huck & Cormier, 1996). Thus, the sample may be biased. As a result, my sample taken from NCTW program's participants, representing a predominantly urban population, are likely not generalizable to other areas and groups.

Program participants enrolled in the Life Skills Management class from November 2003 until October 2004 comprised the sample. Participants in this class were primarily TANF recipients and referred to NCTW through several feeder programs, including the Atlanta Department of Health and Human Services, and Atlanta Department of Housing. The

collaboration of various entities provides individuals with employment assistance opportunities along with a means of training to develop the necessary skills to become self-sufficient.

The females in the classes at Dekalb Technical College's New Connection to Work program represented a homogeneous group of individuals; primarily African American females from metropolitan Atlanta between the ages of 18 and 50 years old. The sample size of 94 is considered sufficient using Cohen's (1988) minimal total sample size table. An alpha level of .05, power of .80, and a medium effect size or R^2 of at least .13, the minimal total sample size needed to evaluate multiple correlation coefficients with five predictors is 91 participants. Cohen suggests that a power setting of .80 is sufficient to guard against the probability of a Type II error.

Instruments

There is limited research available linking the qualities identified in the SCANS (1991) report as those work-readiness skills necessary to be effective in the workplace to specific measurements. This section focuses on the measurement of SCANS-based work-readiness skills. Two instruments the--Becker Work Adjustment Profile (BWAP; Becker, 1989) and the Perceived Employability scale (PES; Houser & Oda, 1990)--have been used in vocational training to assess disadvantaged populations' job readiness. The BWAP was developed specifically to assess the work-readiness of physically and economically disadvantaged students in vocational training. In the Life Skills Management class at the midpoint of the class, instructors completed the BWAP as an assessment of trainees' work readiness. Trainees completed the PES as an assessment of their own work-readiness.

In the SCANS (1991) report, three foundational skills considered essential for effective workplace performance were identified: basic skills, thinking skills, and personal qualities.

The key foundational skills (including the work-readiness skill) measured by the BWAP are listed here:

1. Basic skills: Reads, writes, performs arithmetic and mathematical operations, listens and speaks effectively. (BWAP-Performance skills)
2. Thinking skills: Thinks creatively, makes decisions, solves problems, visualizes and knows how to learn and reasons. (BWAP-Cognitive skills)
3. Personal qualities: (BWAP-Interpersonal relationships and work habits/attitudes)
 - A. Responsibility. Exerts a high level of effort and perseveres towards goal attainment
 - B. Self-esteem
 - C. Sociability
 - D. Self-management
 - E. Integrity/Honesty-chooses ethical courses of action

The BWAP captures the majority of SCANS foundational skills, social/interpersonal behaviors, thinking skills, and task-performance for job-readiness. There are various approaches to evaluating job readiness in a training program, but limited instruments are available for evaluating individuals considered disadvantaged. Table 3.1 provides a comparison of the attributes in SCANS, BWAP, and the Life Skills Management work-readiness classes. Many of the same criteria that SCANS considers to be foundational skills for employment are captured in the BWAP and the Life Skills Management classes.

The BWAP (Becker, 1989) measures the three foundational areas identified in the SCANS (1991) report—basic skills, thinking skills, and personal qualities—through four domains of performance—cognitive skills, interpersonal relationships, work habits, and attitudes—to derive a composite score for work competency (job-readiness). The New

Connections to Work (NCTW) job training and job search program focuses on training and preparing participants for work using the basic components measured by the BWAP. The instrument's fundamental purpose is for use as an observer rating instrument to assess rehabilitation clientele or disadvantaged individuals' work behaviors, work-related performance, and intellectual and social competencies needed to achieve in the workplace (Li & Tsang, 2002).

Table 3.1

SCANS, BWAP and Life Skills Management Comparison

SCANS	BWAP	Life skills management
1. Basic work skills. Reads, writes, and performs math Effectively	Performance skills	Work-related performance
2. Thinking skills. Uses reasoning	Cognitive skills	Decision/Problem-solving
3. Personal qualities: Responsibility Self-esteem Sociability Self-management Integrity/honesty/ethics	Interpersonal skills Work habits Work attitude Work ethics Self-management	Interpersonal/relationship Employment retention Work attitude Self-esteem Goal setting Work ethics

The skills taught in the NCTW Life Management Skills class and assessed by the BWAP are:

1. Performance skills. The customized training classes and workshops provides career testing and seminars. Uses career testing and exploration, job placement assistance and workplace role-playing, simulations and job performance assessment to provide on the job training feedback and counseling.

2. Cognitive skills. NTCW provides academic preparation and review. The program offers certificate training to develop academic skills. Participants are assessed for academic

achievement using a battery of tests including interest, aptitude, and specialized cognitive testing before placement in certain positions.

3. Interpersonal relationships and work habits/attitudes skills. NCTW offers training classes, workshops, and seminars in life management skills---goal setting, self-esteem through self-improvement, decision making, money management, interpersonal, communication and relationship skills, job readiness skills (e.g., communication and listening), work ethics, employment retention techniques, and job support services.

This study used three instruments. Two of the instruments, the demographic questionnaire and Perceived Employability Scale (PES) were given to trainees, while the BWAP was completed by each of two instructors who coordinate their teaching efforts.

Demographic Sheet

A demographic sheet was used to obtain personal information from participants (see Appendix A). Items on the questionnaire asked each respondent for age, race, educational level, years of work experience, number of children currently living at home, age of children, and age of trainee her when first child was born. These demographic characteristics were identified, based on a study conducted by the Manpower Demonstration Research Corporation (2001), as factors relevant to welfare recipients' success in finding and keeping jobs.

Measurement Instruments Reliability and Validity

Several vocational training studies support the reliability of selected instrument scores using Cronbach alpha's reliability coefficients for the BWAP. These studies support the reliability of the instrument scores, i.e., as an excellent indicator of ones of vocational ability (Bolton, 1992; Gory, 1992; Law, Baum, & Dunn, 2001; Li & Tsang, 2002). The instrument has good internal consistency as indicated by its high reliability coefficients for content, test-retest,

and interrelated ratings. Studies testing the reliability of PES participant scores have also confirmed their reliability in assessing employment self-efficacy (Daniels et al., 1998; Houser & Oda, 1990).

Measurement of Vocational/Workplace Competencies

Workplace performance competencies, as identified in SCANS (1991), focus on foundational and essential skills that new employees entering the workforce must possess for long-term employment and successful career advancement. One of the major factors, personal qualities, consists of several components: self-management, responsibility, teamwork, information, and integrity. Personal quality skills are considered pertinent to the assimilation of disadvantaged populations into the workforce and their long-term success. The Becker Work Adjustment Profile (BWAP) is an instrument that was developed to assess the personal qualities of disadvantaged individuals (see Appendix C). Becker (1989) developed the BWAP to identify deficits in the work behavior of people with disadvantage (physical, intellectual, emotional or economic) that can be remediated through vocational training (Bolton, 1992). The conceptual domain measured by the BWAP includes work skills, habits, attitudes, and personal traits that constitute vocational competency, a construct of central importance in vocational rehabilitation. Individuals completing the BWAP must be familiar with a trainees' work behavior, e.g., counselors, vocational trainers, teachers or vocational evaluators. The BWAP scale includes items centered around four domains: (a) Work Habits-Attitudes--attendance, punctuality, personal hygiene, motivation, work posture, (b) Interpersonal Relationships --social interaction, emotional stability, cooperation, (c) Cognitive Skills--knowledge, reasoning, recognizing, judging, functional academics, and (d) Work Performance Skills--motor, job responsibilities, communication, work efficiency. These domains form separate subscales that are combined to

provide a composite score called workplace competency (work-readiness). This study analyzes the composite score for a comprehensive measure of work-readiness.

The BWAP is easy to use and simple in design to facilitate evaluation. The short form consists of 32 work-related questions (items with the highest factor loading and item-score correlations). It takes approximately 10 minutes to complete the short form. Due to the heavy workload of the job counselors/trainers at NCTW, the short form was used. Information derived from the BWAP can be used as a diagnostic tool in constructing specific individualized vocational training programs for trainees (Gory, 1992).

Gory's (1992) psychometric properties review of the BWAP supports it as an instrument that produces valid observer rating scores. Cronbach's alpha median coefficient for internal consistency was .87, inter-rater reliability was .82 and test-retest reliability equaled .86 (Glueckauf, Sechrest, Bond & McDonel, 1993). Test items are scored using a 5-point rating scale, where each point corresponds to a definable behavior pattern or domain. The four domains-work habits/attitude, interpersonal relations, cognitive skills and work performance skills' Cronbach alpha for internal consistency reliability scores ranged from (.84 to .94), test-retest (.78 to .95), and inter-rater reliability (.76 to .86; Law et al., 2001). In training environments there can be several raters that evaluate trainees, to increase inter-rater reliability for the different raters, the BWAP test designers developed an explicit set of scoring rules for the instrument that raters must follow. Overall, the BWAP psychometric results support the validity and reliability of the instrument for use in vocational competency assessments.

The content validity of the BWAP has been demonstrated using items selected and evaluated based on existing scales measuring work and adaptive behavior, as well as by literature, work programs, and interviews with vocational evaluators and counselors. These

results were used in a factor analysis to test content validity, resulting in the final items retained. Concurrent validity was obtained by comparing results from the AAMR Adaptive Behavior Scale, which resulted in moderate to high correlation coefficients between the two instruments (Li & Tsang, 2002). Construct validity was measured in terms of progressions of scores by classification of domains. The four factors/domains accounted for 71.08% of the total common variance (Becker, 1989; Bolton, 1992; Gory, 1992). All of these results were consistent with expected results.

Measurements of Perceived Employability Self-Efficacy

The Perceived Employability Scale (PES; Houser & Oda, 1990) was tested by Daniels et al. (1998) with a large group ($n = 2,600$) of low income women from diverse cultural, racial, and ethnic backgrounds in Hawaii to assess their employability self-efficacy. The employability self-efficacy construct is an individual's belief about their ability to successfully deal with situations and act in ways that facilitate their career development. The PES is a 15 item self-report test, tailored to evaluate issues, concerns, and needs commonly associated with low-income adults. Test items are specifically designed to measure belief in one's ability to accomplish numerous career-related tasks, including "Gain job-related information" and "Get a job." Various other aspects of an individual's career self-efficacy relating to employment beliefs are assessed using PES (see Appendix B).

