

ABSTRACT

Title of Document:

DETERMINING THE VARIABLES THAT
CONTRIBUTE TO JOB TENURE FOR
PEOPLE WITH PSYCHIATRIC
DISABILITIES PARTICIPATING IN AN
EVIDENCED-BASED SUPPORTED
EMPLOYMENT PROGRAM

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Despite the implementation of supported employment programs and the assistance from supported employment specialists, people with disabilities continue to have lower employment rates than their non-disabled counterparts. Persons with psychiatric disabilities continue to have lower employment rates than people with visual disabilities and people with hearing disabilities. The purposes of this secondary analysis research study were to identify factors that distinguished those individuals with psychiatric disabilities who obtained employment while participating in an evidenced-based supported employment program from those individuals with psychiatric disabilities who did not obtain employment while participating in an evidenced-based supported employment program and to identify the variables that contributed to job tenure of people with psychiatric disabilities participating in an evidenced-based supported employment

program. Participants were clients who participated in the Back to Work Program at St. Luke's House and were enrolled in the study for 27.5 months. Univariate and bivariate analyses revealed that the only factor that distinguished those individuals with psychiatric disabilities who obtained employment while participating in an evidenced-based supported employment program from those individuals with psychiatric disabilities who did not obtain employment while participating in an evidenced-based supported employment was social security benefits. No variables were found to contribute to the job tenure for clients with psychiatric disabilities participating in an evidenced-based supported employment program. Due to the low enrollment rate, additional descriptive analyses were used and found interesting patterns for employment and job tenure for clients with psychiatric disabilities participating in an evidenced-based supported employment program. This study introduced the Social Cognitive Career Theory as a proposed framework to understanding employment for persons with psychiatric disabilities and their job tenures while participating in an evidenced-based supported employment program. Attachment to the labor market was used to expand how job tenure was measured. Limitations to the study, implications for Rehabilitation Counselors and Rehabilitation Counselor Educators, and future research suggestions were provided.

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EVIDENCED-BASED SUPPORTED EMPLOYMENT PROGRAM

By

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Dedication

This dissertation is dedicated to my father, Harry C. Phelps, in memory of my mother, Sarah E. Phelps, my grandmother, Gladys Ethridge, my brother, Harry T. Phelps, and the love of my life, Gavin D. McNeil. I am forever grateful for their continuous love, support, sacrifice, and prayers throughout this process.

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Chapter 1: Introduction

It is well-documented within the literature that people with psychiatric disabilities have lower unemployment rates than people without disabilities (Brostrand, 2006). The reasons for these persistently low rates can be based on stigma (Dalgin & Bellini, 2008; Dalgin & Gilbride, 2003; Goldberg, Killeen, & O'Day, 2005; Granger, 2000; MacDonald-Wilson, 2005; Ralph, 2002), lack of job skills (Cook, Blyler, Leff, et al., 2008), among other issues. The history of disability suggests that people with disabilities in general, have lower employment rates than people without disabilities (Gilbride & Hagner, 2005) despite the enactment of several federal laws to address this problem. Current statistics still continue to support this claim. According to Erickson, Lee, and von Schrader (2010), in 2008, only 39.5% of people with disabilities were employed compared to 79.9% of people without disabilities. Of people with disabilities who were employed, only 25.4% worked full-time, compared to the 60.4% of employed people without disabilities that worked full-time. The average income of people with disabilities was \$35,600, \$5100 less than people without disabilities who earned an average \$40,700. Approximately 18% of people with disabilities received Supplemental Security Income (SSI) from the Social Security Administration (SSA), and 17.7% of people with disabilities report having high school diplomas. Statistics pertaining to gender and ethnicity indicated that 12.4% of women reported having a disability, while 11.7% of men reported having a disability. Native Americans were the highest group that reported having a disability (18.8%), followed by African Americans (14.3%) and Caucasians (10.2%), with Asians having the least reported disabilities (4.6%).

In regard to specific employment statistics for people with disabilities, Erickson et al. (2010) revealed that the largest group of individuals employed were those with hearing disabilities (56.0%), with self-care deficiencies (e.g., limitation to dressing and bathing activities, and not getting around inside the home; 18.7%) being the lowest. In comparison to other disability groups, such as persons with hearing disabilities and persons with visual disabilities, people with psychiatric disabilities were competitively employed at lower rates. For example, people with psychiatric disabilities were competitively employed 28% less than people with hearing disabilities, and 15% less than those persons with visual disabilities. The same finding was also evident in areas of working a full-time job and earning wages. There were a higher percentage of people with hearing disabilities who were employed full-time (40.9%), than people with psychiatric disabilities who were employed full-time (14%). In regards to earnings in 2008, people with psychiatric disabilities earned less money on average (\$30,600) than those with hearing (\$40,700) and visual disabilities (\$32,600). The only area in which people with psychiatric disabilities had a higher statistic was receipt of disability benefits. People with psychiatric disabilities were the highest group receiving SSI income (26.1%) compared to people with hearing (10.7%) and visual disabilities (17%).

One issue in reviewing the data and literature regarding individuals with psychiatric disabilities was the use of different terminology that has been used. For example, severe mental illness (e.g., Becker, Whitley, Bailey, & Drake, 2007; Cook, Leff, Blyler, et al., 2005; Cook, Lehman, Drake, et al., 2005; Cook et al., 2007; Dixon, Goldberg, Lehman, & McNary, 2001; Gold, Goldberg, McNary, Dixon, & Lehman, 2002; Gold et al., 2006; Leff, Cook, Gold, et al., 2005), psychiatric disabilities (Banks,

Charleston, Grossi, & Mank, 2001; Cook, Mulkern, Grey, et al., 2006; Larson et al., 2007; Waghorn, Chant, & King, 2005a), and serious mental illness (Dorio, Guitar, Solheim, Dvorkin, & Marine, 2002) were among the labels that have been used in describing people with mental health disorders. Several articles also referred to specific types of psychiatric disabilities, such as schizophrenia, depression, psychosis and schizoaffective disorder.

For the purposes of this paper, the terms were used interchangeably. However, the population referred to meets the federal definition of “psychiatric disabilities”: (1) having a major mental health diagnosis (such as schizophrenia spectrum disorders, bipolar or severe depression); (2) of at least 6 months duration; and (3) which substantially impairs functioning in a major life domain of living, learning or working in the community (Equal Employment Opportunity Commission, 1997).

History of Supported Employment

One program designed to improve employment outcomes for people with significant disabilities is supported employment. Introduced in the 1980s, the purpose of supported employment is to “provide competitive work in an integrated work setting with ongoing support services as needed” (Baker, 1994, p. 3). According to Title VI of the Rehabilitation Act of 1973, as amended, supported employment is legislatively defined as “competitive work in integrated settings (a) for individuals with severe handicaps for whom competitive employment has not traditionally occurred, or (b) for individuals for whom competitive employment has been interrupted or intermittent as a result of severe disability and who, because of their handicap need ongoing services to perform such work (Federal Register, 1987). These elements must be present in order for agencies to

seek reimbursement for supported employment services from state and federal sources. Job placement, job-site training and advocacy, ongoing monitoring, and follow-up are the four key components of supported employment (Wehman, 1986). Supported employment programs became instrumental during the early 1980s for the employment of individuals with developmental disabilities (Anthony & Blanch, 1987). Early supported employment programs focused only on the employment needs and opportunities for adults and youth with developmental disabilities, not for adults and youth with psychiatric disabilities. To address this lack in the provision of supported employment opportunities, Congress funded the 1985 Supported Employment Demonstration Project in 10 states and expanded it to 27 states a year later.

As a result of this federal attention, changes began to occur in law and policy for people with mental illness during the 1970s. During this time, the National Institute of Mental Health (NIMH) created the Community Support System, which promoted a change of perception regarding people with mental illness by endorsing and funding community-based rather than hospital-based services. This change of perception also led to a collaborative agreement between the Rehabilitation Services Administration (RSA) and NIMH in 1980. A result of this collaborative agreement was the establishment of two Rehabilitation Research and Training Centers (RRTC) devoted to research related to people with psychiatric disabilities. Additional results of this collaborative agreement included, “a conference on improving interagency collaboration held in 1981, and an interagency workgroup established in 1984 to improve services to ‘chronically mentally ill’ persons” (Anthony & Blanch, 1987, p. 9). In 1986, the coalition of the International Association of Psychosocial Rehabilitation Services (IAPSRS) and several agencies

successfully advocated for modifications to the Rehabilitation Act of 1973 that strengthened the definition and inclusion of individuals with serious mental illness for supported employment services.

Significance of the Problem

Since the amendments to the 1986 amendments to the Rehabilitation Act, supported employment programs have been established and funded for persons with psychiatric disabilities (Bond, Drake, Mueser, & Becker, 1997; Cook et al., 2008; Fabian & Wiedefeld, 1989; Perkins, Born, Raines, & Galka, 2005). Over the past 25 years, there has been an explosion of research regarding the types, effectiveness, and various components of supported employment for this population. Several of these studies resulted in a unique approach to supported employment for individuals with psychiatric disabilities called the Individual Placement and Support (IPS) Model approach (Bailey, Ricketts, Becker, Xie, & Drake, 1998; Becker et al., 2007; Chan, Tsang, & Li, 2009; Drake et al., 1994; Lehman et al., 2002; Tsang, Chan, Wong, & Liberman, 2009). Subsequent randomized clinical studies demonstrated the superiority of the IPS model in achieving better employment outcomes for this population, and IPS was then established as an evidenced-based practice in supported employment (e.g., Burns et al., 2007; Cook, 2003; Cook et al., 2008; Cook, Grey, Burke-Miller, et al., 2006; Cook, Leff, Blyler, et al., 2005; Cook, Lehman, et al., 2005; Cook, Mulkern, Grey et al., 2006; Cook et al., 2007; Gold et al., 2006; Howard et al., 2010; Macias et al., 2006).

Within the evidenced-based supported employment literature, research has focused on the financial cost of services (Cimera, 2008; Larson et al., 2007), identification of effective supported employment strategies (Blitz & Mechanic, 2006;

Gervey & Kowal, 2005; Tschopp, Perkins, Hart-Katuin, Born, & Holt, 2007), and supported employment programs' effectiveness in achieving employment outcomes regardless of the severity of the disability and the demographic characteristics of the client (e.g., Bond, Johannesen, McGrew, Griss, & Born, 2007; Bond, Xie, & Drake, 2007; Cook, Leff, Blyler, et al., 2005; Cook, Lehman, Drake, et al., 2005; Cook, Grey, Burke-Miller, et al., 2006; Cook, Mulkern, Grey, et al., 2006, Cook et al., 2007; Cook, 2008; Drake, Skinner, Bond, & Goldman, 2009; Gold et al., 2006; Lehman et al., 2002; Martz & Xu, 2008).

While there have been numerous studies of the IPS model approach, relatively little attention has been paid to individual psychological/behavioral issues such as self-efficacy, outcome expectations, and choice goals in contributing to employment outcomes for people with psychiatric disabilities. The lack of attention, particularly regarding self-efficacy, was surprising as there has been considerable evidence in the career theory literature on the relationship between self-efficacy and successful career choice (e.g., Lent, 2005; Lent, Brown, & Hackett, 1994), and to a less extent, vocational performance (e.g., Banks et al., 2001; Tsang et al., 2009; Wong, Chiu, Tang, et al., 2000). Another related construct that has received attention in the vocational psychology literature, but not in regard to individuals with psychiatric disabilities, were outcome expectations. Choice goal, of all three constructs in the vocational psychology literature, has been under-researched in regards to employment outcomes, particularly for people with psychiatric disabilities.

Self-efficacy, outcome expectations, and choice goals are all important variables to consider in how they may influence employment outcomes for people with psychiatric

disabilities participating in supported employment programs. Although there have been a number of studies that have examined several of these variables, no study has yet to examine the cumulative effect of these variables simultaneously on employment outcomes for people with psychiatric disabilities. This study included these constructs in exploring their contributions to employment outcomes, particularly job tenure for individuals with psychiatric disabilities participating in an evidence-based supported employment program.

Background of Evidenced-Based Supported Employment

The premise of this study was that sufficient evidence supported the superiority of specific components of supported employment that led to people with psychiatric disabilities achieving better outcomes than other, more traditional VR approaches, or non-evidenced-based supported employment programs. This study used an evidenced-based supported employment program to explore the contribution of cognitive-behavioral, in addition to demographic and background variables pertaining to employment outcomes of people with psychiatric disabilities. Evidenced-based practices have been used to ensure that supported employment is indeed effective in assisting people with disabilities to obtain competitive employment (Bond & Campbell, 2008).

According to Bond and Campbell (2008), there is a set of criteria that must be met to be determined as an evidence-based practice, which include (a) a clearly defined practice; (b) an identified target group; (c) inclusion in several research studies and convincing results shown; (d) replication outcomes/findings of the research study at least two times to ensure that the practice is indeed effective; (e) having effectively have addressed the target group needs; and (f) applicability to an array of settings.

Purpose Statement

There were two overarching purposes of this study. The first purpose was to identify factors that distinguished those individuals with psychiatric disabilities who obtained employment while participating in an evidenced-based supported employment program from those individuals with psychiatric disabilities who did not obtain employment while participating in an evidenced-based supported employment program. The second purpose was to identify the variables that contributed to job tenure of people with psychiatric disabilities participating in an evidenced-based supported employment program.

Importance of the Study

This study is important to the literature because it (a) examined other variables (e.g., self-efficacy, outcome expectations, and vocational goal) in addition to socio-demographic variables that could be influential in job tenure; and (b) used SCCT as a guiding framework in understanding the variables that impact job tenure.

Research Questions

There were two research questions guiding this study:

- 1) What factors distinguished individuals with psychiatric disabilities who obtained and did not obtain employment while participating in an evidenced-based supported employment?
- 2) To what extent did person variables, behavior variables, and the match between job obtained and career goal contribute to job tenure of people with psychiatric disabilities participating in an evidenced-based supported employment program?

- a. Was there a significant difference among participants' demographic and background variables pertaining to their job tenure?
- b. Was there a significant difference among participants' self-efficacies and outcome expectations and their impact on job tenure?
- c. Was there a relationship between participants' vocational goal and the job acquired in regards to job tenure?