The PES assesses economically disadvantaged individuals belief in their ability to accomplish numerous career-related tasks (e.g., get along with others, completing a training program, plan ahead one year for the future). Each item on the PES is rated on a 5-point Likert scale, ranging from 1 (Definitely cannot do) to 5 (Definitely can do). Scores on the 15 items are

added for a total score. The total score is used to determine if an individual's employability self-efficacy falls into one of two categories, high or low.

A review of the psychometric properties for PES scores indicates they have been reliable indicators of the self-efficacy employability of disadvantaged populations. The construct validity and reliability for the Perceived Employability Scale (PES; Houser & Oda, 1990) was tested by Daniels et al. (1998). A factor analysis (principal-axis extraction and varimax rotation) was used, resulting in a four-factor solution. The first factor described a person's interpersonal abilities. Thus, this factor was referred to as *Interpersonal Efficacy*. The second factor focused on an individual's belief in his or her ability to gather and collect the information necessary for obtaining a job. Hence, this factor was referred to as *Information Gathering and Barrier Removal Efficacy*. The third factor related to various aspects of an individual's determination to secure and keep a job. This factor was referred to as *Persistence*. The fourth factor pertained primarily to a participant's belief about his or her ability to plan for the future and was called *Goal-Setting Efficacy*.

The reliability of the PES was assessed by Daniels et al. (1998) and resulted in Cronbach alpha reliability coefficients for the four factors: interpersonal efficacy (.77), information gathering (.79), persistence (.77), and goal-setting efficacy (.80). These results indicate past use of the PES produced a reliable measure of low-income individuals' career self-efficacy. To facilitate data analysis in this study, the PES composite score was used. The composite score on the PES is representative of one's total belief in his or her employability.

Data Collection Procedures

This study was conducted with participants enrolled in the Life Skills Management class at Dekalb Technical College's New Connection Work program. The convenience sample of 94

female training participants was taken from ten classes. Upon receiving IRB approval in October 2003, the first class's data was collected on November 11, 2003 and the study was completed October 2004.

The researcher attended the classes and presented an overview of the study's purpose for the participants and instructors. The consent form was read out loud and explained. The training participants and instructors were informed that they were under no obligation to participate. Training participants were told if they did agree to participate a small token of appreciation of \$2 would be given for their participation. After each participant read, signed and returned the consent form, they were assigned a participant number and given the demographic questionnaire and the PES to complete. The instructors were given the BWAP to complete for each training participant in the class.

Data Analysis

This research examined the relationship between training participants' employment self-efficacy and job-readiness (as measured by composite score). Multiple correlation analysis (MCA) was deemed the best approach. According to Huberty and Petoskey (1999), there are four major steps to conduct a MCA. The steps they recommend are (a) calculating the strength of the relationship, (b) conducting a statistical test of this relationship, (c) interpreting the relationship between the dependent variable and the collection of the independent variables, and (d) determining the relative contribution of the independent variables to the relationship or ordering of the variables based on their importance. In conjunction with the MCA approach, Stevens (2002) suggests that one should calculate descriptive statistics from the demographic data (e.g., age, race, education and work experience) for meaningful analysis.

The first step, calculating the strength of the relationship, can be accomplished by developing a Pearson product correlation matrix for the collection of independent variables to a dependent variable. The independent variables represent perceived employability self-efficacy, along with select demographic information is analyzed in the matrix as it correlates to the dependent variable work-readiness. The Manpower Demonstration Research Corporation (2001) conducted a study to identify the key factors involved in explaining welfare recipients' ability to acquire and sustain successful employment. The study was conducted over a 4-year period and identified 5 major characteristics: (a) age, (b) level of education and skills, (c) work history, (d) personal barriers such as number of children and level of family support, and (e) a belief an individual expressed as having some control over life. Strauser (1995) identified an additional factor critical to disadvantaged individuals' employment success, their self-efficacy toward employment. Self-efficacy toward employment refers to an individual's belief in his/her ability to accomplish the tasks necessary to acquire and maintain employment.

From a theoretical standpoint, this study investigated how perceived employability self-efficacy, age, education, work experience and number of children related to the job-readiness of individuals in the NCTW training program. The dependent variable, job-readiness as measured by the BWAP, included work skills, habits/attitudes, interpersonal skills, cognitive and work performance skills combined to compute a composite score for job-readiness (Glueckauf et al., 1993).

The second step in a multiple correlation analysis is to conduct a statistical test of the strength of the relationship between the independent and dependent variables. A correlation coefficient, r , expresses the magnitude of the association and can range from 1.00 through 0 to +1.00. The square of r reflects the degree of variance explained by the relationship. The greater

the R value, the more certain the relationship and the greater the amount of explained variance (Rojewski, 2000). According to Huberty (2001), statistical testing conducted in MCA uses r , the (Pearson product) correlation between dependent variables and a linear composite of the independent or predictor variables, weights for which are determined to maximize the relationship. Due to the built-in (positive) bias of the derivation of the weights, an adjusted sample correlation value was used. The formula Huberty suggests is:

$$R^2_{\text{adj}} = R^2 - p/N - p-1(1 - R^2)$$

(where p denotes the number of independent variables and N denotes the sample size)

In conjunction with developing the MCA correlation coefficient for statistical testing, the effect-size index should be analyzed. The result is a way is to quantify whether or not the results are better than chance value. The formula Huberty (2001) suggested for effect size is:

$$ES_c = R^2_{\text{adj}} - p/(N-1)$$

The third step in data analysis is interpreting the relationship between the dependent variable and the collection of independent variables. This task is conducted by jointly examining the regression coefficients and the effect size to determine if there is a relationship between the dependent and linear composite of the independent variables. Once a relationship has been established, the basis for interpreting this relationship is using structured r 's values (Thompson & Borrello, 1985). For example, the structured r 's for the dependent variable is the correlation between it and a linear composite of the all the independent variables (which includes X_j). In summary, the independent variable for which the structured r 's are the highest are then jointly considered to identify the construct that underlies the linear composite of independent variables.

Finally, in order to determine the relative contribution of independent variables to the relationship, some type of ordering must be applied to the dependent variables. According to

Huberty and Hussein (2001), researchers should ask the question “Which X variables are most important and which least important to the relationship between the Y variable and the obtained optimal linear composite of the X variables?” This question is answered by conducting an MCA for each (p) X independent variable with $p - 1$ X variables. The X variable when deleted decreases the R^2 (or R^2_{adj}) value the greatest is considered the most important independent variable. To determine the most important independent variable one could focus on the absolute value of the R^2 or use the ordering of the variables. The following information should be reported for ranking the most important independent variable:

1. (P-1) – X variable analyses
2. Structured Correlation's (structured r 's)
3. Rank variable (the biggest decrease in the R^2 value when a variable is deleted)

To conduct MCA, certain assumptions or conditions must be met (Pedhazur, 1997), including: (a) observations that are independent of one another, (b) variables that are continuous and interval level, (c) residuals are randomly drawn and normally distributed, (d) a linear relationship of variances and covariance (homoscedacity), (e) minimal measurement error is assumed due to reliability, (f) unrestricted variance-variances are not truncated or restricted in one or both variables, due to poor sampling, (g) variables have similar underlying distributions, (h) error terms are normally distributed or the central limit theorem applies and (i) collinearity (the correlation among the X independent variables) exists.

Huberty and Petoskey (1999) suggest additional diagnostic analysis be conducted with MCA to ensure there are no extreme cases or influences, i.e., outliers. They recommend the studentized deleted residuals method-- looking at all of the deleted residuals to identify extreme cases. The next step is to determine the extent the outliers have influence on the analysis of the

study results. This is done by examining the estimates of the weights for the linear composite for the independent variables. One reason for examining the weight estimation pertains to bias. To assess the influence of individual units of analysis on the bias of the weights, an index called Cooks D can be used (Pedhazur, 1997). One should look for extreme values among the Cooks D values for the sample to determine if influential outliers exist.

A second method is to examine the composite weight and the covariance ratio (CVR; Montgomery, Peck, & Vining, 2001). The set of CVRs for the sample should be extremely small and extremely large values for the given data set. The CVR is an indication of the precision of the weights and if a particular case should be thrown out because it adversely affects the variability of the weights. The overall weights in the sample should be normally distributed.

Limitations of Study

I was limited in my ability to infer from the results. Since the variables in a causal-comparative research design are not experimentally controlled, outside factors may influence changes in participants' employability. Many researchers have criticized studies using cause-and-effect designs such as causal comparative and correlation analysis because of their attempt to break down complex abilities and behavior patterns into simpler components that may be determined by a variety of factors (Gall et al., 1996).

By not conducting a controlled experimental study, other limitations may prevail, e.g., with the data, population assumptions, and instrumentation. The non-randomization of group participants presents a problem, for internal validity. Additionally, by using a convenience sample, primarily a homogenous group of African American females, limits the ability to generalize the finding of this study to other, more diverse populations of training participants. In

essence, generalization of these results beyond a metropolitan urban population may be difficult due to the demographics of the study's participants.

The literature presents limited research using the causal-comparative design and correlation analysis as a basis for understanding the relationship of employability self-efficacy and disadvantaged populations. One study using a causal-comparative design pertaining to the career education of the disadvantaged was conducted by Champagne (1987). She studied the long-term impact of career counseling on the career development of educationally disadvantaged adult learners. The study investigated 11 independent variables. Her findings were somewhat affirmative, as a moderately significant relationship between self-efficacy and positive career development was reported.

Wenzel (1993) conducted a similar study with disadvantaged females. She used a causal-comparative design to study social and psychological characteristics of disadvantaged persons and how they influenced employment. Her findings supported the important role of self-efficacy in job procurement.

A meta-analysis conducted by Sadri and Robertson (1993) investigated the outcome of studies examining the causal relationship between self-efficacy and work-related performance. Their findings consistently showed a positive relationship, but differed on the actual size and effect. They concluded that variation in the explained variance in work performance may have been attributable to specific work-related situational factors. Indications were that, in some case, work environmental factors facilitated or impeded performance depending on the type of workplace. Their study was not inclusive as to how the various workplace environments affected individuals' performance.

According Huck and Cormier (1996), there are four major cautions to consider when using bivariate correlational data analysis; cause and-effect, linearity, the coefficient of determination, and the possibility of outliers. In essence, correlational analysis is not symmetrical (i.e., not balanced in approach) and therefore does not provide evidence of which direction causation flows. There may be other variables involved that may have caused an effect on the dependent variable that were not included in the study. Similarly, if there is a nonlinear relationship between the two variables being correlated, correlational analysis may understate the relationship. When a correlation coefficient is not squared, the statistic exaggerates the strength of the relationship between the two variables. To compensate for this, the R should be squared, resulting in the coefficient of determination. Finally, outliers may cause the size of a correlation coefficient to understate or exaggerate the strength of a relationship.