Operational Definitions

1. Attachment to the Labor Market: extension of job tenure. Encompasses a pattern of job duration over an individual's work life.
2. Choice goals: "an individual's intention to engage in a particular outcome" (Lent, 2005, p.106).
3. Congruence: refers to the degree of "fit" between the individual's personality and the work environment. The more similar the personality type is to the work environment, the more congruent the relationship.
4. Job tenure: calculated from the date in which participants are placed on their first jobs after their supported employment assessment until participants are no longer employed on their jobs whereby they left or terminated.
5. Outcome expectations: refer to the "beliefs about the consequences or outcomes of performing particular behaviors" (Lent, 2005, p. 104).
6. Psychiatric disabilities: defined as (1) having a major mental health diagnosis; (2) of at least 6 months duration; and (3) which substantially impairs functioning in a major life domain of living, learning or working in the community (Equal Employment Opportunity Commission, 1997).
7. Self-efficacy: "beliefs about the consequences or outcomes of performing particular behaviors" (Lent, 2005, p. 105).
8. Supported Employment: "competitive work in integrated settings (a) for individuals with severe handicaps for whom competitive employment has not traditionally occurred, or (b) for individuals for whom competitive

employment has been interrupted or intermittent as a result of severe disability and who, because of their handicap need ongoing services to perform such work (Federal Register, 1987).

Chapter 2: Literature Review

The purposes of this study were to 1) identify factors that distinguished those individuals with psychiatric disabilities who obtained employment while participating in an evidenced-based supported employment program from those individuals with psychiatric disabilities who did not obtain employment while participating in an evidenced-based supported employment program and 2) identify the variables that contributed to job tenure of people with psychiatric disabilities participating in an evidenced-based supported employment program. This chapter analyzes and presents information pertaining to people with psychiatric disabilities in terms of supported employment, as well as presents literature pertaining to the predictor variables used in this study (See Table 2). The literature reviewed includes background regarding the Individual Placement and Support (IPS) model of supported employment, discussion of the theoretical framework of the study, and a detailed discussion of its constructs and variables. There is also a discussion of John Holland's person-environment theory and Richard Baron's Attachment to the Labor Market as they relate to persons with psychiatric disabilities and their employment outcomes.

Literature reviewed in this chapter was derived from many databases using various search terms. Databases included Academic Search Premier, Business Source Complete, Business Source Premier, CINAHL, Education Research Complete, ERIC, MEDLINE, PsycArticles, PsycCritiques, Psychology and Behavioral Sciences, Psych Info, Social Work Abstracts, and SocIndex with full text. They ranged in their scope from rehabilitation counseling, counseling psychology, medicine, nursing, business, to social work. In order to obtain an array of articles, different search terms were used to

collect literature pertaining to the independent variables. Table 1 has a list of each independent variable used, followed by their respective search terms.

Table 1

Literature Review for the Independent Variables and the Search Terms Used

Independent Variable(s)	Search Term(s) Used
Demographic and Background Variables	Demographic variables, background variables, race, ethnicity, socioeconomic status, disability benefits, age, gender, previous work history, person variables, diagnosis, social security benefits, and education
Contextual Factor	
Social Security Benefits	Benefits, social security benefits, supplemental security income, and social security disability insurance
Cognitive-Behavioral Variables	
Self-efficacy	Self-efficacy, career self-efficacy, vocational self-efficacy, employment self-efficacy, and work-related self-efficacy
Outcome Expectations	Job expectations, career expectations, outcome expectations, and employment expectations,
Choice Goal	Vocational goals, goal-setting, employment goal, employment goal-setting, vocational goal-setting, goal development, and setting goals

In order to be selected, each article had to address supported employment, psychiatric disability, one of the independent variables, and have a focus on vocational outcomes. Because there was a plethora of literature pertaining to supported employment

and psychiatric disabilities, the search consisted of articles published from 2000 through 2012.

The Individual Placement and Support (IPS) Model of Supported Employment

The IPS Model of supported employment was developed in the early 1990s in New Hampshire “for individuals with severe and persistent mental illness” (Moll, Huff, & Detwiller, 2003, p. 299). As discussed earlier, it emerged as a result of increased interest in identifying effective vocational models for people with psychiatric disabilities, as well as considerable federal investment in clinical trials to document evidenced-based approaches to employment. It encompasses both Wehman’s model of supported employment (1986) and the Program of Assertive Community Treatment model developed in Madison, Wisconsin (Marx, Test, & Stein, 1973; Stein & Test, 1980). The IPS model of supported employment also has features of the choose-get-keep approach to employment developed at Boston University’s Center for Psychiatric Rehabilitation (Anthony, Howell, & Danley, 1987).

The goal of the IPS model of supported employment is “to enable people with mental illness to gain competitive employment in integrated settings with follow-along supports” (Becker & Drake, 1993, p. 1). The IPS model has six main requirements. The first requirement, competitive employment, occurs when individuals work in an integrated setting, earning the same wages, and employed in positions that are available to people without disabilities. The second requirement focuses on rapid job search, ideally occurring within the first month of participating in a supported employment program. The third requirement emphasizes the integration of rehabilitation and mental health services. The fourth principle requires that consumers’ career interests be a

primary consideration in finding and getting jobs. The fifth requirement advocates the use of ongoing assessments in order to continuously monitor job-related needs and services. The sixth requirement is the provision of continuous support. This can be in the form of a job coach, natural supports, or anything that can assist clients in searching, obtaining or maintaining employment.

Since its implementation, the IPS model of supported employment has proven to be effective in terms of achieving better employment outcomes for individuals with disabilities (e.g., Becker et al., 2001; Drake et al., 1994), particularly for people with psychiatric disabilities (e.g., Burns et al., 2007; Nygren et al., 2011; Tsang et al., 2009) when compared to traditional vocational rehabilitation methods. Burns, White, and Catty (2008) found in a randomized clinical trial of 312 patients with severe mental illness that IPS was more effective than vocational rehabilitation services in terms of participants having a stronger likelihood of obtaining competitive employment and to retain their jobs longer compared to those receiving other vocational services. Similarly, Lehman et al. (2002) found that people with a severe mental illness participating in an IPS program were more likely to be competitively employed than those persons participating in a psychosocial rehabilitation program. Individuals with a psychotic illness who participated in an IPS program had better vocational outcomes, were least likely to be hospitalized, and worked more days. Siu, Tsang, and Bond (2010) found that individuals with severe mental illness who participated in an IPS group showed positive outcomes regarding their self-efficacy and personal well-being after being employed for three months.

Throughout the past 13 years, there have been numerous replication studies of the IPS model of supported employment, as originally developed in the mid-1990s', concluding, in general, that early evidence of its effectiveness endures over time (Bond, Salyers, Dincin, et al., 2007; Burns et al., 2007; Burns et al., 2008; Chan et al., 2009; Drake, McHugo, Becker, Anthony, & Clark, 1996; Lehman et al., 2002; Mueser et al., 2004; Rinaldi, Perkins, McNeil, Hickman, & Singh, 2010; Tsang et al., 2009; Tsang, Fung, Leung, Ling, & Cheung, 2010).

Theoretical Framework for Vocational Outcomes for People with Psychiatric Disabilities

Although the IPS model of supported employment has sufficient evidence documenting its effectiveness as a practice, there has been surprisingly little attention to developing a theory which would help to explain it. One theoretical model which has been extensively used to understand vocational behavior (including career choice and performance) in the vocational psychology literature and has recently been explored as potentially relevant to understanding supported employment outcomes (e.g., Fabian, 2000; Roberts et al., 2010; Tscopp, Perkins, Wood, Leczycki, & Oyer, 2011; Waghorn et al., 2005a., Waghorn, Chant, & King, 2005b.) is the Social Cognitive Career Theory (SCCT; Lent, 2005; Lent & Brown, 2005; Lent et al., 1994; Lent, Brown & Hackett, 2000). SCCT uses cognitive-behavioral constructs, such as self-efficacy beliefs, and outcome expectations, to explain people's career choice and performance (Lent, 2005; Lent & Brown, 2005; Lent et al., 1994; Lent et al., 2000). While there have been recent studies exploring the utility of various cognitive-behavioral constructs to explain

vocational outcomes for individuals with disabilities (Fabian & Liesener, 2005), there was less research on these constructs for individuals with psychiatric disabilities.

Social Cognitive Career Theory

Introduced in 1994, SCCT attempts to explain people's interests, goals, and performance in education and career development (Lent, 2005, Lent & Brown, 2005; Lent et al., 1994; Lent et al., 2000). Based on Bandura's Social Cognitive Theory (SCT), SCCT examines a set of variables that impact the career development of individuals. While the current study was not designed to "test" the applicability of SCCT for people with psychiatric disabilities in an evidenced-based supported employment program, it was selected because it can provide a theoretical guide for the selection of predictor variables and their relationship to employment outcomes. SCCT constructs incorporated in this study included demographic and behavioral variables (person factors and health-related), contextual factors (eligibility and receipt of federal benefits), and cognitive-behavioral variables (self-efficacy beliefs, outcome expectations, and choice goals). Lent et al. (1994) indicated that demographic and behavioral variables, such as gender, ethnicity, SES, and disability can directly affect an individual's self-efficacy beliefs and outcome expectations, and indirectly influence career goals and performance.

SCCT has been used to explain the career-related behavior of youth with disabilities (Lopez, Brown, Lent, & Gore, 1997; Smith & Fouad, 1999), persons of color (Lent et al., 2005; Lent, Sheu, Gloster, & Wilkens, 2010), and women (Chronister & McWhirter, 2003; Lent et al., 2005). The next sections review the literature regarding SCCT factors and constructs as they applied to employment outcomes for people with psychiatric disabilities.

Cognitive-Behavioral Variables.

Self-Efficacy Beliefs of People with Psychiatric Disabilities.

Self-efficacy is defined as an individual's sense of personal agency (Lent, 2005).

Generally, self-efficacy beliefs are domain specific, such as academic self-efficacy, vocational self-efficacy, career self-efficacy, and so on (Lent, 2005). Recently, there has been significant research examining self-efficacy beliefs and people with psychiatric disabilities (Chan et al., 2004; Dixon et al., 2001; Hutchinson, Anthony, Massaro, & Rogers, 2007; Mueser et al., 2004; Siu, Tsang, & Bond, 2010; Waghorn et al., 2005a), generally concluding that it exerts a strong and positive influence on a variety of vocational outcomes. For example, Mueser et al. (2004) used a measure of general self-esteem and its influence on employment outcomes, finding that self-esteem affected several vocational outcomes, including type of job, number of hours worked, wages earned, and job tenure. Other studies have examined how employment influences self-efficacy beliefs, finding a positive correlation between self-efficacy beliefs and work. Additional evidence suggested that as clients participated in supported employment programs their self-efficacy beliefs increased, producing better vocational outcomes (Chan et al., 2009; Hutchinson et al. 2007).

There was also evidence to suggest that self-efficacy beliefs can impact clients who are unemployed. For example, Siu et al. (2010) found that clients with psychiatric disabilities' self-efficacy beliefs were low when they were unemployed, but improved as they became employed. The longer they worked, the more their self-efficacy beliefs increased, which coincides with the results in Chan et al.'s (2009) and Hutchinson et al.'s (2007) studies that were described earlier. However, some researchers did not find a

relationship between self-efficacy beliefs and employment outcomes for people with psychiatric disabilities. For example, Catty et al. (2008) found that the self-efficacy for clients with severe mental illness did not impact their likelihood of obtaining employment or their job tenure, while Latimer et al. (2006) found that the self-efficacy of people with mental illness did not impact their ability to find and maintain competitive employment.

Self-efficacy can also impact the general health of clients with psychiatric disabilities' which is an important consideration in maintaining employment. For example, Dixon et al. (2001) found that there was a relationship between general health and self-efficacy for clients with severe mental illness. Being healthy and having a positive self-efficacy also impacted clients' motivation to work.

The studies reviewed in this section used different measures of self-efficacy, some developed by the authors, and others modifying existing instruments. Of all of the studies reviewed, only Waghorn et al. (2005a) developed an instrument, the Work-Related Self-Efficacy Scale, to assess self-efficacy beliefs of clients with psychiatric disabilities in several vocational domains, including career planning, finding a job, work-related social skills, and general work skills to measure work-related self-efficacy. Waghorn and colleagues (2005a) developed this scale by using 104 volunteers with psychiatric disabilities that accessed mental health and vocational rehabilitation agencies. Results supported the validity of the scale in that clients with higher self-efficacy beliefs had higher job placement rates, earned higher wages, in addition to working in high level jobs (i.e., journalist, nurse, teacher, etc.). Further results of the study revealed that the four domains tested in this scale had validity in regards to work-related self-efficacy for people either diagnosed with schizoaffective disorder or schizophrenia. In regards to

employment outcomes, approximately 26% of people were employed. Their earnings ranged from \$7.00 to \$30.00. The Work-Related Self-Efficacy Scale (i.e., career planning skills self-efficacy, job securing self-efficacy, work-related social skills self-efficacy, and general work skills self-efficacy) had the strongest correlates to employment.

Outcome Expectations of People with Psychiatric Disabilities.

Outcome expectations are defined as “beliefs about the consequences or outcomes of performing particular behaviors” (Lent, 2005, p. 105). While empirical studies of self-efficacy beliefs have grown in the psychiatric disability vocational literature, there remain very few studies of outcome expectations. Only Becker et al. (2007) tapped into this construct in their exploratory study of employment trajectories of adults with psychiatric disabilities who participated in a supported employment program. Results from the four follow-up interview questions pertaining to outcome expectations revealed that these expectations did not prove to be a significant factor in predicting vocational outcomes for clients with psychiatric disabilities. There was not much evidence to support or refute the impact of outcome expectations on vocational outcomes for people with psychiatric disabilities.

Choice Goals of People with Disabilities.

Choice goals are defined as “an individual’s intention to engage in a particular outcome” (Lent, 2005, p.106). Little research has been conducted that has examined the extent to which having a career goal influences employment outcomes for people with psychiatric disabilities. Only two articles addressed this issue for clients participating in a supported employment program. Macias, DeCarol, Frey, Wang, and Barreira (2001)

examined whether having a vocational goal predicts work outcomes for 166 people with psychiatric disabilities. They determined that having a work interest was a statistically significant predictor of whether a person worked and the amount of time it would take to obtain a job. Biegel, Stevenson, Beimers, Ronis, and Boyle (2010) found that for people with a co-occurring mental and substance use disorder that identified a vocational goal, they had better job tenure and earned more wages than people with psychiatric disabilities who did not identify a vocational goal. Additionally, people who identified a job goal obtained jobs quicker than those who did not specify a vocational goal.

There was little research examining the effect of choice goals (or career goals in general) on employment outcomes for this population, and very few studies that have examined the effect of goal congruency or job match on employment outcomes for people with disabilities in general, and particularly those with psychiatric disabilities. One study that examined the effect of goal congruency was conducted by Kukla and Bond (2012). Kulka and Bond (2012) used a secondary data analysis to determine the relationship between job match and job tenure for competitive employed clients with severe mental illness who participated in a supported employment program. The results indicated that there was a relationship between job match and job tenure for people with severe mental illness participating in a supported employment program. Further results revealed that there was a relationship with clients' interest and job enjoyment, and job tenure.

In another study, Beveridge and Fabian (2007) used Holland's person-environment theory to examine the relationship between career choice goal and actual job obtained for 99 clients with disabilities receiving services from the State Department of

Maryland Division of Rehabilitation Services. The sample included persons with physical disabilities, developmental disabilities, chronic problems, and psychiatric disabilities. People with psychiatric disabilities accounted for 52% of the sample.

Results revealed that goal/job congruency predicted clients' wages, but not client job satisfaction. Those clients with higher congruency had higher earnings.

Several authors have suggested that for persons with psychiatric disabilities, establishing a vocational goal can be problematic due to a lack of employment opportunities, paucity of work experience, and internalized stigma, in addition to other person-environment factors (Beveridge & Fabian, 2007; Fabian, 2000; Szymanski, Enright, Hershenson, & Ettinger, 2003). Lack of attention to choice goals for this population helps account for the dearth of literature in this area.

Measurement of the Social Cognitive Career Theory's Cognitive-Behavioral Variables

When measuring SCCT cognitive-behavioral variables, it is important to be cognizant of the distinctions between them (Lent & Brown, 2006). According to Lent and Brown (2006), items/statements on self-efficacy scales measure what a person perceives that he/she “can do”, while outcome expectations focuses on what a person believes he/she “will get”. Choice goals measure the person’s “intent” or what he/she would like to pursue (e.g., career, education, etc.). When creating scales items for each of the cognitive-behavioral variables, it is important to keep items “clear, explicit, relatively short, and written in plain language, consistent with the reading level of the target participants” (Lent & Brown, 2006, p. 31).

Demographic and Background Variables

The most frequently studied variables in understanding individuals with psychiatric disabilities' employment outcomes have been demographic and background variables. These variables have been looked at both qualitatively and quantitatively and in randomized clinical trials and longitudinal studies. Overall, there were inconsistencies regarding the influence of these variables on vocational outcomes. This section only focused on those studies relevant to people with psychiatric disabilities in supported employment programs.

Age.

Several studies have examined the effect of age on employment outcomes for people with psychiatric disabilities participating in supported employment programs (Burke-Miller et al., 2006; Campbell et al., 2007; Gold et al., 2002; Howard et al., 2010; Macias et al., 2006; Twamley, Narvaez, Becker, Bartels, & Jeste, 2008; Wong, Chiu, Chiu, & Tang, 2000). Of these seven, only one found that age contributed to employment outcomes. Burke-Miller et al. (2006) found that younger people were more likely to achieve competitive employment and work more hours per month.

Gender.

Gender was another variable that had been studied regarding employment outcomes for people with psychiatric disabilities participating in supported employment programs. The studies that have used gender as a predictor variable yielded inconsistent results. For example, Wong et al. (2004) found that men with psychiatric disabilities had better employment outcomes (i.e., job tenure, salary, earnings, nature of placement, and job retention). Wong, Chiu, Chiu et al. (2000) also found a difference in regards to job retention, job tenure, type of placement, and job termination, as did Gold et al. (2002) in

their studies of evidence-based supported employment programs. Wong, Chiu, Tang, et al. (2000) and Gold et al. (2002) found that women had better employment outcomes than men, but the difference was not significant. However, other studies suggested that gender was not a significant predictor of vocational outcomes for people with psychiatric disabilities (Campbell et al., 2007; Howard et al., 2010; Nygren et al., 2011; Tsang et al., 2010; Wong et al., 2000; Wong, Chiu, Chui, & Tang, 2001; Wong et al., 2008).

Ethnicity.

Many studies have used ethnicity as a predictor variable in examining employment outcomes for people with psychiatric disabilities (e.g., Becker et al., 2007; Burke-Miller et al., 2006; Campbell et al., 2007; Catty, et al., 2008; Cook, Leff, Blyler et al., 2005; Cook, Lehman, Drake, et al., 2005; Cook, Grey, Burke-Miller, et al., 2006; Cook, Mulkern, Grey, et al.. 2006; Dixon et al., 2001; Gold et al., 2002; Gold et al., 2006; Howard et al., 2010); however, only Gold et al. (2002) found that clients' ethnicity affected job tenure of people with psychiatric disabilities.

Diagnosis.

There were inconsistent findings in determining whether the type of psychiatric diagnosis affects employment outcomes. For example, Mueser et al. (2004) noted only few differences in employment outcomes (e.g., type of job, number of hours worked, wages earned, and job tenure) for clients who were diagnosed as having a significant psychiatric disorder, while other studies indicated that having a more severe diagnosis (such as schizophrenia or schizo-affective) did impact employment outcomes, such as number of hours worked and job tenure (Campbell et al., 2007; Howard et al., 2010; Jones, Perkins, & Born, 2001; Latimer et al., 2006; Rinaldi et al., 2004; Tsang et al.,

2009; Wong et al., 2000; Wong et al., 2008). Only Sherring, Robson, Morris, Frost, and Tirupati (2010) found results that refuted the notion that having a serious psychiatric diagnosis (e.g., schizophrenia or schizoaffective disorders) does not impact employment outcomes. In their study of 43 clients with mental illness, they found that clients who had less severe symptoms of their diagnoses had better employment outcomes, such as obtaining and maintaining employment, and working more hours per week than those with more severe symptoms. For those with more severe symptoms, the primary reason for lower employment outcomes was due to a relapse in mental illness. Participants with more severe symptoms also had higher rates of anxiety and depression than those persons with less severe symptoms.

The type of diagnosis has been shown to affect employment outcomes. For example, Banks et al. (2001) found that there was a difference in vocational outcomes (e.g., integration at work and wages) for clients with mood disorders and schizophrenia. Persons who had a mood disorder had higher work rates than people with schizophrenia. Both groups' overall functioning impacted both integration at work and the amount of wages earned. Other studies examining a psychiatric diagnosis have also examined the effect of having co-occurring disorders on employment outcomes. For example, Biegel et al. (2010) found that individuals who were dually diagnosed (mental health and substance abuse disorders) received lower wages and were less likely to be competitively employed as did Cook et al. (2007) in their study of 1273 persons with co-occurring MH and substance abuse disorders in supported employment programs across eight states. However, Cook, Leff, Blyler et al. (2005) and Gold et al. (2006) found that regardless of diagnosis, clinical and demographic variables, individuals with psychiatric disabilities

were able to achieve competitive employment, and work 40 hours when participating in IPS supported employment programs.

Level of Education.

Level of education can affect the types of jobs and the amount of wages that an employee receives. In the supported employment literature, several studies have found that education was predictive of employment. For example, Sakai, Hashimoto, and Inuo (2009) found that clients who had high school diplomas were able to work more than 20 hours per week in competitive employment compared to those without high school diplomas. Burke-Miller et al. (2006) found that people with higher education were more likely to achieve competitive employment and tended to work more hours. Wong et al. (2004) found significant differences in education for clients with psychiatric disabilities. The level of education affected job tenure, salary, earnings, and job retention rate, while Gold et al. (2002) found that level of education impacted clients' job tenure. People with higher education in these studies had better employment outcomes. While these studies suggested that level of education does influence vocational outcomes for people with psychiatric disabilities, there were many studies that have shown that education did not affect employment outcomes (Campbell et al., 2007; Rinaldi, Perkins, Hardisty, Glynn & Souza, 2006; Tsang et al., 2009; Wong et al., 2008). What can be deduced from the literature using level of education as a predictor variable for employment outcomes is that further research is needed to determine its effectiveness.

Previous Work History.

A client's work history can have an impact on vocational outcomes as well. There were seven studies that used work history as a predictor variable of employment

outcomes for people with psychiatric disabilities. Four out of the six studies suggested that previous work history is a strong predictor of vocational outcome, such as being competitively employed (Burke-Miller et al., 2006), number of hours worked (Burke-Miller et al., 2006), and job tenure (Campbell et al., 2007; Sherring et al., 2010); while Howard et al. (2010), Tsang et al. (2009), and Tsang et al. (2010) found that previous work history did not impact employment outcomes for people with psychiatric disabilities participating in a supported employment program.

Finally, Wewiorski and Fabian (2004) conducted a meta-analysis of the vocational outcomes literature for people with psychiatric disabilities participating in supported employment programs. In their analysis of 17 studies, they found that age, gender, race, and diagnosis were predictors of vocational outcomes. There were also differences within and across the demographic variables. For example, younger people were significantly more likely to be employed than older adults; persons of color were more than likely to be working six months after placement; however, Caucasians were more likely to be employed than persons of color. Additional findings throughout this literature review found that persons with affective disorders have better employment rates than persons with cognitive disorders, and that persons with cognitive disorders were less likely to obtain employment and if employed would not last on the job past three months.

Contextual Factor

Social Security Benefits.

Individuals who can document substantial impairments in vocational functioning which limit their capacity to work are eligible to receive benefits from the Social Security Administration (SSA; Social Security Administration, 2010). There was a voluminous

literature on the effect of social security benefits receipt on decisions to work or return to work for individuals with disabilities (Kennedy, Olney, & Schiro-Geist, 2004; Killeen & O'Day, 2004; Marini & Reid, 2001; O'Day & Killeen, 2002; Olney, 2007; Wheeler, Kearney, & Harrison, 2001/2002), with the majority finding that receipt of these benefits substantially decreases the likelihood of work for a number of complex reasons (Marini & Reid, 2001). The supported employment literature that specifically focused on social security benefits found that having benefits impacted vocational outcomes (Bond et al., 2007; McGurk, Mueser, Harvey, LaPlugia, & Marder, 2003). Bond et al. (2007) found that people with severe mental illness who were receiving social security benefits and participating in a supported employment program were able to obtain and retain their jobs; while McGurk et al. (2003) found that having social security benefits was negatively associated with having a full-time job for a sample of people with psychiatric disabilities who were participating in a supported employment program. People with psychiatric disabilities who were receiving social security benefits worked approximately 20 hours per week and were able to maintain employment. Only Campbell et al. (2007) found that receiving benefits did not have an effect on employment outcomes (e.g., job acquisition, job tenure, and total weeks worked) for people with a severe mental illness participating in a supported employment program.

Goal Congruence

Goal congruence was based on Holland's theory of vocational choice (1992), which postulates that consistency between an individual's vocational interests and job choice predicts job tenure and satisfaction. The theory posits a six-sided hexagon, each point of which is associated with a distinct work environment (i.e., realistic,

investigative, artistic, social, enterprising, and conventional). As Holland contended that no work environment is based solely on one type, most people's vocational interests are characterized by a three-letter code hierarchy (e.g., AES) to describe patterns of values, attitudes, and behaviors that represent distinctive ways people think and act.

In using Holland's theory as an career assessment approach, individual's three-letter codes, which can be derived from a variety of standardized and non-standardized assessments, are compared to the Dictionary of Holland Occupational Codes (Gottfredson & Holland, 1996), which has over 12,000 occupations that have been Holland-coded based on the Dictionary of Occupational Titles in order to ascertain those occupations which are most consistent with an individual's interest profile. The Holland construct of *congruence* refers to the degree of "fit" between the individual's personality and the work environment. The more similar the individual's three letter code is to that of the occupation, the higher the congruence and the higher the likelihood of job satisfaction and tenure.

Attachment to the Labor Market

This concept, attachment to the labor market, was derived from Richard Baron's (1992) study. In a qualitative exploration of the career patterns of 38 adults with psychiatric disabilities, Baron proposed that the traditional outcome measure used in employment studies in the field, that is job tenure, was not valid in assessing career patterns and employment outcomes for this population. Baron pointed to several individual and structural factors that can interfere with single job tenure, including psychiatric symptom exacerbation, re-hospitalization, fear of losing social security benefits and others discussed earlier in this chapter. As a result, he proposed that a single

outcome measure, how long an individual remains at one job, was inadequate, and suggested that the field rely on a broader concept, such as attachment to the labor market, as a more valid outcome. In his view, attachment to the labor market not only takes into account a person's job tenure, but their ability to obtain another job, once the first job is lost. This study extended Baron's concept of attachment to the labor market by characterizing three distinct patterns that emerged for describing it. These patterns are described in Chapter 4.

Chapter Summary

The purpose of this literature review was to discuss and synthesize the vocational literature on predicting employment outcomes for clients with psychiatric disabilities participating in an IPS supported employment program. Although this study did not test the SCCT model of vocational performance as applied to this population, the SCCT model provided a framework for selecting predictors and outcomes to answer the research questions. The vast majority of the information reviewed revealed that there were inconsistent findings in regards to the impact of demographic and background variables on vocational outcomes for people with psychiatric disabilities in supported employment programs. Moreover, the literature review indicated that there has been little research on the validity of some of the SCCT constructs for this population, even though they have been researched extensively for the general population. Lent and Brown (2006) noted that when developing scales based on the cognitive-behavioral variables, researchers need to be able to differentiate between the constructs and understand what each cognitive-behavioral variable measures. Holland's theory and the Baron's concept of attachment to the labor market were also discussed as they relate to the employment

outcomes of people with psychiatric disabilities. A summary of the studies related to each of the predictor factors can be found in Table 2 below. The next chapter focuses on the methodology of this research study.