Additional factors of concern in correlation studies relate to the data. The correlation will be erratic to the extent there is measurement error, including use of sub-interval data or artificial truncation of the range of data. Correlational analysis can be a misleading average if the relationship varies depending on the value of the independent variable or “lack of homoscedasticity” (Cohen, 1988).

Although delimitations exist, the causal-comparative research design, along with correlational statistical data analysis, offers one the ability to examine the relationship between disadvantaged females’ self-efficacy (along with several other factors) and their job-readiness. However, due to the complexity of the job-readiness/employability phenomena, it cannot be completely explained by examining only six variables. Further research is needed involving a more diverse population, in a more diverse setting using a different set of independent variables.

CHAPTER 4

RESULTS

This chapter presents findings of the relationship between perceived employment self-efficacy (along with other selected factors) and work-readiness. The sample for this study was taken from participants in the New Connections to Work (NCTW) job training program in the greater Atlanta area. Results are presented in two parts. First, a description of those participating in the study is discussed. Second, results pertaining to the three main research objectives are presented. Research objectives were:

1. Describe the dependent variable, job-readiness, as measured by a composite score for work habits, work attitude, cognitive skills, and work performance skills, for TANF participants.
2. D Describe the dependent variable, job-readiness, as measured by a composite score for work habits, work attitude, cognitive skills, and work performance skills, for TANF participants.
3. D Determine the relationship between job readiness and selected independent variables (inc., perceived employability self-efficacy, age, education, work experience, and number of children).

Sample

The data for this multiple correlation analysis (MCA) was collected from November, 2003 through October, 2004 and analyzed using SPSS version 11.0 software. Data was obtained using three instruments, two surveys and a short demographic questionnaire, to 94 participants in NCTW job training classes at Dekalb Technical College. The classes emphasized two major

areas of job skills training, computers and office services. Two instructors taught these courses. The instruments were administered and completed after the mid-point of each class series. Survey instruments were administered during course time to allow students the opportunity to thoughtfully consider their responses related to specific job requirements and for instructors to assess students' job-related performance.

Dekalb Technical College's NCTW program provides services primarily to low-income individuals. This study included only female participants. Of the 94 participants, only four were not African American. Further, the majority (77%) had never been married. Thus, a major focus of this study was work readiness and perceived employability self-efficacy of low-income African American women. Participants gave their consent to participate by signing a consent form that detailed the purpose of the study and individual rights related to involvement in the study and completion of survey instruments. After collecting signed consent forms, participants completed a demographic questionnaire consisting of 10 items (see Appendix A).

Demographic results describing the 94 participants are presented in Table 4.1. The mean age of the sample was 30 years; race was almost entirely Black or African American; most had never been married; and the majority had graduated high school with approximately 22.5 months of work experience. For participants with children, the average number of children was 2. The average age of participants, when they gave birth to their first child was 20 years old. The average age of the youngest child in the household was 6.9 years. On average, participants began receiving assistance when they were 24.3 years old, and had received assistance for an average of approximately 2.57 years.

Table 4.1

Descriptive Statistics

	Minimum	Maximum	Mean	Standard Deviation
Age of participant	18	49	30.05	8.78
Education ^a	1	5	3.11	1.20
Month of Work Experience	0	72	22.53	18.40
Number of Children	0	4	1.23	1.20
Perceived Employability	44.00	75.00	67.13	6.31
Self-Efficacy ^b				
Broad Work Adjustment ^c	63.00	126.00	96.53	14.98

Note. ^aEducation Categories: 1 = less than high school; 2 = GED; 3 = high school graduate; 4 = some college or technical school; 5 = college degree or post graduate. ^bPES scores range is 44 lowest to 75 highest possible score. ^cBWAP scores range is 63 lowest to 126 highest possible score.

Perceived-Employability Self-Efficacy (PES)

The first research objective sought to describe one of the independent variables, perceived employability self-efficacy (PES). PES represents an individual's beliefs in the ability to successfully perform the tasks or behaviors necessary to secure and maintain employment. The *Perceived Employability* scale (Houser et al., 1990), which consists of 10 questions, was used to assess training participants (see Appendix B). Participants' mean score of 67.13 on the PES instrument represents 89.5% of a total possible score of 75. Scores ranged from 44 to 75. In addition, two-thirds of all participants scored between 61 and 73. This response pattern indicates that a majority of participants' held positive perceptions of their employment self-efficacy. They believed they possessed the necessary abilities required to perform the tasks involved in searching for, acquiring, and maintaining employment.

Job-Readiness

The second research objective was to describe the job-readiness of NCTW participants. The Becker Work Adjustment Profile (BWAP; Becker, 1989) measured job-readiness and consisted of four major components: work habits, work attitude, cognitive performance, and work performance (see Appendix C). The BWAP composite score represents broad work

adjustment and constitutes *vocational competency*, a construct of central importance in vocational training and rehabilitation (Glueckauf et al., 1993). Program instructors rated participants' broad work adjustment, on average, 96.53 of a possible 126 points (76.6%). This figure indicates that instructors' assessed most training participants' job-readiness in the middle range.

Relationship of Perceived Employment Self-efficacy to Job-Readiness

The final and most critical objective of this study was to determine if a significant relationship existed between job readiness and selected independent variables, including employment self-efficacy, age, education, work experience, and number of children. This research objective included an examination of the strength of the relationships between these factors.

According to Huberty and Petoskey (1999), a multiple correlation analysis (MCA) is the statistical data analysis approach best suited for answering relationship-type questions. They recommend four major steps when conducting a MCA: (a) calculating the strength of the relationship, (b) conducting a statistical test of the strength of the relationship, (c) interpreting the relationship between the dependent variable (Y) and what is considered to be representative of the collection of independent variables (X), and (d) determining the relative contribution (importance) of each independent variable to the relationship or ordering of the variables.

Calculating the Strength of the Relationship

The first step, calculating the strength of the relationship, is accomplished by calculating a correlation matrix for the collection of X variables to the Y variable(s). The X variables represent perceived employability self-efficacy along with demographic information (i.e., age,

education, work experience, and number of children). The Y variable is a measure of work-readiness. The correlation matrix is presented in Table 4.2.

Table 4.2

Correlation Matrix for Job-Readiness

	Age of Participant	Education	Months of Work Experience	Number of Children	Perceived Employ Self-Efficacy	Broad Work Adjustment
Age of Participant	.	.185	.047	-.216*	-.048	-.147
Education		.075	.650	.036	.647	.157
Month Work Experience			.235*	.073	.042	.264**
Number of Children			.022	.486	.685	.010
Perceived Employ Self-Efficacy				-.060	-.112	.146
Broad Work Adjustm't				.563	.280	.162
					.044	.135
					.670	.194
						.293**
						.004
						.

*. Correlation is significant at the 0.05 level (2-tailed).

**. Correlation is significant at the 0.01 level (2-tailed).

Observations of the correlational matrix reveal several statistically significant relationships.

First, a statistically significant inverse relationship exists between age and number of children.

The older participants had fewer children. The correlation indicates that approximately 4.7% of the variance in this relationship is explained by these two variables.

Second, there is a statistically significant relationship between education level and months of work experience. Participants that possessed higher levels of education reported more work experience. Approximately 5.6% of the variance in this relationship was explained by these two variables. Past research supports the findings that educational attainment affords individuals access to more work opportunities (Bok, 2004; Relave, 2001).

Third, a statistically significant relationship existed between education and broad work adjustment (work-readiness). Participants with higher levels of educational attainment were

more work-ready. Approximately, 7.0% of the variance between these two factors was explained by this relationship. Education and training are key factors in preparing individuals for sustaining employment. Finally, a statistically significant relationship existed between perceived employment self-efficacy and work-readiness. The R^2 value revealed that 8.4% of the variance between these two variables was explained by this relationship.

Statistical Test of the Strength of the Relationship

The second step when conducting a multiple correlation analysis is a statistical test of the strength of the relationship between independent and dependent variables. Strength is determined by deriving a correlation coefficient r , which expresses the magnitude of the association of the X and Y variables. The square of r yields a statistic, explained variance that indicates the percentage of variance shared by the variables. The greater r , the more certain the relationship is and the greater the explained variance (Rojewski, 2000). According to Huberty and Hussein (2001), in order to eliminate a built-in (positive) bias, an adjusted r squared value should be calculated. The adjusted r square in this sample was .158, indicating that approximately 16% of the change in work-readiness scores can be explained by the linear composite of the five independent variables selected in the analysis (perceived employment self-efficacy, age, education, work experience, and number of children).

Regression analysis was conducted with the composite of the five independent variables (perceived employment self-efficacy, age, education, work experience, number of children) scores to predict job-readiness. For this data set, there was a modest correlation between job-readiness and the composite of the five independent variables, $R = .451$, $R^2 = .203$. The R^2_{adj} value was .158, which was statistically significant, $F(5,88) = 4.49$, $p < .001$. The R^2_{adj} value indicates that approximately 16% of the variation in training participants' job-readiness can be

explained by the composite of the five independent variables (perceived employment self-efficacy, age, level of education, work experience, and number of children).

Huberty and Hussein (2001) also suggest that in conjunction with developing correlation coefficients for statistical testing one need to analyze the effect-size index, which is a way to quantify the degree that results are better than chance values. The estimated proportion of shared variance (i.e., effect size) in this analysis, beyond that which may have been obtained by chance is .104. Thus, it is approximately 10 % better than chance that the value derived explains the variance for the relationship between work-readiness and the optimal linear composite of the five variables.

Next, to properly interpret what construct is defined by the linear composite of the five independent variables, the five structure r 's must be examined (Huberty & Hussein, 2001). The structure r is the simple correlation between each of the five independent variables and the linear composite of the five variables. A structure r for X_j is the correlation between X_j and linear composite of the pX s (which includes X_j). The X variables for which the structure r 's are the highest are considered in determining the construct that underlies the linear composite (Huberty & Petoskey, 1999). Based on structured r 's (see Table 4.3), the most influential factors on job-readiness were employability self-efficacy and education. Results, although modest, indicate a relationship between employment self-efficacy, educational preparation, and job-readiness.

Finally, in order to determine the relative contribution of each independent variable to the relationship, some type of ordering must be applied. Huberty and Hussein (2001) advocate that researchers ask, "Which X variable(s) is (are) the most important and which one(s) is(are) the least important to the relationship between the Y variable and the obtained optimal linear composite of the X variables?" To answer this question a MCA was conducted for each (p) X

independent variable with $p - 1$ X variables. The X variable which, when deleted, decreases the r^2 (or r^2_{adj}) value the greatest is considered the most important independent X variable. To determine the most important X independent variable two options are available, the absolute value of r^2 or the ordering of variables. Table 4.4 denotes the ordering of the variables.

Table 4.3

Structure Correlations for Job-Readiness

Component	Structure r	BWA-component correlation.
Perceived employment self-efficacy	.65	.29
Education	.59	.26
Age	-.33	-.15
Work experience	.32	.15
Number of children	.30	.14

Table 4.4

Results of the Five-Components Analyses

Variable deleted	R^2	R^2_{adj}	Rank
Perceived employment self-efficacy	.123	.084	1
Education	.149	.110	2
Age	.177	.140	3
Work experience	.187	.151	4
Number of children	.198	.162	5

After reviewing the ordered independent variables, Huberty and Petoskey (1999) suggest ranking the variables based on deleting certain independent variables. Results indicate which independent variable is dominant in establishing the relationship with the dependent variable. Accordingly, based on data in Table 4.4, PES and education are the most dominant variables influencing participants' work-readiness. Additionally, when the variable, number of children is deleted from the linear composite, r^2_{adj} increases to .162 from .158, the original correlation.

Consequently, by excluding the number of children from the analysis we improve the percentage of explained variance.

To proceed using the Pearson correlation results, certain assumptions or conditions must be met to ensure the data matrix row vector of scores are independent of all other score vectors (Huberty & Petoskey, 1999). Major conditions include: each sample must be a random subset of the population it represents, independence of participant score vectors, Y-variate normality, and homogeneity of Y-variable across the X-score possibilities. The sample randomness and independence of score conditions were satisfied based on the design of the study. This is because the survey instruments were given and scored independently for all participants enrolled in the Life Skills Management classes. For the Y-variate normality condition, which means that residuals are randomly drawn and normally distributed, Y-normality plots can be examined. Normality plots of the five independent variables can be examined using these graphs for identifying any aberrations in the data. The plots are linear indicating normal probability plots for the variables (see Figures 1-5) and for homoscedasticity (see Figure 6) exams the homogeneity of the Y-variable (i.e., job-readiness) variance across the X-variable scores.

Figure 1. Normality plot for age of participants.

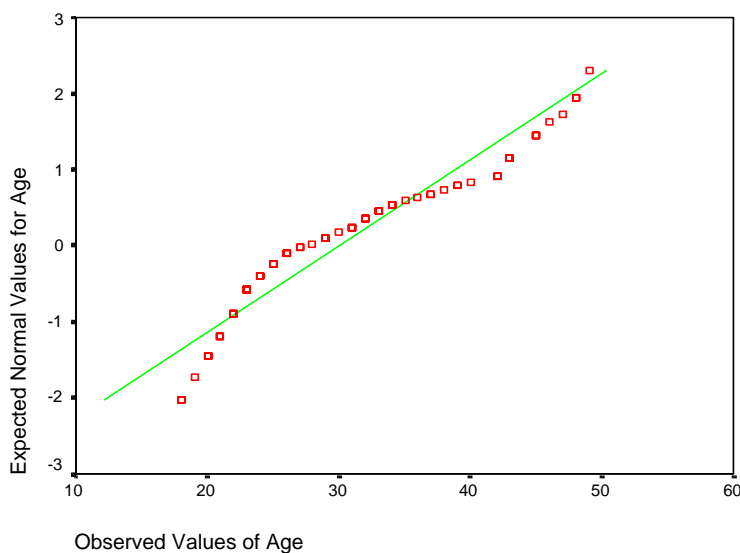


Figure 2. Normality plot for education of participants.

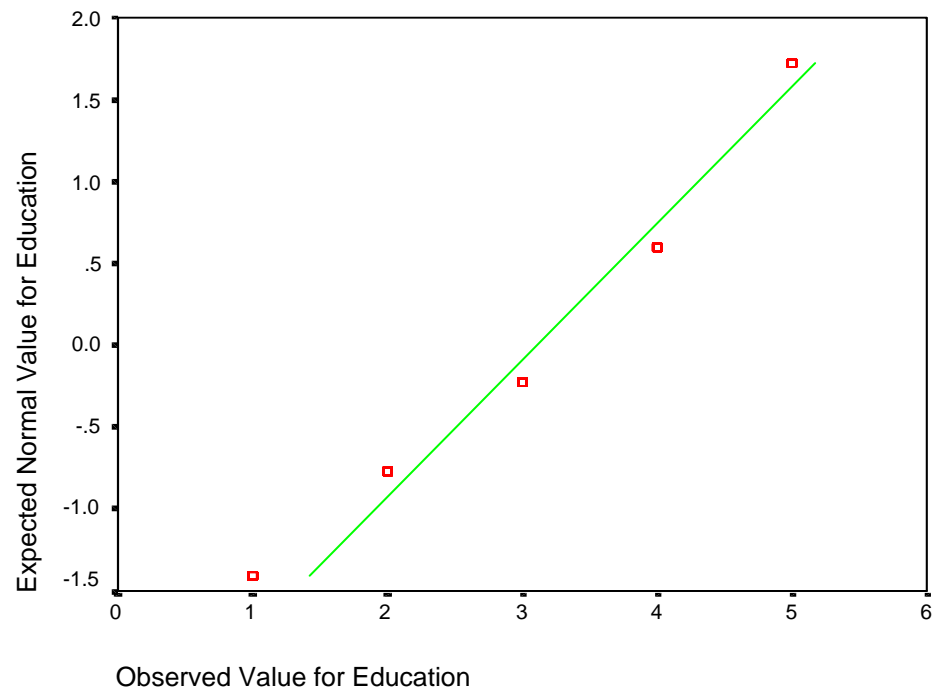


Figure 3. Normality plot for work experience.

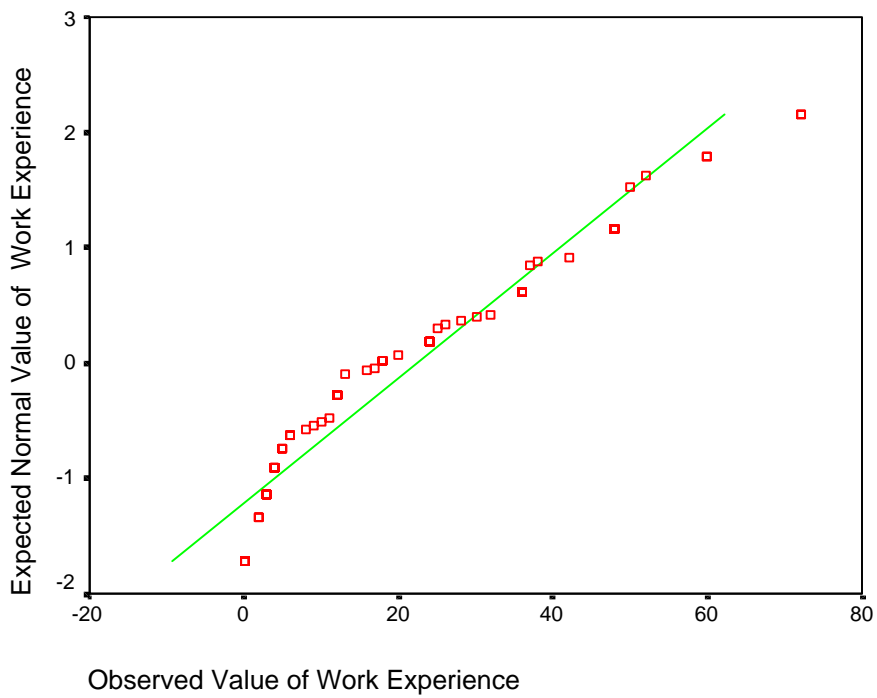


Figure 4. Normality plot for number of children.

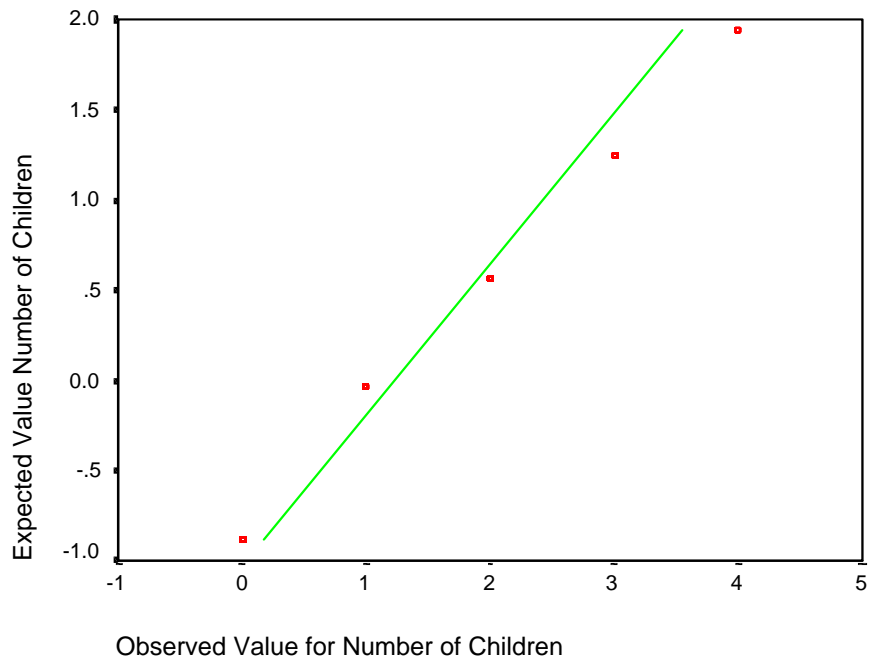
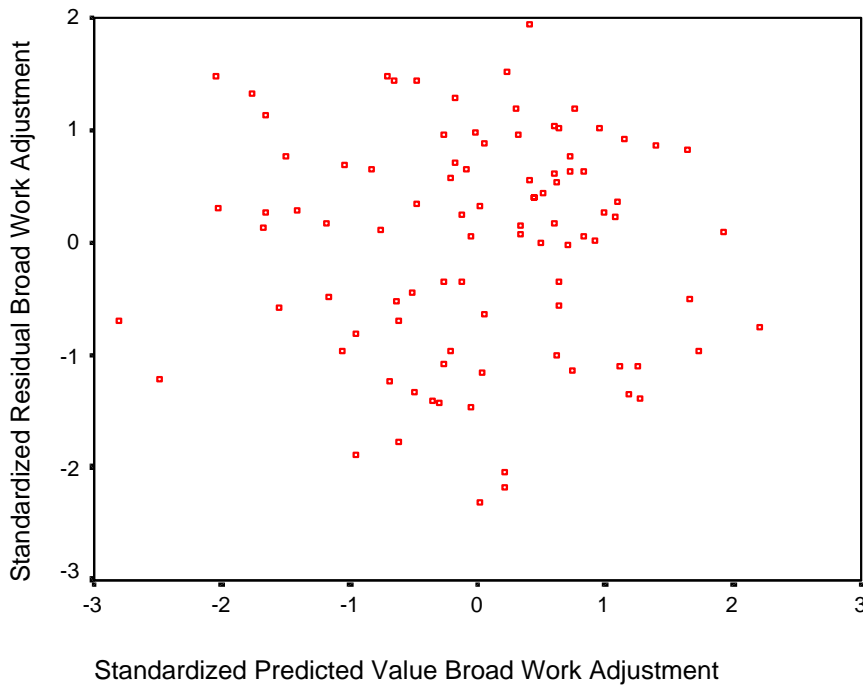


Figure 5. Normality plot for perceived employment self-efficacy (PES).