Table 2

Empirical Studies Regarding the Independent Variables and Their Respective Citations

Independent Variable(s)	Citation
Cognitive-Behavioral Variables	
Self-efficacy Beliefs	Chan et al., 2004; Dixon et al., 2001; Hutchinson et al., 2007; Lent, 2005; Mueser et al., 2004; Siu et al., 2010; Waghorn et al., 2005a
Outcome Expectations	Becker et al., 2007; Lent, 2005
Choice Goals	Beveridge & Fabian, 2007; Biegel et al., 2010; Fabian, 2000; Kulka & Bond 2012; Lent, 2005; Macias et al., 2001; Szymanski et al., 2003
Demographic and Behavioral Variables	
Age	Burke-Miller et al., 2006; Campell et al., 2007; Gold et al., 2002; Howard et al., 2010; Macias et al., 2006; Twamley et al., 2008; Wong et al., 2000
Gender	Campbell et al., 2007; Gold et al., 2000; Howard et al., 2010; Nygren et al., 2011; Tsang et al., 2010; Wong et al., 2000; Wong et al., 2001; Wong et al., 2002; Wong et al., 2004; Wong et al., 2008
Ethnicity	Banks et al., 2001; Biegel et al., 2010; Campbell et al., 2007; Cook et al., 2005; Cook et al., 2007; Howard et al., 2010; Jones et al., 2001; Latimer et al., 2006; Mueser et al., 2004; Rinaldi et al., 2004; Sherring et al., 2010; Tsang et al., 2009; Wong et al., 2000; Wong et al., 2008
Level of Education	Campbell et al., 2007; Gold et al., 2002; Rinaldi et al., 2006; Sakai et al., 2009; Tsang et al., 2009; Wong et al., 2004; Wong et al., 2008

Previous Work History	Burke-Miller et al., 2006; Campbell et al., 2007; Howard et al., 2010; Sherring et al., 2010; Tsang et al., 2009; Tsang et al., 2010; Wewiorksi & Fabian, 2004
Contextual Factor Social Security Benefits	Bond et al., 2007; Kennedy et al., 2004; Killeen & O'Day, 2004; O'Day & Killeen, 2002; Olney 2007; Marini & Reid, 2001; McGurk et al., 2003; Social Security Administration, 2010; Wheeler et al., 2001/2002

Chapter 3: Methodology

This research was a secondary analysis of an existing database which consisted of reviewing employment records of adults with psychiatric disabilities participating in a supported employment program in Montgomery County, Maryland. Two research questions guided this study. They were: (1) What factors distinguished individuals with psychiatric disabilities who obtained and did not obtain employment while participating in an evidence-based supported employment?, and (2) To what extent did person variables, behavior variables, and the match between job obtained and career goal contributed to job tenure of people with psychiatric disabilities participating in this program? Research question two had three subquestions, namely: a) Was there a significant difference among participants' demographic and background variables pertaining to their job tenure?; b) Was there a significant difference among participants' self-efficacies and outcome expectations and their impact on job tenure?; and c) Was there a relationship between participants' vocational goal and the job acquired in regards to job tenure? To address the research study, both univariate and bivariate analyses were used.

Participants

The participants in this study were clients with psychiatric disabilities who participated in an evidence-based supported employment program of a non-profit organization in Montgomery County, Maryland that provides services to people with psychiatric disabilities. The purpose of this supported employment program is to help people recovering from mental illness to choose, find, and keep a job by providing services such as, vocational evaluation, transitional employment programs, evidence-based supported employment, job development/placement services, and follow along

support. The program operates on a “zero reject” philosophy, which means that any individual who expresses a desire to work is offered supported employment services; in other words, there are no screening criteria that must be met in order to participate.

Typically, clients who are interested in participating in this program complete an application. Of those clients who complete the application, approximately 90% then complete the Supported Employment Assessment, which typically takes between 30-45 days. For this study, the researcher collected data on clients who entered the program beginning November 1, 2009. This date was selected for two reasons: 1) it was the date the program initiated an electronic records system; and 2) all of the program’s rehabilitation files were transferred to the electronic medical records system on that date. Between 11/1/09 and 02/29/2012 (the end date of this study), the program manager of this supported employment program indicated that 190 supported employment assessments had been completed. Of these, 47 individuals left the program and could no longer provide consent prior to the study’s IRB approval from the University, leaving a potential sample pool of 143 clients with a Supported Employment Assessment in the system. After numerous recruitment efforts, 63 clients agreed to participate in the study, giving a response rate of 44%. There were 26 (41.3%) females and 37 (58.7%) males. Age varied from 18 to 68 years ($M=41.97$, $SD=10.90$). The majority of the participants were Caucasian ($N=29$). Forty-eight (76.2%) people had never been married. There was little difference in the number of people who were diagnosed with an affective disorder ($N=31$) or a cognitive disorder ($N=32$). Twenty-nine (46.0%) of the 63 participants possessed a high school diploma or less, with 25 (39.7%) having some college. Only

14.3% had a Bachelors degree or higher. The majority of the participants were social security beneficiaries (69.8%). Additional demographic data can be found in Table 3.

Table 3

Demographic and Background Variables of Participants N=63

Demographic and Background Variables	N	%
Marital Status		
Never Married	48	76.2
Married	3	4.8
Separated	1	1.6
Divorced	9	14.3
Unknown	2	3.2
Ethnicity		
Caucasian	29	46.0
African American	22	34.9
Asian	4	6.3
Hispanic/Latino	5	7.9
Other	3	4.8
Education Level		
Less than high school	6	9.5
High School	19	30.2
Special Education	4	6.3
Some College	20	31.7
Trade, Voc., Technical	2	3.2
Associate's	3	4.8
Bachelor's	6	9.5
Graduate School	3	4.8
Referral Source		
Family	7	11.1
Mental Health Provider	9	14.3
Core Services Agency	1	1.6
DHHS	8	12.7
Self	5	7.9
Access Team	3	4.8
PRP	1	1.6
Case Management	5	7.9
Other non SLH PRP/RRP	7	11.1

State Hospital Facility	2	3.2
Residential Crisis Program	1	1.6
Local Hospital	3	4.8
Other	9	14.3
Unknown	2	3.2

According to the supervisor of this supported employment program, the demographic data presented in Table 3 is similar to that of clients that are served in the Program on an annual basis.

Instrumentation

Client data for the program was entered into a rehabilitation electronic data base called “Anasazi”. The data was collected and reported in five rehabilitation electronic files-Supported Employment Assessment, Vocational Profile, Entitlement Resource Checklist, SEP Program Placement A, and the Job Loss Checklist A. These can be found in Appendices A-E. The questions that were used to collect the data have an asterisk next to them in their respective appendices and can also be found in Table 4. The supported employment staff was responsible for entering the data for their respective clients into the data base. The information was routinely checked and verified by team supervisors and medical records staff at the supported employment program. Anasazi is an electronic file method which can restrict users to specific client data files. In other words, individuals with access to client vocational information can be restricted from accessing medical records of the same clients.

Table 4

Rehabilitation Electronic Data File Forms

Independent Variables	Name of Electronic Form	Question(s) from the Electronic Form
Demographic and Background Variable(s)		

Previous Work History	Supported Employment Assessment	Work History-Enter the following for each previously held job: Title/Employer/Dates Employed/Work Schedules/Responsibilities (Focus more on the fact if clients have held a job)
Race/Ethnicity, Age, Gender, other demographic information	Demographic Form	
Education	Demographic Form	
Diagnosis	Diagnosis Form	Used the diagnosis as reported by therapist
Cognitive-Behavior Variable(s)		
Self-efficacy	Supported Employment Assessment	Ability to Choose a Job: On a scale of 1 to 5, how would rate your ability to choose a job?; Ability to Find a Job: On a scale of 1 to 5, how would you rate your ability to find a job?; Ability to Keep a Job: On a scale of 1 to 5, how would you rate your ability to keep a job?
Outcome Expectations	Supported Employment Assessment	Where do you see yourself in 5 years?
Choice Goals (Job Match)	SEP Program Placement A; Supported Employment Assessment Interview	Job Title; What occupations relate to your interest and skills?
Dependent Variable Employed	SEP Program Placement Date	Start Date
Job Tenure/Labor Market Attachment	SEP Program Placement A; Job Loss Checklist A	Start Date Job End Date; How many months did the client work in this position?

To assess participants' self-efficacy beliefs, the researcher used three items from the supported employment assessment that asked questions pertaining to participant's confidence in their ability to choose, get and keep a job. These questions were based on a 5-point Likert scale, where 5 was the highest level of ability. Specific questions included: (a) Ability to Choose a Job: On a scale of 1 to 5, how would rate your ability to choose a job?; (b) Ability to Find a Job: On a scale of 1 to 5, how would you rate your ability to find a job?; and (c) Ability to Keep a Job: On a scale of 1 to 5, how would you rate your ability to keep a job? A composite score was created by using the average based upon the three subscales used to measure self-efficacy.

To assess participants' outcome expectations, the researcher used the following question from the Supported Employment Assessment (See Appendix A): Where do you see yourself in 5 years? In collaboration with the dissertation advisor, it was decided to quantify the responses to this item into a 3-point Likert scale where 0 indicated that there were no expectations, 1 means that there were minimal or vague expectations, and 2 indicated concrete expectations. After the researcher rated each of the responses to this item, she asked one of the program's supervisors who was familiar with the clients' histories to re-rate each client's ratings for outcome expectations. Once this was completed, the researcher compared and contrasted these ratings with the program supervisor and made the necessary adjustments for those ratings that differed from those of the supervisor. Seven of the ratings differed between the researcher and the supervisor. The researcher used the ratings that the supervisor provided as she was more familiar with the clients that participated in the Program.

To determine congruence between the consumer career goal and the job, the initial job goal (from the Supported Employment Assessment; See Appendix A) was compared to the Job obtained (from the SEP Placement A Form; See Appendix C). Regarding participants' vocational goals, the researcher used the question from the Supported Employment Assessment (See Appendix A) that asked: What occupations relate to your interest and skills?

Procedures

The researcher met with the program's staff on the first (August 2, 2011) and third Tuesday (August 16, 2011) monthly team meetings at the Silver Spring and Bethesda locations to introduce the study, provide procedures for introducing the study to potential participants, and provide procedures for obtaining client consents. The researcher then provided the staff the IRB approved consent form (See Appendix F) and script (See Appendix G) and suggested that the staff customize the script based on their client-counselor relationship. To alleviate any additional work for staff, the direct supervisor of the program identified those persons who were on each staff member's caseload who were eligible to participate in the study. The staff was provided with white envelopes that held the consent form and script for each respective client on their caseload that had been identified as eligible to participate in the study. These envelopes were then used for clients to place their consent forms into and place in one of two program locations. The supported employment staff was then asked to have their respective clients read the consent form, indicates whether they agreed or did not agree to participate in the study, and then place the completed consent form in a locked box at either program location. The researcher collected consent forms at the end of every

month and provided a \$5.00 Star Bucks Gift Card for those that consented to participate in the study. It is important to note that not all consent forms that were collected were signed by clients, and that the researcher had no knowledge of who declined to participate in the study. Only those who chose to participate received a gift card.

After the consents were collected monthly, the researcher would then inform the medical records specialist in charge of the Anasazi data of those individuals who chose to participate so that access could be given to review clients' rehabilitation electronic data files. He then provided the researcher with a guest access and homepage in order to view those consenting participants' files. Data collected from the rehabilitation electronic data files was done on-site at the medical record's office. All data derived from each participant's Anasazi rehabilitation electronic data file was transferred into a Data Form (See Appendix E) created by the researcher. Rather than using client names, the researcher assigned numbers so that participants' data were kept confidential providing no identifying client information that could be linked to any participant that had provided consent. In regards to obtaining clients' diagnoses, the information was taken from the Diagnosis Review Form, not the client's personal medical records. No additional information was sought directly from clients.

Due to slow enrollment rates, the researcher and the direct supervisor of the supported employment program devised additional recruitment strategies to address this issue, such as extending the enrollment date and having the program's supervisor follow-up with the people who originally declined to re-introduce the study and to clarify what files were to be reviewed by the researcher.

To determine if there was a job match for the client, the researcher looked at the relationship between the client's vocational goal and the job obtained. The Standard Occupational Classification Occupation to Holland Codes (SOC to HOC) in the Dictionary of Holland Occupational Codes was used for both the vocational goal and job obtained to determine the specific job codes for each. If the vocational goal and/or the job obtained differed from the title that was provided from the Dictionary of Holland Occupational Codes, the researcher would refer to a similar job title and use its code, in addition to using the information about the company participants worked for and their job titles, which were captured in the SEP Program Placement A forms. Once the codes were determined for both the vocational goal and the job obtained, the researcher would determine if a job match occurred. If the first two Holland letter codes were the same for both the vocational goal and the job obtained, this was considered a job match and the researcher assigned a 1. If the first two codes were different, it was not considered a job match and the researcher assigned a 0.

After recruiting the sample, it was apparent that a significant number 20 (31.7%) entered the program with a job and sought assistance from program staff to retain this job. Because the actual job start date for these clients was not included in the Supported Employment Assessment, the researcher, in consultation with the dissertation advisor, relied on a different categorization than job tenure, namely attachment to the labor market described in chapter 2. For this sample, three categories of attachment were identified: no attachment, intermittent, and stable. The categories are defined in Chapter 4. For those clients who did obtain a job during their enrollment in the program, job tenure was calculated from information provided in the SEP Program Placement A Form – Appendix

C) and the Job Loss Checklist A Form – Appendix D. Subject recruitment into the study started in August 15, 2011 and ended February 29, 2012. The last participant enrolled in the study was February 28, 2012.

Research Design

The research study was a secondary analysis of an existing database.

Data Analysis

For research question 1, univariate (i.e. frequencies) and bivariate (i.e., chi-square) analyses were used to identify those independent variables that had a relationship to securing employment for those participants with psychiatric disabilities who found a job while participating in the supported employment program versus those who did not secure a job. The independent variables for research question 1 were the individual, contextual, and cognitive-behavioral variables in Table 4. The dependent variable was having a job. For research question 2, univariate (i.e. frequencies) and bivariate analyses (i.e., chi-square) were used to determine the significant differences between the independent variables in Table 4 and the dependent variable, labor market attachment.

Prior to running data analyses, several demographic variables (e.g., ethnicity, and educational level) and the contextual factor (e.g., social security benefits) needed to be recoded to ensure that enough people were in groups. Ethnicity was condensed from five groups to three groups. These three groups include Caucasian, African American, and Other. Having social security benefits was condensed into two groups, which included those that did not have social security benefits and those having social security benefits. Educational level was condensed from eight groups into three groups that included high

school or less, some college, and Bachelors or higher. See Table 5 for a detailed depiction of these groups.

Table 5

Recoded Demographic and Background Variables and Contextual Factor

Independent Variables	N	%
Demographic and Background Variables		
Ethnicity		
Caucasian	29	46.0
African American	22	34.9
Other	12	19.0
Educational Level		
High school or less	29	46.0
Some College	25	39.7
Bachelor's or Higher	9	14.3
Contextual Factor		
Social Security Benefits		
Doesn't have social security benefits	13	20.6
Have social security benefits	44	69.8

Because self-efficacy, a cognitive-behavioral variable, was measured in terms of three different scales (e.g., Ability to Choose a Job, Ability to Find a Job, and Ability to Keep a Job) a composite score or self-efficacy score was created ($M=10.94$, $SD=2.449$). The next chapter provides the results of the study.

Chapter 4: Results

Chapter 4 is organized according to the two research questions. Because of the small sample size, additional descriptive analyses were conducted in order to explore similarities and differences for persons who obtained employment while participating in an evidenced-based supported employment program and those persons who did not obtain employment while participating in an evidenced-based supported employment program. Similarities and differences were also conducted for job tenure for persons who entered the study with a job, those persons who obtained a job with the assistance of the Program staff, and those who did not become employed.

Research Question 1

Research Question 1 states the following: What factors distinguished individuals with psychiatric disabilities who obtained and did not obtain employment while participating in an evidenced-based supported employment? As discussed in Chapter three, out of 63 participants in the study, three groups of participants were identified in these analyses. The first group of participants entered the Program with a job (20 or 32%). The second group was those persons who entered the Program without a job, but secured one with the assistance of staff (28 or 44%). The third group entered without a job, and did not secure a job during the study (15 or 24%). For those 28 individuals who secured a job with the assistance of Program staff, the average time taken to find the first job was seven months.

Table 6 shows the mean scores for two of the three SCCT cognitive-behavioral variables-self-efficacy beliefs and outcome expectations. As stated in Chapter three, a self-efficacy composite score was created in order to compute an overall self-efficacy

score because self-efficacy beliefs (i.e., Ability to Find a job, Ability to Keep a Job, and Ability to Choose a Job) were measured using three subscales. Hence, the lowest score that someone could have was a three and the highest score was 15. A chi-square analysis revealed that there was not a significant difference in self-efficacy score among the groups of people ($p=.401$). While the differences among the three groups was not significant (given small sample size), there were some observations to make. One was the relatively high self-assessments for each of the three domains across the three groups. Six of the nine mean scores for the three subscales for self-efficacy beliefs (e.g., Ability to Choose a Job, Ability to Find a Job, and Ability to Keep a Job) across the groups were over 3.50 on a 5-point likert scale, even though one of the groups neither entered with a job nor obtained one during the time frame of the study. There were differences between Group 1 (entered with a job) and Group 2 (got a job with assistance) for each of the three self-efficacy scales; although the differences were only .12 (Ability to Choose a Job), .14 (Ability to Find a Job), and .15 (Ability to Keep a Job) respectively. For Group 3 (did not enter with a job, nor got one), the self-efficacy scale scores were still relatively high. Further examination of Group 3 indicated that 24.2% of participants reported having a previous work history, compared to those persons who came in with a job (32.3%) and those persons who obtained employment with the assistance of the Program staff (43.5%). It is important to note that previous work history was self-reported when clients were completing the Supported Employment Assessment with their respective supported employment specialists. There was no available information as to the extensiveness of participants' work histories (such as number of jobs or tenure).

Out of the 63 people who participated in this study, 48 (76.2%) secured employment during the time frame of this study. It is important to note that out of these 48 people, 20 (31.7%) people who participated in the Program held a job prior to entering into this program, while 28 (44.4%) individuals obtained a first job as a participant in the Program. Fifteen (23.8%) participants did not find a first job during the time frame of this study.

There was not a statistically significant difference regarding outcome expectations between people who got a job and those who did not ($p=.657$). Outcome expectations were based on a 3-point Likert Scale where, 2 indicated “concrete expectations”, and 0 was “no expectations”. The highest mean score were for those who secured a job with the assistance of the Program. The mean score for this group was .82. The mean scores for people who came in with a job ($M=.65$) and those who did not obtain a job were similar ($M=.67$). It is important to note that none of the groups achieved a rating of 1 or higher on this scale. As stated previously, a rating of 1 means that the outcome expectations for a future career employment were minimal or vague. The highest rating of a 2, would have suggested that the outcome expectations for jobs were concrete or clear. The specific question used to identify the rating for outcome expectations asked participants the following: Where do you see yourself in 5 years?

Table 6

Group Means and Standard Deviations for Self-Efficacy and Outcome Expectations for the Three Program Groups

	Entered with a Job (N=20)	SD	Secured a Job (N=28)	SD	No Job (N=15)	SD
Self-Efficacy Ability to	3.65	1.040	3.81	1.001	3.60	1.121

Choose a Job						
Ability to Find a Job	3.30	1.218	3.44	.934	2.93	1.468
Ability to Keep a Job	3.85	1.089	4.00	.832	4.00	1.254
Outcome Expectations	.65	.671	.82	.723	.67	.724

The researcher also examined whether congruence between the stated job goal on the Supported Employment Assessment and the actual job obtained were similar (See Table 7). As explained in Chapter 3, the congruence measure was based upon a match between the first two Holland code letters for the vocational goals the participants' identified and the jobs they obtained. Of those who entered the study with a job, only 9 (47.4%) had a match on the first two Holland codes, while 19 (70.4%) of those who secured a job with the assistance of the Program staff had a Holland match on the first two letters. While the chi-square was not significant ($\chi^2 = 2.477$, df = 1, $p = .116$), given the small sample size, there is a substantive difference in Holland congruence between job goal and job acquired as a result of participating in the Program. It is also important to note that the majority (96.4%) of participants identified vocational goals and the majority of the participants possessed a work history experience (98.4%).

Differences between Those Who had a Job (N=48) and Those Who Did Not (N=15)

Table 7 shows comparisons for all three groups of participants in the study based on the factors identified in the literature review. Chi-square analyses and mean differences were conducted to analyze group differences as described above among the three groups.

Table 7

*Within and Between Group Differences among Those Persons who Obtained Employment
and Those Persons who Did Not Obtain Employment*

	Entered with a Job (N= 20)	% Within Group	% Between Group	Secured a Job (N=28)	% Within Group	% Between Group	No Job (N= 15)	% Within Group	% Between Group
Person Variables									
Ethnicity									
Caucasian	10	50.0	34.5	11	39.3	37.9	8	53.3	27.6
African American	8	40.0	36.4	11	39.3	50.0	3	20.0	13.6
Other	2	10.0	16.7	6	21.4	50.0	4	26.7	33.3
Educational Level									
High School or Less	9	45.0	31.0	14	50.0	48.3	6	40.0	20.7
Some College	9	45.0	36.0	9	32.1	36.0	7	46.7	28.0
Bachelor or Higher	2	10.0	22.2	5	17.9	55.6	2	13.3	22.2
Gender									
Male	11	55.0	29.7	19	67.9	51.4	7	46.7	18.9
Female	9	45.0	34.6	9	32.1	34.6	8	53.3	30.8
Diagnosis									
Affective Disorder	9	45.0	29.0	16	57.1	51.6	6	40.0	19.4
Cognitive Disorder	11	55.0	34.4	12	42.9	37.5	9	60.0	28.1
Previous Work History									
No	0	0	0	1	3.6	3.6	0	0	0
Yes	20	100	100	27	96.4	43.5	15	100	24.2

Contextual Factor									
*Social Security Benefits *									
Do not have social security benefits	2	11.8	15.4	10	38.5	76.9	1	7.1	7.7
Have social security benefits	15	88.2	34.1	16	61.5	36.4	13	92.9	29.5
Cognitive-Behavioral Choice Goal									
No	1	5.0	50.0	1	3.6	50.0	0	0	0
Yes	19	95.0	31.1	27	96.4	44.3	15	100	24.6
Job Match									
No	10	52.6	55.6	8	29.6	44.4	-	-	-
Yes	9	47.4	32.1	19	70.4	67.9	-	-	-

Note. The dashes in the table indicate that the no employment data because clients did not have a jobs. Therefore, there is no data regarding job match for those people who did not become employed during the tables. P<0.05

Chi-square analyses revealed that there was not a statistically significant difference for demographic and background factors among the three groups. The only independent variable found to be statistically significant in determining those individuals with psychiatric disabilities who obtained employment while participating in an evidenced-based supported employment program and those individuals with psychiatric disabilities who did not obtain employment was the contextual factor, social security benefits ($\chi^2 = 6.748$, df = 2, $p = .034$). As indicated in Table 7, 93% of participants who did not obtain employment were those receiving social security benefits, while only 39% of the group that secured a job with assistance from program staff received SSA benefits. Several interesting findings occurred for ethnicity. For example, a higher percentage of Caucasians did not obtain employment (53.5%) compared to those Caucasians who obtained employment with the assistance of the Program staff (39.3%). More African Americans obtained a job with the assistance of the Program (50%) than those African American who did not obtain employment (13.6%). The “Other” ethnic group consisted of those persons who identified themselves as being “Other”, Hispanic/Latino, and Asian/Pacific Islander. There were fewer “Other” that entered the Program with a job (16.7%) than “Other” people who did not obtain employment in the study (33.3%).

A higher percentage of people with a bachelor’s degree or higher obtained a job (55.6%) compared to those who only had some college education (36.0%). Fewer males obtained employment (18.9%) on their own compared to males who obtained a job with the assistance of program staff (51.4%). For psychiatric diagnosis, 60% of the participants with a cognitive diagnosis (schizophrenia or schizo-affective disorders) did not secure a job during the 27.5 month time frame of the study, compared to 40% of

those with an affective disorder diagnosis. Of those persons who had an affective disorder diagnosis, the majority were able to obtain employment with the assistance of the Program staff (51.6%). A majority of the participants entered the program with a previous work history and were able to establish a vocational goal, so there were no differences among the three groups on this factor.

Job Characteristics

Cross tabulations and descriptive statistics were conducted to study the job characteristics for those people who entered the study with a job and those people who obtained a job after enrolling in the program. The average rate of pay for all employed participants was \$9.64 ($SD=3.81$), with the maximum amount being \$25.00 per hour. The minimum hourly wage was \$6.75. The hours per week that individuals worked varied from 0 to 40 hours per week ($SD=3.81$). The average number of hours per week is 15.62 or 16 hours per week ($SD=10.874$). The majority of jobs were “grocery/retail” position (49.3%), with the next most frequent position being “clerical/office/paraprofessional” (30.7%), followed by “food service/dietary service” (32.9%). Table 8 provides descriptive data on job characteristics for the two groups of participants: those who had a job at entry and those whom the Program assisted to secure a job.

Table 8

Frequencies and Percentages of Job Characteristics, Placement Type, and Disclosure for Participants who Obtained Employment

Job Characteristic	Entered with A Job (N= 20)	%	Obtained A Job (N=28)	%
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Job Type A				
Grocery/Retail	7	35.0	4	14.3
Clerical/Office Paraprofessional	4	20.0	3	10.7
Food Service/Dietary Service	3	15.0	5	17.9
Stocking/Warehouse/Material Handling	2	10.0	1	3.6
Other	2	10.0	4	14.3
Health/Human Services/Education	2	10.0	1	3.6
Agriculture/Horticulture/Animal Care	0	0	2	7.1
Grounds Keeping/Landscaping	0	0	2	7.1
Janitorial/Housekeeping/Maintenance	0	0	6	21.4
Placement A Type				
Competitive	17	85.0	21	75.0
Customized	1	5.0	6	21.4
Set Aside	2	10.0	1	3.6
Disclosure				
Yes	16	80.0	19	67.9
No	4	20	9	21.1

The chi-square analysis of the job characteristics revealed that there was not a statistically significant difference for the job type for the two groups ($p=.161$).

There were three types of job placement approaches that were used to secure jobs: customized employment, competitive employment, and set aside. Customized employment occurs when an employer creates a job based upon individuals' skills and abilities. Competitive employment occurs when individuals can perform the essential job functions of a job without any type of modification or assistance. Set aside employment usually occurs when a large business or federal agency contracts with a non-profit organization to provide a specific service, such as janitorial work. The non-profit agency then hires and pays their clients to perform the contracted work. The chi-square analysis indicated that there was not a significant difference for placement type ($p=.215$) for the three groups. Though the analysis was not significant, descriptive exploration indicated

that there were some emerging patterns. For example, 85% of people who entered the Program with a job were competitively employed, whereas only 75% of people who obtained a job with the Program were competitively employed. A higher percentage of people who obtained a job with the Program were placed in customized employment positions (21%) versus 5% of people who came into the Program with jobs.

All individuals that participated in the supported employment program were presented with the Disclosure Education Form that was reviewed with them by their respective supported employment specialist. Supported employment specialists report the preferred disclosure approach for their respective clients, which included sample statements, such as “client is open to disclose”; “client is unwilling to disclose”; “client needs more time to make decision”; “client will make a decision on a case by case”; and “client and supported employment staff member discussed disclosure”. The chi-square analysis indicated that there was not a statistically significant difference between the two groups regarding their disclosure preference ($p=.275$). What was interesting to note was that 80% of people who came in with a job disclosed that they had a disability to an employer versus 68% of people who obtained a job while a participant in the Program.

Finally, the researcher analyzed the differences in the reasons and causes that people lost their jobs. Table 9 below provides the frequencies and percentages for the reasons and causes for job loss.

Table 9

Frequencies and Percentages of Reasons and Causes for Those Participants who Lost Their First Jobs

Reason	Frequency	%
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Non Voluntary	15	23.8
Voluntary	11	17.5
Cause		
Laid Off	6	9.5
Other	6	9.5
Inferior quality or quantity of work	4	6.3
Concerns about medical illness or health	4	6.3
Job Dissatisfaction	3	4.8
Increase in severity of symptoms	2	3.2
New job or career advancement	1	1.6

The Job Loss Checklist Form A captured the reasons and the causes for employment loss. There was not a statistically significant difference for the reason that people lost their job ($p=.301$). The primary reason for job loss was non-voluntary (23.8%). The main causes that people lost their jobs involuntarily was either they were laid off (9.5%) or for some other cause (9.5%), followed by inferior quality or quantity of work (6.3%) and concerns about medical illness or health (6.3%). The least frequent reason for leaving a job was a positive one – meaning that people voluntarily left their job for a different or better one (1.6%).

Research Question 2

Research question 2 states the following: To what extent did person variables, behavior variables, and the match between job obtained and career goal contributed to job tenure of people with psychiatric disabilities participating in an evidenced-based supported employment program? Three subquestions were used to address the overall research question. They included the following: a) Was there a significant difference among participants' demographic and background variables pertaining to their job tenure?; b) Was there a significant difference among participants' self-efficacies and

outcome expectations and their impact on job tenure?; and c) Was there a relationship between participants' vocational goal and the job acquired in regards to job tenure?

Job Tenure and Labor Market Attachment

Job tenure was calculated in terms of the start date of employment and the end date of employment. Of the 48 individuals who had a job (including those who entered with a job, and those who secured one with the assistance of the Program), 26 (41.3%) lost their first job during the study and the average job tenure for this group was 11 months. Of the 26 individuals who lost their first job, 17 (27%) obtained a second job. Of the group that obtained a second job, 11 (17.5%) retained it during the 27.5 months of the time frame of this study.