Figure 6. Standardized residual plot for dependent variable job-readiness



The normality plots for the independent variables (see Figures 1- 5) suggest that multivariate normality exist. The plots for age, education, work experience, number of children and PES are linear, indicating that the condition of normality was satisfied.

The test for homoscedasticity (see Figure 6) exams the homogeneity of the Y-variable (i.e., job-readiness) variance across the X-variable scores. The boundaries of the plot for the scatterplot data approaches being a circle. Thus, the homogeneity condition has been met.

Huberty (1999) suggests additional diagnostic analysis be conducted with MCA to ensure there are no extreme cases or influences, such as outliers. He recommends the studentized deleted residuals method, i.e., looking at all deleted residuals to identify extreme cases. The next step is to determine the extent the outliers influence the analysis. This is done by examining the estimates of the weights for the linear composite for the independent variables. One reason for examining the weight estimation pertains to bias. To assess the influence of individual units of

analysis on the bias of the weights, an index called *Cook's D* can be used. One should look for extreme values when using the studentized deleted residual method to identify distinct cases.

When reviewing residual statistics for the detection of extreme residuals, Pedhazur (1997) suggests that residuals greater than 2 (in absolute value) be scrutinized. He asserts that large standardized residual values serve to alert the researcher not to automatically designate the data points in question as outliers. He further advises that the standardized residual is not the best measurement. It is based on generally untenable assumptions that all residuals have the same variance, therefore, the studentized residual should be used to avoid this shortfall. To further refine residual analysis, the studentized deleted residuals is preferred because given that a data point constitutes an outlier, its retention in the analysis would lead to upward bias in the standard error of estimation, thereby running the risk of failing to identify it as an outlier. In summary, an examination of the studentized residual, the studentized deleted residual, along with the Cook's *D* is recommended as preferential diagnostics tools for multiple regression analysis.

Table 4.5

Residual Statistics for Dependent Variable Broad Work Adjustment

	Minimum	Maximum	Mean	Std. Deviation
Predicted Value	77.56	111.43	96.53	6.76
Std. Predicted Value	-2.81	2.21	.00	1.00
Standard Error of Predicted Value	1.88	6.17	3.38	.80
Adjusted Predicted Value	79.16	112.47	96.61	6.82
Residual	-31.61	26.74	.00	13.38
Std. Residual	-2.30	1.94	.00	.97
Stud. Residual	-2.35	1.99	.00	1.01
Deleted Residual	-34.21	28.05	-.08	14.37
Stud. Deleted Residual	-2.42	2.03	.00	1.02
Mahal. Distance	.76	17.76	4.95	2.99
Cook's Distance	.00	.17	.01	.02
Centered Leverage Value	.01	.19	.05	.03

The studentized and studentized deleted residual values (see Table 4.5) ranges are slightly higher than the absolute value of 2.0. The maximum absolute value for the studentized residual is 2.0 and for the studentized deleted residual is 2.0. Based on the mean values for the studentized residual and the studentized deleted residual of .00, one would judge that all data points fall within an acceptable range. Thus, I concluded that there are no significant outliers.

According to Weisberg (1980), for diagnostic purposes a relatively large Cook's D value should be found in the data if there are influential observational data points. If most Cook's D values are small, this is an indication that an absence of overly influential observations exists. For my data, Cook's D is relatively small. Hence, I concluded no outliers exist that may have unduly influenced or biased the results.

In summary the statistical findings for this study indicate a significant (but modest) relationship between the NCTW training participants' job-readiness, perceived employment self-efficacy and education. In this study, approximately 7% of the variance in job readiness was explained by perceived employment self-efficacy and an additional 5.6% by education. Based on Bandura's self-efficacy theory (1982) and Bok's education attainment research (2004) the enhancement of employment self-efficacy along with education and training may increase a person's ability to pursue and attain employment opportunities. Understanding the factors that contribute to job-readiness is important for program coordinators given limited resources—time and money dedicated to work transition training. The results from this study indicate that employment self-efficacy may be useful to administrators when designing assessment measures for economically disadvantaged females' job-readiness.

CHAPTER 5

DISCUSSION

The purpose of this study was to investigate the relationship of perceived employment self-efficacy and other key demographic factors to job-readiness. The literature offers vast information pertaining to self-efficacy and work (e.g., Eden & Aviam, 1993; Gist, 1987; Gist & Mitchell, 1995; Strauser, 1995; van Ryn & Vinokur, 1992). But little has focused specifically on disadvantaged females' employment self-efficacy and its relationship to employability.

I found that perceived employment self-efficacy has utility in helping to understand employability. The emphasis of this research was on selected factors that facilitate disadvantaged females' ability to transition from Temporary Assistance for the Needy Families (TANF) into sustaining work. The majority of previous research pertaining to the economically disadvantaged has focused on the types of training programs most effective in increasing work-readiness. Since the late 1990s research directed at job training for disadvantaged populations has enriched our knowledge of the types of programs that are most effective (Friedlander & Burtless, 1995; Gueron & Pauly, 1991; Leahey, 2001). As an enhancement to this body of literature, this study delved into the characteristics of participants most promising for achieving sustained employment.

The Personal Responsibility and Work Opportunities Act (PRWORA) of 1996 has propelled a rapid influx of low-income mothers into the workforce. This influx has heightened interest in the implications of preparation for job-training and job retention. To further substantiate this thrust, research has shown that education and training can open pathways to

greater job security, income, and upward mobility for this population (Strawn & Martinson, 2000). Education and income are generally so highly correlated in many studies they have become the proxy for the other (Bok, 2004). Education is key to the primary goal of work adjustment and job training—employment. Yet, the effectiveness of education and training programs for many disadvantaged females are behind in achieving the goal of economic independence.

Within the framework of self-efficacy theory, Bandura (1982) postulated that the stronger one's self-efficacy belief regarding a particular task, the more likely the individual will exert effort at the task in the face of adversity. Further, individual's self-efficacy not only influences the execution of effort toward activities, but the choice of activities and the setting. Hence, individuals seeking employment that have the belief that they can be successful at executing the required tasks, behaviors and necessary steps to secure and maintain employment may be more successful at employment.

The effectiveness of self-efficacy in job training programs aimed at preparing low-income women for employment was investigated by Farley (1992), who defined employability or job readiness as a complex set of interrelated factors which determine how successful a person is at choosing, getting, keeping, and advancing on a job. Personal factors contributing to the success of a person's employability include self-efficacy and work knowledge, decision-making skills, and planning skills required for vocational choice. Results of this study substantiated Farley's observations for low-income participants in the NCTW job-training program. Participants in this study who had higher educational levels and employment self-efficacy were deemed to be more job-ready.

A substantial body of research has attested to the application of self-efficacy theory in career development, career choice and job-search related activities. To capsulate the significance or prior research pertaining to self-efficacy and job-readiness Stajkovic and Luthans (1998) conducted a meta-analysis. Their meta-analysis examined the relationship between self-efficacy and work-related performance. A significant weighted-average correlation between self-efficacy and work-related performance was reported. Adjusted for sample size outliers and extreme values, the meta-analysis indicated a weighted average correlation value of .38. This evaluation represented the first time that an indicator of the overall relationship between self-efficacy and work-related performance had been meta-analytically derived and analyzed. These comparisons appear particularly important, because historically, it has been difficult to predict objective behavioral outcomes (Stone-Romero, 1994). Stajkovic and Luthans (1998) conducted a study where the average correlation of .38 demonstrated that self-efficacy may be a better predictor of work-related performance than personality-based constructs commonly used in organizational research studies. Hence, traditional career assessment measures (e.g., Holland and Super's career development/choice tools) may be supplemented by the use of employment self-efficacy. As highlighted previously, employment self-efficacy is an indicator of one's belief in the ability to seek, acquire and maintain employment. Based on Stajkovic and Luthans (1998) correlation results of .38, the relationship (29% explained variance) I derived between perceived employment self-efficacy and job-readiness may be considered meaningful in understanding job-readiness.

Bok's (2004) research on low-income women supports the notion that education and training increases job choices, job tenure, wages, job mobility, and improves working conditions. This is especially true for individuals who have completed high school and have gone on to

complete some type of post secondary education or vocational training. More importantly, Bok's findings support the use of the PES as a tool for assessing disadvantaged individuals' belief in their ability to accomplish career-related tasks. Edin and Harris (1999) found that most poor women want to work, and seek economic betterment through education and training, but, most employers believe that they need to change their attitude, motivation toward work and their work ethic. The PES can assist in evaluating low-income women in training programs that may benefit from enhancing the job-readiness characteristics that employers seek.

Relave (2001) found that working with employers when developing training programs can allow for the necessary inputs to make training programs more responsive to their needs. At the same time this collaboration can educate employers on the challenges facing low-income workers and encourage their participation in welfare-to-work efforts. This partnership may ultimately lead to employers' willingness to be more proactive in using public training programs to fulfill their workplace needs. Employers in Relave's study consistently indicated that government providing qualified, reliable, and entry-level workers is more important than offering public subsidies. This need highlights the usefulness a collaborative training partnership between NCTW and employers would be in implementing training programs. The disadvantaged female participants in NCTW, job-readiness may be facilitated by the involvement of potential employers in the design and job-skills development phases of the training program.

Another important characteristic employers generally believe is important for entry-level workers, is their work attitude and ethic, they are viewed as more important than jobs-skills training (Moss & Tilly, 2001). Employers indicated that technical jobs skills training can be taught on the job, but how an employee view themselves, the importance and the effort they are willing to put forth to achieve were not trainable. Hence, the emphasis on soft skills, e.g.,

employment self-efficacy, work attitude, and work ethic is important from an employers perspective particularly for disadvantaged participants involved in public job-training programs.

Research by Bok (2004) and Relave (2001) supports this study's findings on the importance of employment self-efficacy and education to work-readiness. In the current study, education and employment self-efficacy had the strongest correlation among selected variables with employability. These results support incorporating measurements of employment self-efficacy into work-training programs. Traditional job-training programs typically have a measure for academic orientation, but would be complemented by including a measurement for employment self-efficacy. This type of measure may assist job counselors in identifying participants with low employment self-efficacy to develop customize training to enhance their employment self-efficacy for improved job-readiness.

Collectively, results of the studies discussed in the preceding paragraphs support the theoretical framework that employment self-efficacy may provide an understanding of job-readiness among disadvantaged females. Further, employment self-efficacy along with education may be valuable to counselors in assessing trainee's job-readiness. In this study's sample, perceived employment self-efficacy explained 7% of the variance in job readiness and education explained 5.6% of the variance in job-readiness. The remaining unexplained variance in work-readiness is an indication that there are other influences on work-readiness. This study does not address the multitude of other factors involved. In order to capitalize on the relationship discovered here, training programs may use assessment tools to understand participants' employment self-efficacy. More importantly, by understanding participants' employment self-efficacy trainers can incorporate efficacy enhancement techniques in the curriculum as a positive step to improving their work-readiness.

Bandura's (1977a) self-efficacy theory postulated that it was the most powerful determinant of behavioral change. He asserted that efficacy expectancies determine the initial decision to perform a task, the effort to be expended on the task and the persistence to continue with the task even in the face of adversities. As it applies to work-readiness, the enhancement of employment self-efficacy may increase a person's employment search, achievement and maintenance, even in the face of adversities. To the extent that job-training programs are successful at identifying and enhancing participants' employment self-efficacy, may be an indicator of their ability to influence participants' work-readiness.

Delimitations of the Study

There are several delimitations associated with my study, including limited generalizability and the inference of causality. The delimitations are briefly discussed in the subsequent paragraphs.

Limited Generalizability

The current study was conducted in a job-training program, where training participants were evaluated on their ability to exhibit behaviors and complete job tasks required in a work environment. Both instructors evaluated students on promptness—to work and completing tasks, work attitude, ethic and work performance. Since this study was conducted in a stimulated work-setting, participants' performance may deviate in an actual work environment where they have less opportunity for corrective actions.

The sample of individuals that participated in this study was students at Dekalb Technical College. They were primarily African American, single-parents from metropolitan Atlanta, Georgia. The ability to generalize the results of this study to other populations may be difficult. For example, if a study were conducted with a sample drawn from a Caucasian and rural

population, the findings may be drastically different from those presented here. The inability to generalize to other populations is one of the delimitations of conducting a study via a non-randomization of groups.

Inference of Causality

The research design of the study--multiple correlation analysis, analyzing the relationship of factors that may influence ones employability, may be a limitation. The participants' work-readiness may have resulted from factors outside and unrelated to the study (e.g., an improved job market or advanced training techniques). Many researchers have criticized cause-and-effect studies (correlational and causal comparative) because of their attempt to break down complex abilities and behavior patterns into simpler components that may be determined by a variety of factors (Gall et al., 1996). Due to the cause-and-effect research design used for this study the ability to know for certain that education and employment self-efficacy is the true cause for the variation in work-readiness is precluded.

Current literature is limited that uses the causal-comparative analysis as a basis for understanding the cause-and-effect of self-efficacy as it relates to employment for the disadvantaged population. One study pertaining to the long-term impact of career education on a disadvantaged population was conducted by Champagne (1987) in which a casual-comparative design was used. Her findings affirmed that a correlation existed between the career counseling given to the disadvantaged population and their career development.

In summary, the major disadvantage of research using a correlational method is that determining causal patterns based on the data collected with any degree of certainty is difficult. Further, it is difficult to address certain issues in a stimulated correlational study. Certain factors

involving people and situations in a work setting cannot be stimulated. Hence, real world or on the job investigations may be required to for a thorough assessment.

In interpreting results the limitations involved in correlational studies must be acknowledged. Using the causal-comparative research design along with correlational statistical data analysis allows for an examination of the relationship of work-readiness, employment self-efficacy along with other demographic factors. A true cause and effect relationship can not be established among the variable, because of the complexity involved in the job-readiness phenomena; it cannot be completely explained by examining five variables. At best, this study allows one the ability to understand some of the important factors contributing to the job-readiness for disadvantaged females in a training program.

Implication of Findings

The findings in this study support Bandura's (1989) postulation that self-efficacy is an individual's belief in their capabilities to mobilize the motivation, cognitive resources, and courses of action needed to meet situational demands. Bandura advocated that the relationship of self-efficacy to performance served as a behavioral predictor. As a result, people are successful at performing tasks they believe they are capable of doing. This is indicative of how the participants in the NCTW program felt about their ability to perform the task necessary to acquire and maintain employment as it related to their work-readiness.

Implications of these finding for programmatic changes that may be useful in the NCTW's training pertain primarily to participants' work-readiness assessment. Program administrators may find the PES instrument useful in assessing participants' belief about their ability to conduct job search, and perform the tasks necessary to acquire and maintain a job. The conceptual basis upon which the generative capability self-efficacy invokes is based on

substantive theory. The self-efficacy theory emerged as a significant foundation for work motivation and employment performance research (Eden & Aviam, 1993; Gist, 1987; Gist et al., 1989; Stumpf et al., 1987; van Ryn & Vinokur, 1992). Studies conducted by Gist and Mitchell (1992) revealed the importance of self-efficacy for predicting and improving work performance. The understanding and application of the knowledge we have gained on how employment self-efficacy beliefs apply to the successful job search and acquisition for disadvantaged females is valuable for positioning them for sustained employment.

The perceived employment self-efficacy scores for this study are indicative of how important ones employment self-efficacy is to their work-readiness. Participants in the NCTW program PES scores averaged 67.13. This above average score is impressive based on a total possible score of 75. I believe that PES scores were high due to the participants' willingness to answer question in a positive manner, because of the relationship built by the instructors. Likewise, the instructors rated the participants on average relatively high in their job-readiness. Additional further explanation maybe that the training classes were small enough in size to allow both instructor and student to develop a unique and familiar relationship—allowing for one on one discussion that may have enhanced participant's career development. This indicates there may be some value in the instructors and training participants sharing their evaluations and having discussions on where the training participants are in their job-readiness.

To further understand the effect other influential factors (such as class size) may have had on the participants' job-readiness, one would have to further investigate training participants', prior work experience, prior training (e.g. computers etc), training program instructional techniques, participant's high school grade point average and trainers' background.

These factors may offer additional insight into evaluating participants' job-readiness and provide further understanding on enhancing it.

From its inception, the NCTW program was conceived as a comprehensive short-term training and employment program that provides support services and preparation to students for job-readiness. It was designed to offer assessment, counseling, training, and personal skill development for sustained employment. This research conducted using a sample of the program's female participants reveal some unique training implications. First, the future ability to meet the changing workforce demands will dictate that job-training approaches be more flexible and focus on essential skills, both technical and interpersonal. Second, depending on the state of the economy and current labor market, employers, trainers and job-training participants will need to collaborate on what training is needed to build a more skilled and competent workforce. Finally, with the emphasis on short-term job preparation along with shifting labor markets, the importance of a proactive job-readiness assessment process is critical. Optimally, an assessment process would readily identify essential job sustaining skills and incorporate a measure of ones employment self-efficacy in the evaluation.

Suggestions for Future Research

Employment self-efficacy may be a useful tool when assessing job-readiness. The findings revealed in this study are in a positive direction, although modest size and effect, they may contribute to understanding specific work-related behaviors and performance. Given the findings in this study are informative, when reviewing the results, one must be cognizant, that in some cases environmental factors may facilitate or impede performance depending on the different workplaces and work climates. I realize that further investigations are needed to explore how various work environments or industries may affect ones work-readiness. Hence, additional

studies need to be conducted that are on-the-job, to allow for employer/employee interaction, in turn, understand how this affects one's job-readiness.

Second, future investigations are needed using a sample taken from a more diverse ethnic population. In this study, most participants were female and African American. A study using a sample from a more diverse group in terms of gender, race/ethnicity, and perhaps even geographic location may reveal differences not accounted for in the current study. This is important, given the current research highlighting the differences in employment opportunities for economically disadvantaged African Americans compared to White Americans as a result of welfare reform. Edin and Harris (1999) conducted an investigation comparing these two groups. They found that African American women had more difficulty making a permanent transition from welfare to work than did White women. In general, White women were better positioned to move into sustaining work.

Finally, research is needed that focuses on how the structural changes in the United States and global economies have influenced job opportunities for women transitioning from TANF into work. In the late 1990s, when PRWORA was passed, the United States was in a job creation mode. In the early 2000s, workforce demands have shifted to an emphasis on overseas labor markets. Companies are increasingly sending jobs in manufacturing and those repetitive in nature to countries where labor costs are cheaper. Thus, entry-level positions that individuals moving from TANF into work would have easily acquired in the latter portion of the 21st century, are non-existent or competitive with more experienced and educated displaced workers. The trend of shifting lower skills and repetitive types of work abroad is expected to continue. Concerted research on how this impacts job-training programs for disadvantaged workers, especially for female and African-American, would be informative.

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APPENDIX A
DEMOGRAPHIC QUESTIONNAIRE

**Self-Efficacy as a Determinant of Work Readiness
Demographic Questionnaire**

Remember, this information is Confidential. We will not share this information with anyone outside of our research team.