In order to examine differences among the groups of people who had maintained a job throughout the study, lost a first job but acquired a second, and never worked, the researcher used the following designations: the group that retained a job throughout the study (n=22; 34.9%) were described as exhibiting a "stable pattern" of labor market attachment. The group who either entered or secured a job, lost it, but secured a second job during the time frame of the study, was described as exhibiting an "intermittent pattern" (n=14; 22.2%) of labor market attachment to. The final group were those who lost a first job, never secured another, and those who never got a job, were described as having an "unstable pattern" (n=27; 42.9%) of labor market attachment. Table 10 illustrates the characteristics of each of these three groups according to their attachment to the labor market.

Table 10

Labor Market Attachment Within and Between Groups

	Unstable Pattern (N= 27)	% Within Groups	% Between Groups	Intermittent Pattern (N=14)	% Within Groups	% Between Groups	Stable Pattern (N= 22)	% Within Groups	% Between Groups
Person Variables									
Ethnicity									
Caucasian	13	48.1	44.8	7	50.0	24.1	9	40.9	31.0
African American	6	22.2	27.3	5	35.7	22.7	11	50.0	50.0
Other	8	29.6	66.7	2	14.3	16.7	2	9.1	16.7
Educational Level									
High School or Less	14	51.9	48.3	6	42.9	20.7	9	40.9	31.0
Some College	10	37.0	40.0	5	35.7	20.0	10	45.5	40.0
Bachelor or Higher	3	11.1	33.3	3	21.4	33.3	3	13.6	33.3
Gender									
Male	14	51.9	37.8	8	57.1	21.6	15	68.2	40.5
Female	13	48.1	50.0	6	42.9	23.1	7	31.8	26.9
Diagnosis									
Affective Disorder	12	44.4	38.7	9	64.3	29.0	10	45.5	32.3
Cognitive Disorder	15	55.6	46.9	5	35.7	15.6	12	54.5	37.5
Contextual Factor									

Social Security Benefits									
Do not have social security benefits	4	15.4	30.0	5	38.5	38.5	4	22.2	30.8
Have social security benefits	22	84.6	50.0	8	61.5	18.2	14	77.8	31.8
Cognitive-Behavioral Variable									
Choice Goal									
No	1	3.7	50.0	1	7.1	50.0	0	0	0
Yes	26	96.3	42.6	13	92.9	21.3	22	100	36.1
Job Match A									
No	4	36.4	22.2	7	53.8	38.9	7	31.8	38.9
Yes	7	63.3	25.0	6	46.2	21.4	15	68.2	53.6

P<0.05

In Table 10, chi-square analyses revealed that there were no statistically significant differences among the demographic and background variables for the three groups. Despite this finding, there were still some interesting patterns. For example, 22 or 85% of individuals with psychiatric disabilities who were in the "unstable pattern" group were SSA beneficiaries, compared to 78% of those who were in the "stable pattern" of labor market attachment , and 62% of those in the "intermittent pattern". Regarding educational level, it is clear that those with the least education were in the "unstable pattern", where approximately 52% had an educational level of high school or less compared to 11% of those persons who fell in the same group with a bachelors degree or higher. Across the three groups, those with a high school diploma or less accounted for 48% of people that fell into the “unstable pattern”, but only 21% and 31% of the other two groups respectively.

Gender differences also revealed a surprising finding for labor market attachment. For example, within the groups, 68% of males had a “stable pattern”, while only 32% of females had a “stable pattern”. The findings for males and females that held an “unstable pattern” were more similar. Within groups percentages revealed that there 52% of males and 48% of females that fell in this pattern, but across groups, women accounted for 50% of those in the "unstable pattern" group.

The findings for diagnosis, not surprisingly, revealed that 47% of those with a cognitive disorder (schizophrenia) fell in the “unstable pattern” group compared to approximately 38% of those in the “stable pattern” group. Within the three groups of labor market attachment, 56% of people with a cognitive disorder had an “unstable pattern” to the labor market, while 64% of people who had an affective disorder had an

“intermittent pattern”. Fifty-six percent of people with a cognitive disorder fell in the “unstable pattern” group versus 39% of people with an affective disorder.

In terms of job match (congruence between vocational goal and actual job), 25% of those with a job match exhibited an “unstable pattern”, whereas 54% of those in the “stable pattern” exhibited congruence between goal and job secured. Within the groups, 68% of people who had a job match had a “stable pattern”, while 63% of people who had a job match had an “unstable pattern”. It is important to note that of those 26 persons who were categorized as having an “unstable pattern”, 11 of them held a job during this study, but lost that job and never obtained another. Of these 11 people, seven people that possessed a job that they wanted were categorized as having an “unstable pattern”.

Mean scores pertaining to participants’ outcome expectations were calculated using the cognitive-behavioral variables-self-efficacy and outcome expectations (See Table 11). Many of the subscales for self-efficacy beliefs were very similar with regard to labor market attachment. The highest mean score, 4.09, was on the “Ability to Keep a Job” subscale and people who had this score exhibited a “stable pattern” to the labor market. There were no differences among the three groups on the outcome expectations scale.

Table 11

Mean Scores and Standard Deviations for the Self-Efficacy Subscales and Outcome Expectations

	Unstable Pattern Mean	SD	Intermittent Pattern Mean	SD	Stable Pattern Mean	SD
Self- Efficacy*						
Ability to Choose a	3.59	.971	3.69	1.182	3.86	1.037

Job						
Ability to Find a Job	3.11	1.281	3.62	1.261	3.27	.985
Ability to Keep a Job	3.93	1.072	3.77	1.092	4.09	.921
Outcome Expectations	.81	.786	.43	.514	.82	.664

*Note. The subscales for self-efficacy (i.e. Ability to Choose a Job, Ability to Find a Job, Ability to Keep a Job) was based on 5-point Likert Scale, where 5 is the highest level of ability. Outcome expectations were based upon a 3-point Likert Scale, where a 2 indicates concrete expectations.

Chapter Summary

Three groups of people were used to address the research questions. They included those persons that were employed prior to participating in the Program, those persons who obtained a job with the assistance of the Program staff, and those persons who did not obtain employment over the 27.5 month time period of the study. Twenty-six people lost their first job; however, 17 people were able to obtain a second job. The average job tenure for the first job was 11 months.

For research question 1, mean scores for the cognitive-behavioral variables (e.g., self-efficacy beliefs and outcome expectations) did not provide significant results, but the mean scores across the three groups on self-efficacy beliefs indicated that participants rated themselves above 3.50 on a 5-point likert scale, even those persons who never obtained a job during the time frame of the study. There were only small differences for the mean scores for self-efficacy between those persons who entered the study with a job and those persons who obtained a job with the assistance of the supported employment Program. Those persons who did not obtain employment during the study had relatively high ratings on the self-efficacy subscales considering they did not obtain employment

compared to those persons who worked during the study. The mean scores regarding participants' outcome expectations also did not yield any significant results for the three groups. Descriptive statistics revealed that none of the groups had concrete expectations. Job match was not found to be significant, but what was interesting about job match is that there was a higher job match for those persons who obtained employment with the assistance of the Program than for those who entered the Program employed.

There were several demographic and background variables that were used to compare those persons who became employed and those who did not. Out of all the independent variables, only social security benefits proved to be statistically significant. Those persons who never became employed during the study were more likely to be receiving social security benefits. There were interesting findings for ethnic groups as well. For example, the largest percentage of Caucasians in the study did not become employed, but for African Americans, the largest percentage was for those persons who became employed with the assistance of the Program. The majority of individuals that remained employed throughout the study held a Bachelor's degree or higher. Regarding gender, there were more males who obtained a job with the assistance of the Program than males who entered the Program employed. A higher percentage of persons with affective disorders versus those with cognitive disorders were employed during this study.

Persons who were employed throughout the study held various positions with the majority falling into grocery/retail sectors, followed by clerical/office/paraprofessional and food service/dietary service. In terms of disability disclosure, those participants who entered the program with a job were more likely to have disclosed their disability to

employers compared to those obtaining a job with the assistance of program staff. The majority of people who lost a job during the study resulted from non-voluntary reasons

In terms of attachment to the labor market, chi-square analyses did not yield any significant differences among the three groups (unstable, intermittent, and stable) for background and demographic variables. Despite these non-significant findings, interesting patterns emerged. For example, the vast majority of those receiving social security benefits fell into the “unstable pattern” group. Further analyses revealed that those persons who possessed a Bachelor’s degree or higher were identified as having a “stable pattern” to the labor market. There were more males in the “stable pattern” group than females. The majority of persons with cognitive disorders were identified as having an “unstable attachment” to the labor market. Over 50% of persons who had a congruent job match were identified as having a “stable pattern” of attachment.

Chapter 5: Conclusions

There were two purposes to this study. The first was to identify factors that distinguished those individuals with psychiatric disabilities who obtained employment while participating in an evidenced-based supported employment program from those individuals with psychiatric disabilities who did not obtain employment. The second purpose was to identify the variables that contributed to job tenure of people with psychiatric disabilities participating in an evidenced-based supported employment program. The three groups of participants in the study were: (1) who were those persons who obtained employment with assistance of a supported employment Program, (2) persons who held a job prior to entering the Program, and (3) those who did not obtain employment during the study.

For research question 1, only receipt of social security benefits was found to significantly differentiate participants who obtained employment from those who did not. The majority of persons who did not become employed during the study were social security beneficiaries. This finding is consistent with the psychiatric rehabilitation literature, where studies indicate that social security beneficiaries are reluctant to work for fear of losing their benefits (e.g., Kennedy et al., 2004; Killeen & O'Day, 2004; Marini & Reid, 2001).

Although there were no significant differences for demographic and diagnostic variables, there were some interesting trends. In this study, ethnicity was not significant in distinguishing between those who secured a job and those who did not, a finding that coincided with the literature reviewed (e.g., Becker et al., 2007; Burke-Miller et al., 2006; Campbell et al., 2007; Catty et al., 2008; Cook, Leff, Blyler et al., 2005, Gold et al.,

2006; etc.). In this study, there were no significant gender differences for employment. This finding coincides with previous studies described in the literature review that suggested that gender is not a predictor of employment outcomes for people with psychiatric disabilities (Campbell et al., 2007; Howard et al., 2010; Nygren et al., 2011; Tsang et al., 2010; Wong et al., 2001; and Wong et al., 2008). The findings for diagnoses revealed that there were more people who had an affective disorder that were employed versus those persons who had a cognitive disorder. This same trend was also found in the supported employment literature discussed in chapter two (e.g., Campbell et al., 2007; Howard et al., 2010; Jones et al., 2001; Latimer et al., 2006; Rinaldi et al., 2004). While educational level in this study was not significant, there was a trend indicating that those with higher educational levels were likely to be employed. Similarly, Burke-Miller et al. (2006) concluded that people with psychiatric disabilities who had higher levels of education were more likely to obtain employment.

This study introduced SCCT as a framework to understand employment outcomes for persons with psychiatric disabilities that participated in an evidence-based supported employment program. It has been noted that SCCT has been used with various populations (Chronister & McWhirter, 2003; Lent et al., 2005; Lopez et al., 1997; Smith & Fouad, 1999), but there has been few studies that have used the constructs for persons with psychiatric disabilities (Fabian & Liesener, 2005). In this study, self-efficacy beliefs, outcome expectations and choice goals were not found to be significant in predicting employment for people with psychiatric disabilities participating in an evidenced-based supported employment program. Participants rated themselves on the scales for each cognitive-behavioral construct. Although none of the findings were

significant, there were some potentially important observations. For example, all three groups of participants in this study, including those who never obtained a job during the time frame, reported high levels of self-efficacy beliefs. This somewhat contradicts other studies reviewed in chapter two, which suggested that self-efficacy increased as a result of employment (Chan et al., 2009; Hutchinson et al., 2007; Siu et al., 2010). However, it may be important to note that in this study, self-efficacy was measured using only three items: Ability to Find a Job, Ability to Keep a Job, and Ability to Choose a Job. Participants might have been relying on their self-reported previous work histories. All but one participant had previous work experience. All three groups reported low outcome expectations, which did not prove to be a significant factor when determining whether someone became employed. Only Becker et al. (2007) used this construct, finding that outcome expectations were not predictive of employment for this population. The issue of outcome expectations (OE) is an important one, particularly given the low ratings of this construct for these participants in this study. To some extent, OEs may be a proxy variable for hope, in that individuals with higher outcome expectancies can envision positive outcomes associated with their behaviors, and thus are more likely to pursue their goals in anticipation of achieving these positive results (Lent, 2005). Although self-efficacy beliefs are potentially malleable (Lent, 2005), there is little evidence to suggest interventions for improving an individual's anticipation or hope for the future (Fabian, 1999). This is an important issue in the field and one that needs further study.

Choice goals were measured in terms of Holland's theory of congruence between the stated vocational goal and the job obtained. The results of the study indicated that job

match was not a significant factor regarding employment for people with psychiatric disabilities. However, it may be important to note that more people who had a congruent job match received placement assistance from the Program versus those persons who entered into the study with a job. As one of the activities of the Supported Employment Assessment completed by staff and consumers is to assist consumers to identify a vocational goal, it makes sense that the Program staff are aware of these goals when finding consumers jobs.

The average wage for participants in this study was \$9.64, which is higher than the federal and state minimum wage of \$7.25 per hour. The difference in hourly wage probably reflects the unique local labor market in Montgomery County, Maryland, but it is also a positive indicator of the types of jobs consumers are obtaining. It is important to note that the demographics in Montgomery County are different than for other counties in Maryland. Persons living in this area typically have access to transportation for going to and from work, more education, and a higher level of income. Given this, people living in this county will access to programs that will assist them in their job search process.

Reasons for job loss were also captured. The main reason that people lost their jobs were non-voluntary issues (e.g., laid-off, inferior quality or quantity of work; concerns about medical illness or health). This finding is consistent with other studies. For example, Becker, Drake, Bond et al. (1998) reported that the most frequently cited reason that people lost their jobs was due to interpersonal difficulty, their diagnosis, job dissatisfaction, and lack of quality work. Other studies have found that job terminations for people with psychiatric disabilities tended to be for negative reasons, such as dissatisfaction with the job, lack of interest, and interpersonal problems among other

reasons (Mak, Tsang, & Cheung, 2006). MacDonald-Wilson and colleagues (1991) studied job loss for this population, and reported that people lost their jobs because they were not interested in working had physical health problems, or they wanted a better work environment. Wong and colleagues (2001) further found that people with psychiatric disabilities initiated their own terminations because of inability to cope with job demand, being offered better jobs, and being unsuitable for the job.