Today's Date (MM/DD/YY) _____

Participant ID Number: _____ (Will be Assigned)

Demographic Information

1. As of your last birthday how old were you? _____

2. How do you describe yourself?

(1) ____ American Indian or Alaska Native

(2) ____ Asian

(3) ____ Black or African American

(3) ____ Hispanic or Latino

(4) ____ Native Hawaiian or Other Pacific Islander

(5) ____ White

(Note: To describe yourself as mixed racial heritage select more than one category)

3. What is your current marital status?

(1) ____ Never Married

(2) ____ Divorced

(3) ____ Separated

(4) ____ Widowed

(5) ____ Married, Not Separated

Demographic Questionnaire Continued

Participant ID Number:_____ (Will be Assigned)

4. What is the highest level of education you have obtained?
 - (1) ____Less than High School Level
 - (2) ____GED
 - (3) ____High School graduate
 - (4) ____Some College or Technical School
 - (5) ____College Degree or Post Graduate
5. Within the last 5 years how many months have you been employed?_____
6. How old were you when your first child was born?_____
7. How many children currently live with you?_____
8. As of his or her birthday how old was your youngest child?_____
9. How old were you when you first received welfare benefits?_____
10. How many years over the course of your lifetime have you been on welfare?_____

APPENDIX B

PERCEIVED EMPLOYABILITY SELF-EFFICACY SCALE (PES)

Perceived Employability Self-Efficacy Scale (PES)

Rick Houser, Ph.D.

University of Massachusetts at Boston

Ethel Aiko Oda, Ph.D.

University of Hawaii at Manoa

1990

Permission granted for inclusion by Dr. Houser and Dr. Oda.

Directions: Please rate on the scale provided how you feel about each statement listed below.

1. Obtain a job.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

2. Find information about job opportunities.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

3. Learn new information about a particular job/career.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

4. Remove potential barriers to getting a job.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

5. Interview for a job.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

6. Get along with co-workers.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

7. Plan ahead one year for my future.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

8. Earn enough money to support myself/family.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

9. Get along with a supervisor.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

10. Plan ahead five years for the future.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

11. Complete a training program if necessary to obtain a job.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
1	2	3	4	5

12. Balance a job/career and family demands.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
-------------------------	--------------------------	-----------------	-----------------------	----------------------

1	2	3	4	5
---	---	---	---	---

13. Find a job/career that fits my needs, abilities and interests.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
-------------------------	--------------------------	-----------------	-----------------------	----------------------

1	2	3	4	5
---	---	---	---	---

14. Keep a job for at least a year.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
-------------------------	--------------------------	-----------------	-----------------------	----------------------

1	2	3	4	5
---	---	---	---	---

15. Show up for work everyday.

definitely cannot do	most likely cannot do	maybe can do	most likely can do	definitely can do
-------------------------	--------------------------	-----------------	-----------------------	----------------------

1	2	3	4	5
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APPENDIX C

BECKER WORK ADJUSTMENT PROFILE (BWAP)

BECKER WORK ADJUSTMENT PROFILE

Ralph L. Becker

SHORT SCALE EDITION QUESTIONNAIRE BOOKLET

Name _____ Sex _____ Date _____
 Grade _____ Date of Birth _____ Age: _____ yrs. _____ mos. IQ _____
 School/Facility _____
 Primary Disability _____ Secondary Disability _____
 Name of Evaluator _____ Title _____

HOW TO USE THIS BOOKLET: The items of the *BWAP* measure a worker's vocational habits, attitudes and skills in the performance of work and job related activities. The 32 items are divided into four domains that assess activities in Work Habits/Attitudes, Interpersonal Relations, Cognitive Skills, Work Performance Skills, and a composite of Broad Work Adjustment.

The rater is someone who has closely observed the daily work behavior of the client and has knowledge of the individual's work adjustment. If you, as the rater, have not had the opportunity to observe performance on a task or the individual does not have opportunity to do it, *estimate* what the performance could be. *Skip no items.*

Each item may be scored (rated) 0,1,2,3, or 4 using criteria reported in the *Evaluator's Manual*. Score 0 if the individual is unable or rarely or never exhibits the behavior although there is opportunity to do so. Score 1 if the individ-

ual exhibits the behavior but does not do it well or the result is unsatisfactory. Score 2 if the individual exhibits the behavior and does it fairly well or the result is generally satisfactory but could be improved upon. Score 3 if the individual exhibits the behavior and does it well or the result is satisfactory. Score 4 if the individual exhibits the behavior and does it very well or the result is highly satisfactory.

Rate the item using the criteria that the task is completed without help or other assistance. Items completed with help or assistance are stated as part of the task or activity. To score each item, circle the numeral that best describes the behavior.

Space for recording the interpretation of results is provided on the back page of the questionnaire booklet.

It is important that you consult the *Evaluator's Manual* for complete information on scoring criteria and use of the *Short Scale* or *Full Scale* in evaluating a client's vocational competency.

From the Becker Work Adjustment Profile by R.L. Becker, 1989, Columbus, OH:
 Elbern Publications.

Copyright 1989 by Ralph L. Becker, Included with permission.

WORK HABITS/ATTITUDES DOMAIN (HA)

1. PERSONAL HYGIENE: *Bathes, washes, and uses deodorants to maintain body cleanliness.*

Neglects body care; Dirty	Often unclean; Body odor	Usually clean; Occasional odor	Frequently clean; No body odor	Regularly clean; No body odor
0	1	2	3	4

2. APPROPRIATE CLOTHING: *Wears appropriate dress in the work situation.*

Never wears proper clothing	Often dress is inappropriate	Usually dress is appropriate	Frequently wears proper dress	Regularly wears proper dress
0	1	2	3	4

3. PERSONAL APPEARANCE: *Maintains a neat appearance and personal grooming.*

Ill-groomed; Sloppy	Often unkempt	Usually well-groomed	Well-groomed; Neat	Exceptional personal appearance
0	1	2	3	4

4. PUNCTUALITY: *Promptness for reporting to work at starting times in the morning, after lunch, and after break periods for a randomly selected 20-day work period.*

Always late; No concept of time	Often late	Generally on time	Nearly always on time	Consistently on time
0	1	2	3	4

5. MOTIVATION: *Initiative and interest when performing job assignments.*

Indifferent; Needs constant pushing	Often needs prodding to do assigned work	Somewhat motivated with assigned work	Considerably motivated with assigned work	Highly motivated; Seeks additional new work
0	1	2	3	4

WORK HABITS/ATTITUDES DOMAIN
RAW SCORE TOTAL
(Short Scale, Items 1-5)

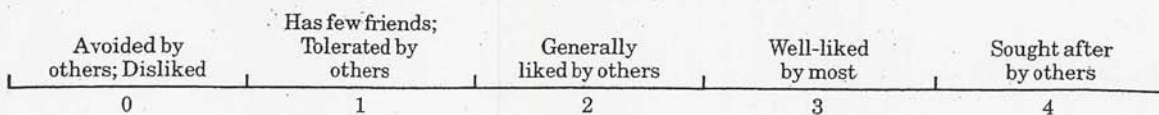
INTERPERSONAL RELATIONS DOMAIN (IR)

1. PERSONAL RELATIONS: *Courteous and respectful toward co-workers and supervisors.*

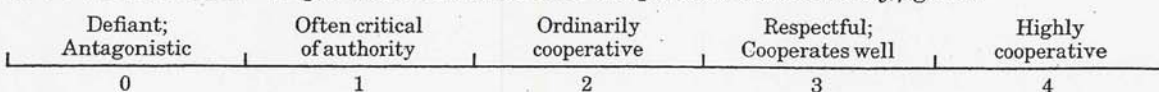
Rude; Uses profanity	Often impolite	Ordinarily polite	Courteous; Polite	Exceptional relations
0	1	2	3	4

The next item for this domain
is on the following page.

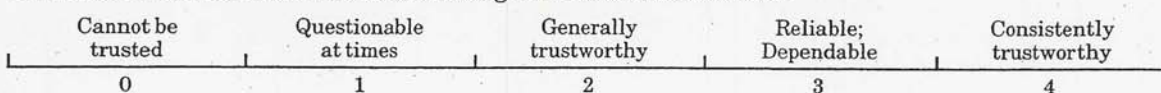
2. GROUP ACCEPTANCE: *Approval and acceptance by co-workers.*



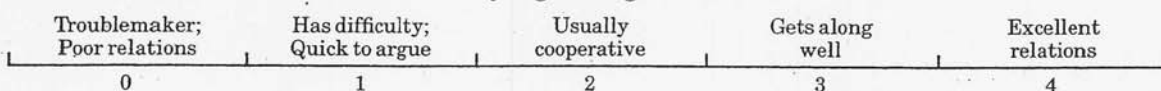
3. COOPERATION—Supervisors: *Attitude toward supervisors as authority figures.*



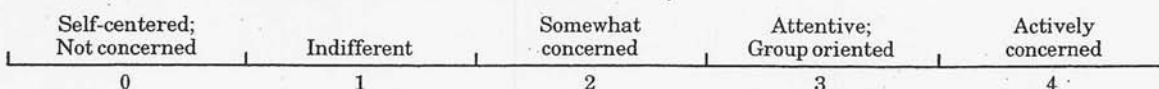
4. TRUSTWORTHY: *Reliable and trusting in relations with others.*



5. COOPERATION—Co-workers: *Ability to get along with others.*



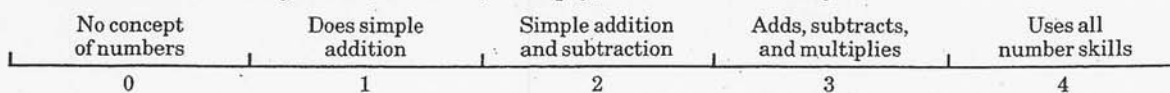
6. CONCERN FOR OTHERS: *Interest in co-workers welfare.*



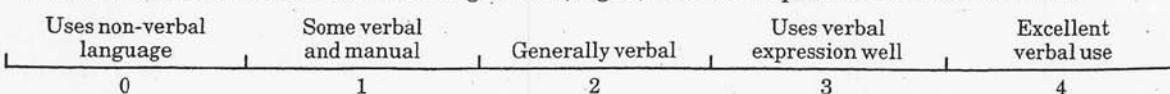
INTERPERSONAL RELATIONS DOMAIN
RAW SCORE TOTAL
(Short Scale, Items 1-6)

COGNITIVE SKILLS DOMAIN (CO)

1. NUMBERS: *Ability to add, subtract, multiply, and divide correctly.*



2. COMMUNICATION MODE: *Uses gestures, signs, or verbal expression to communicate.*



The next item for this domain is on the following page.

3. MEMORY: *Remembers orally given information or work instructions.*

Poor memory; Limited recall	Often forgets simple information	Usually recalls procedures and information	Good recall of information	Excellent recall for details
0	1	2	3	4

4. READING LEVEL: *Reads with comprehension or understanding.*

Non-reader	Reads various survival signs	Reads grade levels 3-5	Reads grade levels 6-8	Reads above 8th grade
0	1	2	3	4

5. TIME CONCEPT: *Knows the meaning of the concepts—yesterday, tomorrow, day after tomorrow, and days of the week.*

No understanding of time concepts	Understands one out of four concepts	Understands two out of four concepts	Understands three out of four concepts	Understands all time concepts
0	1	2	3	4

6. WRITING: *Ability to communicate in print or cursive writing.*

No attempt to write or print	Writes or prints own name	Writes or prints up to two words	Writes or prints simple messages	Writes letters with correct grammar
0	1	2	3	4

7. TELLING TIME: *Tells time correctly on a standard face clock or watch.*

Cannot tell time	Tells time by the hour	Tells time to the half hour	Tells time by 5-minute intervals	Tells time to the minute
0	1	2	3	4

8. TELEPHONE: *Receives and makes phone calls and uses telephone white and yellow pages.*

Answers phone; Takes no messages	Converses; Takes simple messages	Uses phone to call familiar numbers	Uses pay telephone	Gets information from directories
0	1	2	3	4

9. MEASURING: *Ability to measure items of different lengths accurately.*

Grossly limited	Measures to the inch	Measures to the $\frac{1}{2}$ inch	Measures to the $\frac{1}{4}$ inch	Measures to the $\frac{1}{16}$ inch
0	1	2	3	4

The next item for this domain
is on the following page.

10. MANAGING MONEY: *Banking, budgeting, and daily money handling tasks.*

Cannot manage money	Manages with close supervision	Manages with occasional supervision	Manages with minimal supervision	Manages own money
0	1	2	3	4

COGNITIVE SKILLS DOMAIN
RAW SCORE TOTAL
(Short Scale, Items 1-10)

WORK PERFORMANCE SKILLS DOMAIN (WP)

1. CORRECTING ERRORS: *Controls own quality of work.*

Almost never	Makes few corrections	Corrects most errors	Corrects all but a few	Corrects all errors
0	1	2	3	4

2. QUALITY OF WORK: *Maintains production standards of neatness and accuracy of tasks or product produced.*

Consistently inferior work	Frequently below requirements	Meets requirements	Frequently above requirements	Regularly above requirements
0	1	2	3	4

3. INITIATING TASK: *Self-initiates daily work routine.*

Almost never	Often needs to be shown	Usually initiates	Often initiates; Self-reliant	Always initiates; Highly self-directed
0	1	2	3	4

4. QUANTITY OF WORK: *Maintains production rates of volume or amount of acceptable work completed.*

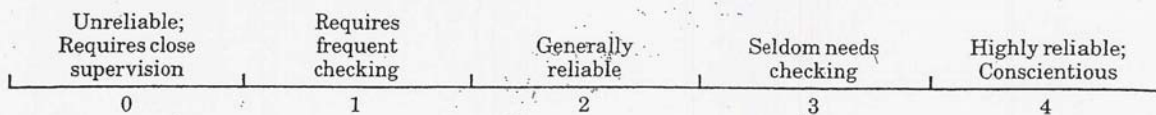
Limited output; Below 25% of norm	Low output; 25-49% of norm	Moderate output; 50-75% of norm	High output; 76-90% of norm	Extended output; Over 90% of norm
0	1	2	3	4

5. ASKING FOR MATERIALS: *Makes requests for needed materials or supplies to complete assignment.*

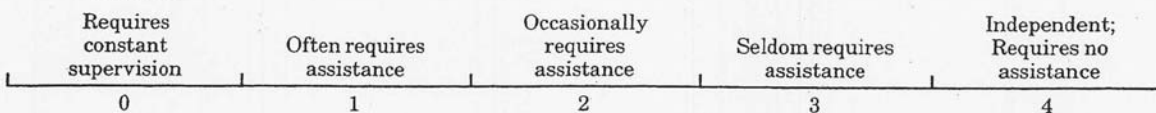
Does not ask; Sits idle	Seldom asks; Wastes time	Ordinarily asks	Frequently asks	Actively seeks needed materials
0	1	2	3	4

The next item for this domain
is on the following page.

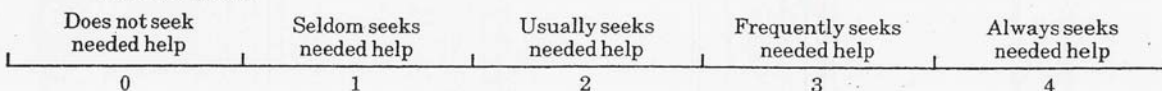
6. **DEPENDABILITY:** *Fulfills assignments in a reliable and dependable manner.*



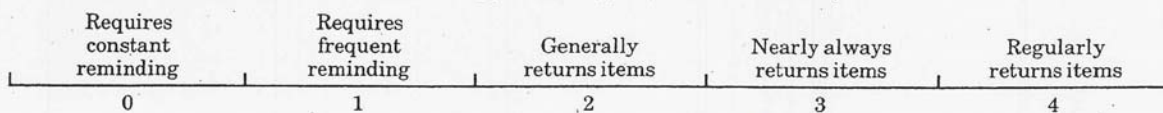
7. **INDEPENDENT FUNCTIONING:** *Amount of supervision required after initial instruction period.*



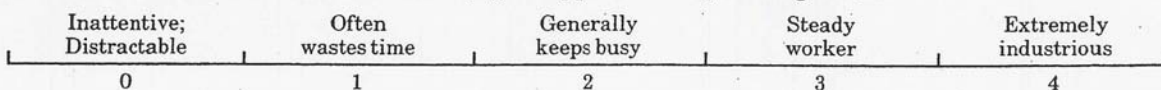
8. **REQUESTS HELP WHEN NEEDED:** *Seeks necessary help or assistance from supervisors in the work area.*



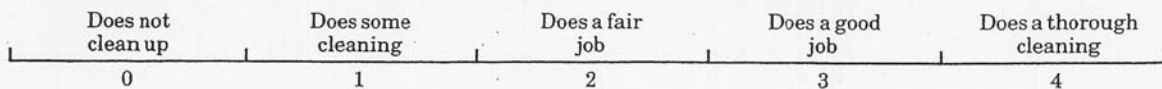
9. **TOOL RETURN:** *Returns tools or supplies to appropriate location after use.*



10. **ATTENDING TO TASK:** *Amount of effort applied to the job assignment.*



11. **MAINTAINING WORK AREA:** *Cleans up work area during and after production.*



WORK PERFORMANCE SKILLS DOMAIN
RAW SCORE TOTAL
(Short Scale, Items 1-11)

INDIVIDUAL PROFILE SECTION

SAMPLE

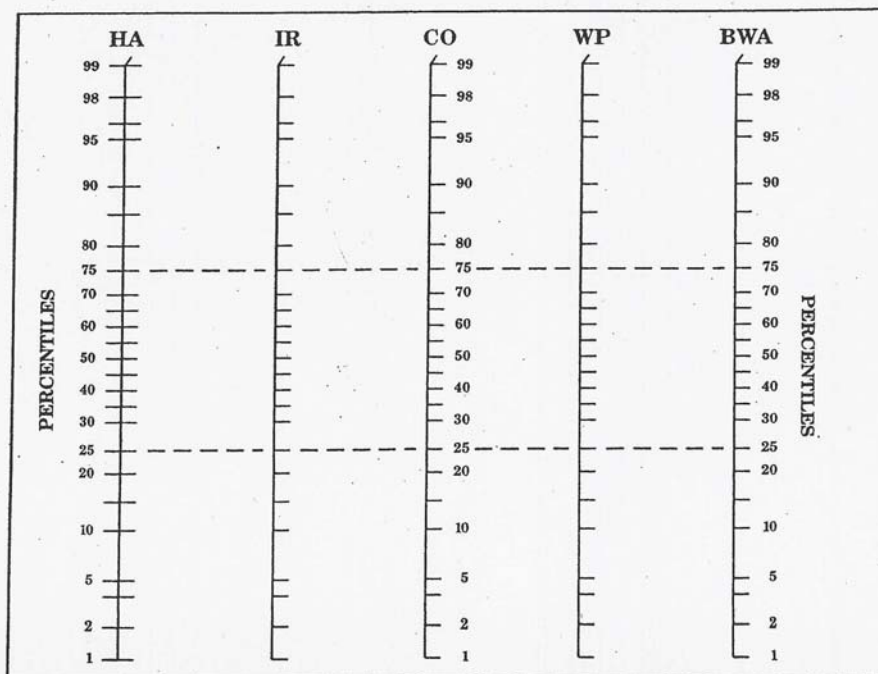
Name _____ Sex _____ Date _____
 Grade _____ Date of Birth _____ Age: _____ yrs. _____ Mos. IQ _____
 School/Facility _____
 Primary Disability _____ Secondary Disability _____
 Name of Evaluator _____ Title _____

SCORE SUMMARY

Full Scale _____ MR _____ PH/CP _____
 Short Scale _____ Norm used: _____ ED _____ LD/EcD _____
 (Mark One) (Mark One)

Domain	Symbol	Raw Score	T-Score	Percentile	Stanine
Work Habits/Attitudes	HA	_____	_____	_____	_____
Interpersonal Relations	IR	_____	_____	_____	_____
Cognitive Skills	CO	_____	_____	_____	_____
Work Performance Skills	WP	_____	_____	_____	_____
Broad Work Adjustment	BWA	_____	_____	_____	_____

PEER PROFILE



EMPLOYABILITY STATUS PROFILE

Competency Level	Percentiles					Expected Placement Track Program
	HA	IR	CO	WP	BWA	
High	97-99	+	+	+	+	97-99 Community-Competitive
Moderately High	76-96	+	+	+	+	76-96 Transitional Sheltered
Adequate	25-75	+	+	+	+	25-75 Extended Workshop
Moderately Low	4-24	+	+	+	+	4-24 Work Activity
Low	1-3	+	+	+	+	1-3 Day Care

HA = Work Habits/Attitudes; IR = Interpersonal Relations; CO = Cognitive Skills;
WP = Work Performance Skills; BWA = Broad Work Adjustment.

Interpretation of Results

SAMPLE