Research question 2 explored the issue of job tenure. The issue of job versus employment tenure is an important one in studies of individuals with psychiatric disabilities. Using Baron's (2000) concept of long-term attachment to the labor market, the researcher categorized job tenure into three groups: "unstable pattern", "intermittent pattern", and "stable pattern". Although there were no significant differences among the three attachment groups on demographic, diagnostic or cognitive-behavioral variables, there were some interesting trends that deserve further study. For example, more people in the "unstable" pattern group were SSA beneficiaries and had lower levels of education compared to the other two groups. These findings are consistent with the literature reviewed in chapter two related to job tenure. Similarly, participants with diagnosis of schizophrenia were more likely to be in the unstable attachment group, compared to those with affective disorders, such as depression or bipolar disorder. This finding is also consistent with the literature reviewed on job tenure and diagnosis.

Another interesting trend is that participants who had exhibited a congruent job match between vocational goal and job obtained tended to be in the stable attachment category. This finding is consistent with Holland's theory, which holds that congruence between vocational interests and work environment predicts job satisfaction and retention

(Holland, 1992). Although there is little research on this conceptualization of patterns of employment tenure (Baron 2000; Fabian, 1999) it is clear that additional study may yield some interesting findings.

Limitations of the Study

The first limitation of the study was the small sample size which compromised the power of the study. In other words, the probability of finding a significant difference among the groups was limited, the Type II error rate was potentially high and the study had low power. In addition, the small sample size, together with the number of predictor variables limited the type of inferential statistical analyses that could be conducted. The second limitation was the self-report nature of the self-efficacy and outcome expectation scales. Although some research has reported that individuals with psychiatric disabilities are able to accurately self-evaluate their confidence in their capacity to perform work-related activities (Waghorn et al., 2005a., Waghorn et al., 2005b), it may be that the cognitive limitations of this sample made it difficult to provide reliable self-reports. A third limitation to the study was due to participants being enrolled in this study from only one supported employment program, thus limiting the generalizability of these findings. A fourth limitation of this study was that the researcher had no direct contact with potential participants regarding the nature and purpose of this study, which may help explain the low enrollment-program staff had considerable difficulty recruiting clients to participate.

A final limitation of this study was the items used to measure self-efficacy beliefs and outcome expectations. For self-efficacy beliefs, only three items are used in the program's Supported Employment Assessment, suggesting potential errors in

measurement. Similarly, only one item was used to measure outcome expectations and choice goals. The supported employment assessment instrument in which these items were taken from does not have any empirical evidence to suggest that these variables were measured accurately.

Implications for Rehabilitation Counselors and Rehabilitation Counselor Educators

There are several implications of this study. For example, rehabilitation counselors might want to move away from the notion of job tenure in evaluating program outcomes, to a more longitudinal perspective such as attachment to employment in their work. This issue was first raised by Richard Baron (2000), who called it "long term attachment to the labor market", suggesting that this was an approach which didn't penalize people for the uneven course of the recovery process. A second practical implication is for Rehabilitation Counselors to use social cognitive constructs in their work with clients, but understand that that client self-report on these measures might be inaccurate. Alternatives could be having another person rate the individual on various dimensions, or using the scales as clinical tools to help the person improve their capacity to self-evaluate. Outcome expectations and choice goals are important for people with psychiatric disabilities, particularly as the lack of either or both suggests an inability to envision a vocational future. While this wasn't the focus of this study, counselors might want to spend time discussing goals, exposing people to peers who have achieved them, and linking goals to recovery programs.

A third implication for rehabilitation counselors is to provide benefits counseling to clients, particularly those who receive SSA benefits. There has been evidence from not only in this study, but other studies that have been referenced that continues to show

evidence that people who receive SSA benefits are reluctant to work or return to work due to fear of losing benefits. Obtaining SSA benefits can be a long and daunting process for many, and can take months to years to receive, which might explain the reluctance to work. In this study, the majority of persons who did not become employed during the study were social security beneficiaries. Additionally, these persons were also found to have an unstable attachment to the labor market. Despite modification in federal regulations to remove disincentives embodied in social security laws, there remain challenges in assisting people with significant disabilities to weigh the costs and benefits of competitive employment, particularly because these benefits programs provide access to national health care through either Medicare or Medicaid. As new federal policies recently enacted make it easier for individuals to purchase low-cost health insurance, the effect of these new policies on disability employment will be particularly interesting to track. In the meantime, program staff need to be educated regarding new federal policies enacted as part of the Affordable Care Act (P.L. 111-148), and the potential for low cost health care availability.

A related recommendation involves rehabilitation counselor educators. Rehabilitation counseling students are rarely trained to understand the intricacies of health care and disability policy even though this type of information helps their consumers make informed decisions about continuing or returning to work. Incorporating a more specific focus on this important and complex issue of SSA benefits, should be a consideration in rehabilitation counseling program curriculum.

A final implication of this study extends to the positive effects of the program staff and their efforts to assist clients with psychiatric disabilities in Montgomery County

obtain and sustain employment. The results revealed that with assistance of the Program staff, clients were able to obtain employment, sustain employment, and acquire a second job once they lost their first job. The findings also suggest that participants in the program often had a “stable pattern” to the labor market. The Program adheres to the requirements of an evidence-based supported employment program and is deeply rooted in the Individual placement and support model of supported employment. From the results of this study, it can be concluded that the IPS model of supported employment is effective for people with psychiatric disabilities.

Future Research

Some of the findings of this study suggest directions for future research. For example, researchers might conduct a prospective study of these three critical SCCT constructs, measuring them at program entry, and then after job placement. While a few studies have done this, none of them have incorporated all of these variables derived from the SCCT theoretical model. These types of studies help explain, rather than just predict employment outcomes. Another potential avenue is to enroll a more diverse sample of consumers with psychiatric disabilities. Clients who are eligible for services from the program studied here tended to be at the most severe end of the diagnostic spectrum - in other words, those individuals with psychiatric disabilities who encounter the most challenge in getting, and particularly keeping, a job. SCCT variables might be differentially predictive for clients with less severe mental health disorders, or those who are further in their recovery. Future research should also examine participants who might have co-occurring substance abuse disorders. A substantial minority of clients with severe psychiatric disabilities has various co-morbidities, and this study did not examine

that condition. Finally, a study that explores the extent to which categories of labor market attachment derived in this study can be validated would be beneficial.

Conclusions

The findings pertaining to the background and demographic variables suggest that perhaps there are other factors, besides ethnicity, age, gender, and previous employment that may help to explain why people with psychiatric disabilities become employed while participating in an evidenced-based supported employment program. They also suggest that the type of psychiatric diagnosis and being an SSA beneficiary is worth investigating more regarding employment outcomes for people with psychiatric disabilities while participating in an evidenced-based supported employment program. The introduction of SCCT constructs into the study, though not significant, provides some evidence to suggest that these variables play an integral part in obtaining employment and also promoting long term attachment to work for people with psychiatric disabilities. What can be deduced from the findings is obtaining employment and maintaining jobs for people with psychiatric disabilities in supported employment programs continues to be complicated because this population has its own unique set of challenges. By incorporating new variables that are used in evaluating employment outcomes, introducing career development theories, and expanding the measurement for job tenure we can begin to address and provide innovative ways to increase the employment rates of people with psychiatric disabilities.

Appendix A

Supported Employment Assessment

Assessment Interview

The following Supported Employment Assessment questions are to be answered by the BTW client and recorded by the SES in a face to face meeting. Some questions and answers may lead to more in-depth discussion, so please record all relevant information, even if the information does not directly relate to the question asked

Work History

 Enter the following for each previously held job: Title/Employer/Dates Employed/Work Schedule/Responsibilities

Expanded Text Response

What did you like about your previous jobs?

Expanded Text Response

What didn't you like about your previous jobs?

Expanded Text Response

How did you obtain your job(s)?

Expanded Text Response

Why did you leave your previous job(s)?

Expanded Text Response

How have you maintained your job(s) in the past?

Expanded Text Response

Educational Background

Please provide information regarding your educational experiences, special trainings, or certificates. If applicable, please indicate educational or specialized training goals that you may have at this time.

Expanded Text Response

Ability to Choose a Job

* On a scale of 1 to 5 (5 being the highest level of ability), how would you rate your ability to choose a job? ShTxt

Please indicate your employment interests and related skills.

Expanded Text Response

What occupations relate to your interests and skills?

Expanded Text Response

* Do you have a career plan? Where do you see yourself in 5 years?

Expanded Text Response

Ability to Find a Job

* On a scale of 1 to 5 (5 being the highest level of ability), how would you rate your ability to find a job?

ShTxt

What specific steps will you take to look for a job?

Expanded Text Response

What type of support do you need from the program in looking for a job? (e.g. applications, resume, disclosure, interviews)

Expanded Text Response

Ability to Keep a Job

* On a scale of 1 to 5 (5 being the highest level of ability), how would you rate your ability to keep a job?

ShTxt

How do you plan on maintaining your job? Please give examples.

Expanded Text Response

What type of support do you need from the Employment Program in order to maintain your job? (e.g. work clothes, transportation, time management, communications, support network, job coaching)

Expanded Text Response

Work Perspectives

Please give five examples of why you are interested in finding a job at this time, and why do you want support from the BTW Program (if you are currently employed, what supports are you looking for)?

Expanded Text Response

What do you feel like you can offer an employer?

Expanded Text Response

* What are your expectations for a job? (include salary range, locations, days, and hours)

Expanded Text Response

Describe your ideal work environment (e.g. quiet v. busy, independant v. collaborative).

Expanded Text Response

What type of supervisor and coworkers would you be most successful with?

Expanded Text Response

How might your mental health and/or medication affect your work? How have you managed your mental health in the past? Do you have a plan for if or when mental health ssues arise? How can St. Luke's support you with mental health concerns?

Expanded Text Response

Signature of BTW Staff Interviewing Client:

Name: Staff Name
Electronically Signed

Date: 11/09/2010 Time: 10:34 a.m. Yes No

COMAR 10.21.28.07

WYSIWYG Form SLHSEPASSINT; Version 1.00; Imported 10/5/09

Appendix B

Entitlements/Resource Checklist

- _____ MA - Medicaid
 TEHMA – Temporary Emergency Health & Medical Assistance
 QMB – Qualified Medicare Beneficiary
 SLMB – Specified Low Income Medical Beneficiary
- _____ Medicare
- _____ MPAP – Maryland Pharmacy Assistance Program
- _____ SSI - Supplemental Security Income
- _____ SSDI - Social Security Disability Insurance
- _____ PAA - Public Assistance for Adults
- _____ Food Stamps – Independence Card
- _____ Rental Assistance; Section 8
- _____ Other - _____

How employment will effect your benefits

	SSI	SSDI	OTHER	OTHER
Current amount I receive?				
Maximum Amount I can earn w/o effecting benefits?				
What happens if I earn more than the maximum?				
Options:				
PASS Plan				
IRWE				
Other				

We have reviewed the available entitlements, disability benefits and other benefits and the impact of employment on these.

declined

Client Signature

Staff Signature

*Client offered a copy of the Quick Reference SSA/HHS/DSS eligibility sheet and SSA Red Book for reference.

Appendix C

SEP Program Placement A

General Information

* Hired Date: 11/09/2010 * Start Date: 11/09/2010
Company: *Short Text Response*
Address: *Short Text Response*
Phone Number: *Short Text Response*
Supervisor: *Short Text Response* * Title: *Short Text Response*
Consumer Job Title: *Short Text Response* Job Type: *Selection List*
Rate of Pay: 9999999999 . 9999999999 Placement Type: *Selection List*
Disclosed? Yes No
Work Schedule: *Short Text Response* Hours per week: 9999999999 . 9999999999
Estimated Weekly Job Coaching Hours: *ShTxt* % of time Supervision Available: *ShTxt*
Number of Employees in this Position if Known: *ShTxt* During the same hours? *ShTxt*
Signed SLH Release of Information for Employer? Yes No
Tax Credit Information completed and given to employer? Yes No

Benefits Information:

Written description of employee benefits? Yes No
Eligible for health insurance benefits? Yes No
Time Required to Qualify for Benefits (Hours or Weeks) *Short Text Response*
Is there a waiting period? Yes No Days: *ShTxt* Cost to Employee: *ShTxt*
Insurance Benefits: Medical Dental
Vacation (Days per Year): *ShTxt* Waiting Period? Yes No Days? *ShTxt*
Sick Leave (Days per Year) *ShTxt* Waiting Period? Yes No Days? *ShTxt*
Holidays? Yes No Number of Days Per Year: *ShTxt*
Personal Days? Yes No Number of Days Per Year: *ShTxt*
Has an additional entitlements counseling been completed? Yes No

Company Procedures:Job Description:

Expanded Text Response

Task Analysis:

Expanded Text Response

What is the Dress Code? ***Short Text Response***
Break Policy: ***Short Text Response***
Paycheck Dates/Intervals: ***Short Text Response***
Sign-In/Time Clock: ***Short Text Response***
Formalized Orientation? Yes No
Union Involvement? Yes No Union Dues: ***Short Text Response***
What are the resignation procedures (if different from the SLH policy of 2 weeks notice)?
Short Text Response

Signature of Staff Completing Form:

Name: Staff Name Date: 11/09/2010 Time: 10:34 a.m. Yes No
Electronically Signed

Signature of Workforce Development Specialist:

Name: Staff Name Date: 11/09/2010 Time: 10:34 a.m. Yes No
Electronically Signed

Signature of Supervisor/Manager:

Name: Staff Name Date: 11/09/2010 Time: 10:34 a.m. Yes No
Electronically Signed

WYSIWYG Form SLHSEPLACEA; Version 1.00; Revised 10/15/09

Appendix D

Job Loss Checklist A

Company: **Short Text Response**

Consumer Job Title: **Short Text Response**

*Start Date: 11/09/2010 *Job End Date: 11/09/2010

How many months did the client work in this position? **Selection List**

Disclosed? Yes No

Last Supervisor or Job Contact: **Short Text Response**

Reason for Leaving: **Selection List**

Cause: **Selection List**

Explain:

Expanded Text Response

Did the employee give two weeks notice? Yes No

Does the consumer currently have other paid employment? Yes No

Next Steps

- Update Treatment team
- Presenting case in staff meeting
- Update or new referral to DORS
- Supported Employment Assessment
- Update of goals/vocational plan with new objectives

Job Development and Work Based Activities

- Immediate Job Search with a clear job choice
- Job Site Visit
- Job shadowing
- Informational Interviews
- Mock Interviews
- Work Trial
- Employment Networking

Additional Next Steps

- Montgomery Works Visit
- Pocket Resume
- Obtain employment references
- Additional benefits counseling

Signature of Staff Completing Form:

Name: Staff Name
Electronically Signed

Date: 11/09/2010 Time: 10:34 a.m. Yes No

Signature of Workforce Development Specialist:

Name: Staff Name
Electronically Signed

Date: 11/09/2010 Time: 10:34 a.m. Yes No

Signature of Supervisor/Manager:

Name: Staff Name
Electronically Signed

Date: 11/09/2010 Time: 10:34 a.m. Yes No

WYSIWYG Form SLHSEPJOBLOSSA; Version 1.01; Revised 11/20/09

Appendix E

Client Data Form

Client Identification No. _____

Demographics Form

1. Referral Source: _____

2. Ethnicity: _____ African American _____ Caucasian _____ Asian
 _____ Hispanic/Latino _____ Other

3. Date of Birth: _____

4. Gender: _____ Female _____ Male

5. Education: _____ Less Than High School _____ High School _____ Special Ed.
 _____ Some College _____ Trade, Voc., Tech _____ Associates _____ Bachelors
 _____ Graduate School

6. Marital Status: _____ Never Married _____ Married _____ Separated
 _____ Divorced _____ Unknown

7. Employment Status: _____

8. Living Arrangements: _____

Signature of Staff Obtaining Information: _____ Date: _____

Signature of Staff Entering Information: _____ Date: _____
(If Different from Above)

Client Identification No. _____

Diagnosis Review Form

1. Axis I Diagnosis(es): _____
2. Axis II Diagnosis(es): _____
3. Axis III Diagnosis(es): _____
4. Axis IV Diagnosis(es): _____

Signature of Clinician Completing Form: _____

Date: _____

Co-Signature of Clinician Completing Form: _____

Date: _____

Signature of Staff Entering Information: _____
(If Different from Above)

Date: _____

Client Identification No. _____

Disclosure Education Form

Please provide, in the space provided, anything that rose during the disclosure explanation.

Signature of Employment Specialist: _____

Date: _____

Client Identification No. _____

Financial Review Form

Sources of Income

Please indicate MONTHLY Amounts

Paid Employment

\$ _____

SSI-Supplemental Security Income

\$ _____

SSDI-Social Security Disability Insurance

\$ _____

Pension Income

\$ _____

PAA-Public Assistance for Adults

\$ _____

Temporary Cash Assistance

\$ _____

Annuity

\$ _____

Alimony

\$ _____

Trust Fund Income

\$ _____

Parental Authority

\$ _____

Other Sources #1

Name: _____

\$ _____

Information Source: _____

Other Sources #2

Name: _____

\$ _____

Information Source: _____

Client Identification No. _____

Other Sources #3 Name: _____
\$ _____ Information Source: _____

Assets

Checking Account:	Savings Account:	Vehicles:
\$ _____	\$ _____	\$ _____
Real Estate:	Stocks:	Bonds:
\$ _____	\$ _____	\$ _____
Money Market:	IRA:	CDs:
\$ _____	\$ _____	\$ _____

Subsidized Food and Housing

<input type="checkbox"/> Food Stamps-Independence Card	<input type="checkbox"/> Housing Opportunities Commission
<input type="checkbox"/> Housing and Urban Development	<input type="checkbox"/> Housing Unlimited Inc
<input type="checkbox"/> Maryland Energy Assistance Program	<input type="checkbox"/> Rental Assistance
<input type="checkbox"/> Coalition for the Homeless	Site Name: _____

Insurances

Medicaid

Has the client applied for Medicaid? Yes No Application Date:

Has the client been denied Medicaid Yes No Denial Date:

Reason for Denial:

Managed Care Organization: _____

Type of Medicaid: Medicaid Based on Low Income ONLY

Employed Individuals with Disabilities (EID)

Qualified Medicare Beneficiary (QMB)

Specified Low Income Medical Beneficiary (SLMB)

Client Identification No. _____

- Temporary Disability Assistance Program (TDAP)
 Medicaid through Primary Adult Care (PAC)
 Medicaid through Supplemental Security Income (SSI)

Grey Zone-Uninsured Eligibility Span

Effective Date: _____ Expiration Date: _____

Medicare

- Part A Effective Date: _____
 Part B Effective Date: _____
 Part C Effective Date: _____

Medicare Advantage Group Type: _____
 Part D: Effective Date: _____

Is this through the Managed Care Organization from Part C? Yes No

Private Insurance

Insurance: _____ Effective Date: _____
Source of Insurance: _____ Explain: _____

Signature of Staff Obtaining Information: _____ Date: _____

Client Identification No. _____

Supported Employment Assessment

1. Work History

- a. Enter the following for each previously held job: Do they have a work history?

_____ Yes _____ No

2. Ability to Choose a Job:

- a. On a scale of 1 to 5 (5 being the highest level of ability), how would you rate your ability to choose a job? _____

- b. Please indicate your employment interests and related skills.

- c. What occupations relate to your interests and skills?

- d. Do you have a career plan? Where do you see yourself in 5 years?

3. Ability to Find a Job

- a. On a scale of 1 to 5 (5 being the highest level of ability), how would you rate your ability to find a job? _____

4. Ability to Keep a Job

- a. On a scale of 1 to 5 (5 being the highest level of ability), how would you rate your ability to keep a job? _____

5. Work Perspectives

- a. What are your expectations for a job? (include salary range, locations, days, and hours)

Signature of BTW Staff Interviewing Client: _____ Date: _____

Client Identification No. _____

Vocational Profile

1. What type of position and job setting do you think they will be most successful in?
2. This plan will include some or all of the following activities. Please check which activities you will recommend to the client.

Job Development and Work Based Activities

- Immediate Job Search with a clear job choice
- Job Site Visit
- Job Shadowing
- Informational Interviews
- Mock Interviews
- Work Trial
- Employment Networking

Additional Next Steps

- Montgomery Works Visit
- Pocket Resume
- Obtain employment references
- Additional benefits counseling

Signature of Staff Completing Form: _____ Date: _____

Client Identification No. _____

SEP Program Placement A

General Information:

Hired Date: _____

Start Date: _____

Consumer Job Title: _____

Job Type: _____

Rate of pay: _____

Placement Type: _____

Disclosed: Yes No

Work Schedule: _____

Hours per week: _____

Estimated Weekly Coaching Hours: _____

Tax Credit Information completed and given to employer: Yes No

Benefits Information:

Eligible for health insurance benefits? Yes No

Vacation (Days per Year): _____

Signature of Staff Completing Form: _____

Date: _____

Signature of Workforce Development Specialist: _____

Date: _____

Client Identification No. _____

Job Loss Checklist A

Start Date: _____

Job End Date: _____

How many months did the client work in this position? _____

Disclosed? Yes No

Reason for Leaving: _____

Cause: _____

Does the consumer currently have other paid employment? Yes No

Next Steps

- Update Treatment Team
- Presenting case in staff meeting
- Update or new referral to DORS
- Supported Employment Assessment
- Update of goals/vocational plan with new objectives

Job Development and Work Based Activities

- Immediate Job Search with a clear job choice
- Job Site Visit
- Job Shadowing
- Informational Interviews
- Mock Interviews
- Work Trial
- Employment Networking

Additional Next Steps

- Montgomery Works Visit

Client Identification No. _____

- Pocket Resume
- Obtain employment references
- Additional benefits counseling

Signature of Staff Completing Form: _____

Date: _____

Signature of Workforce Development Specialist: _____

Date: _____

Client Identification No. _____

SEP Program Placement B

General Information:

Hired Date: _____

Start Date: _____

Consumer Job Title: _____

Job Type: _____

Rate of pay: _____

Placement Type: _____

Disclosed: Yes No

Work Schedule: _____ Hours per week: _____

Estimated Weekly Coaching Hours: _____

Tax Credit Information completed and given to employer: Yes No

Benefits Information:

Eligible for health insurance benefits? Yes No

Vacation (Days per Year): _____

Signature of Staff Completing Form: _____

Date: _____

Signature of Workforce Development Specialist: _____

Date: _____

Client Identification No. _____

Job Loss Checklist B

Start Date: _____

Job End Date: _____

How many months did the client work in this position?

Disclosed? Yes No

Reason for Leaving: _____

Cause: _____

Does the consumer currently have other paid employment? Yes No

Next Steps

- Update Treatment Team
- Presenting case in staff meeting
- Update or new referral to DORS
- Supported Employment Assessment
- Update of goals/vocational plan with new objectives

Job Development and Work Based Activities

- Immediate Job Search with a clear job choice
- Job Site Visit
- Job Shadowing
- Informational Interviews
- Mock Interviews
- Work Trial
- Employment Networking

Additional Next Steps

- Montgomery Works Visit

Client Identification No. _____

- Pocket Resume
- Obtain employment references
- Additional benefits counseling

Signature of Staff Completing Form: _____

Date: _____

Signature of Workforce Development Specialist: _____

Date: _____

Appendix F

IRB Approval Form



1204 Marie Mount Hall
College Park, MD 20742-5125
TEL 301.405.4212
FAX 301.314.1475
irb@umd.edu
<http://www.umresearch.umd.edu/IRB>

Initial Application Approval

DO NOT REPLY TO THIS EMAIL ADDRESS AS IT IS UNMONITORED

To: Principal Investigator, Dr. Ellen Fabian, EDCP
Student, Glacia Ethridge, EDCP

From: James M. Hagberg
IRB Co-Chair
University of Maryland College Park

Re: IRB Protocol: 11-0339 - Determining the Variables that contribute to Job tenure for people with psychiatric disabilities participating in an evidence-based supported employment program

Approval June 23, 2011
Date:

Expiration June 23, 2012
Date:

Application: Initial

Review Expedited
Path:

The University of Maryland, College Park Institutional Review Board (IRB) Office approved your Initial IRB Application. This transaction was approved in accordance with the University's IRB policies and procedures and 45 CFR 46, the Federal Policy for the Protection of Human Subjects. Please reference the above-cited IRB Protocol number in any future communications with our office regarding this research.

Recruitment/Consent: For research requiring written informed consent, the IRB-approved and stamped informed consent document will be sent via mail. The IRB approval expiration date has been stamped on the informed consent document. Please note that research participants must sign a stamped version of the informed consent form and receive a copy.

Continuing Review: If you intend to continue to collect data from human subjects or to analyze private, identifiable data collected from human subjects, beyond the expiration date of this protocol, you must submit a Renewal Application (<http://www.umresearch.umd.edu/IRB/renewal.html>) to the IRB Office 45 days prior to the expiration date. If IRB Approval of your protocol expires, all human subject research activities including enrollment of new subjects, data collection and analysis of identifiable, private information must cease until the Renewal Application is approved. If work on the human subject portion of your project is complete and you wish to close the protocol, please submit a Closure Report (<http://www.umresearch.umd.edu/IRB/closure.html>) to irb@umd.edu.

Modifications: Any changes to the approved protocol must be approved by the IRB before the change is

implemented, except when a change is necessary to eliminate an apparent immediate hazard to the subjects. If you would like to modify an approved protocol, please submit an Addendum request (<http://www.umresearch.umd.edu/IRB/addendum.html>) to the IRB Office.

Unanticipated Problems Involving Risks: You must promptly report any unanticipated problems involving risks to subjects or others to the IRB Manager at 301-405-0678 or jsmith@umresearch.umd.edu

Additional Information: Please contact the IRB Office at 301-405-4212 if you have any IRB-related questions or concerns. Email: irb@umd.edu

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Appendix G

Script

To: Back to Work Program Staff

Please read the following script to clients on your caseload that have a completed supported employment assessment beginning November 1, 2009. Once you have read the script to the client, please hand the client the Informed Consent form to read. Once you read the script and hand the Informed Consent Form to the client, please allow the client the opportunity to read over the Informed Consent Form alone to ensure no coercion took place and to protect clients' confidentiality. It is suggested that you hand the Informed Consent Form to clients before or after your session to allow clients the opportunity to read over the information and return the consent form in the drop box if they decide to participate in this study. Clients choosing to participate in the study are to return the form in the assigned drop box at your particular location (Silver Spring or Bethesda Office).

Script:

Dear Potential Participant:

My name is Glacia Ethridge and I am a Doctoral Candidate in the Counselor Education Program at the University of Maryland, College Park. Under the supervision of Dr. Ellen Fabian, the name of my study is "Determining the Variables That Contribute to Job Tenure for Clients With Psychiatric Disabilities Participating In An Evidenced-Based Supported Employment Program". The purpose of this study is to explore how personal factors contribute to whether or not you get a job, and how long you remain employed. We are inviting you to participate in this research study because you are receiving services from the Back to Work Program at St. Luke's House and because you have a current supported employment assessment. We are seeking your permission to view your electronic vocational files in the St. Luke's House database. In order to give us your consent, you will need to sign this consent form and place it in the marked locked box in the lobby of the office where you receive services (either Silver Spring or Bethesda). After we receive your consent form, we will send you a \$5.00 Starbucks Giftcard.

If you are interested in participating in this study, please read the Informed Consent Form and provide your signature and an address to where you would like for you Gift Card to be mailed. It is important that you complete this form without the assistance from any Back to Work Program Staff to ensure confidentiality that you are participating in this study. Please note that your choosing to participate in this study will not impact the services you receive from the Back to Work Program at St. Luke's House. If you have any questions about the study, please feel free to contact me at the email address and/or phone number provided to you in the Informed Consent Form.

Sincerely,

Glacia Ethridge, Doctoral Candidate

Glossary

1. Choice goals: “an individual’s intention to engage in a particular outcome” (Lent, 2005, p.106).
2. Job tenure: calculated from the date in which participants are placed on their first jobs after their supported employment assessment until participants are no longer employed on their jobs whereby they left or terminated.
3. Outcome expectations: refer to the “beliefs about the consequences or outcomes of performing particular behaviors” (Lent, 2005, p. 104).
4. Psychiatric disabilities: defined as (1) having a major mental health diagnosis; (2) of at least 6 months duration; and (3) which substantially impairs functioning in a major life domain of living, learning or working in the community (Equal Employment Opportunity Commission, 1997).
5. Self-efficacy: “beliefs about the consequences or outcomes of performing particular behaviors” (Lent, 2005, p. 105).
6. Supported Employment: “competitive work in integrated settings (a) for individuals with severe handicaps for whom competitive employment has not traditionally occurred, or (b) for individuals for whom competitive employment has been interrupted or intermittent as a result of severe disability and who, because of their handicap need ongoing services to perform such work (Federal Register, 1987).

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