

## PERSONS WITH SERIOUS MENTAL ILLNESS AND EMPLOYMENT

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PERSONS WITH SERIOUS MENTAL ILLNESS AND EMPLOYMENT

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## VITA

William Anthony Philadelphia was born to Winslow Compton and Eunice Alleyne Philadelphia in Georgetown, Guyana, South America. He and his family emigrated to the United States soon after he completed high school in Guyana. After working some time in New York City he enlisted in the United States Air Force (USAF) and was stationed in various parts of the world. While a member of the USAF he completed an Associates degree in Avionics and a Bachelor of Science degree in Social Psychology. After leaving the USAF he began working with emotionally and behaviorally challenged youth in California. While residing in California he also worked in psychiatric hospitals, worked as a physical therapy aide, and worked for various on-call nursing agencies. With this experience he and his family moved to Georgia where he worked in psychiatric hospitals and for a local mental health agency. He completed a Masters degree in Community Counseling at Columbus State University and some time later began working on his Doctorate in Rehabilitation Counseling at Auburn University. He has functioned in the capacities of community mental health therapist and group home supervisor, private counselor, and as a non-profit community leader. He is married to Ofelia Santos and they have two children, David Alleyne and Danica Alison.

DISSERTATION ABSTRACT  
PERSONS WITH MENTAL ILLNESS AND EMPLOYMENT

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A significant number of our population includes persons with disabilities. In addition to independence, persons with disabilities want to have the opportunity to engage in meaningful work. Persons who live with serious and long-term mental illnesses continue to experience many obstacles in their quest for employment. Research results so far have been mixed in identifying the criteria necessary for persons with serious mental illness like bipolar disorder to enter and maintain successful long-term placement in employment.

This research assessed how professionals (human service providers) in the field utilized current best practices in supported employment, medication management, and case management to enable consumers enter and remain in the workforce. The target population consisted of 208 human service providers (rehabilitation counselors, mental health counselors, supported employment specialists, psychiatric nurses, case managers,

and job coaches/job develop specialists) working in three Southeastern states. These 208 human service providers in these three states responded to a 66 statement self-report survey that asked them to identify best practices that they found enabled persons diagnosed with bipolar disorder to enter and remain in the workforce. The surveys were mailed to a population of 342 human service providers in 6 agencies and 208 responded resulting in a 61% response rate.

Analyses showed a statistically significant difference between the human service providers who utilized the three best practices and those who did not. Human service providers agreed that consumers were more able to work when medication management, case management, and supported employment practices were in place than when they were not. Medication management was ranked as the most important of the three best practices. Long term and ongoing case management practices was ranked as the second most important and supported employment practices was ranked third. The findings suggest that persons diagnosed with bipolar disorder must be made aware of the importance of medication and symptom management and must have access to medication management services. Agencies could thus be better equipped to enact policies that support the independence and work environment of persons diagnosed with bipolar and other serious mental illness. The results from this study add to the field of knowledge and could further clarify those criteria necessary to enable this group of persons with bipolar disorder to enter and remain a part of the workforce.

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## I. INTRODUCTION

Work is an essential part of our lives. It is taken for granted that everyone who wants to work will be able to do so, however, persons with disabilities face challenges as they navigate the world of work. Those who live with serious mental illnesses such as schizophrenia, bipolar disorder, and anxiety disorders, face even tougher challenges. These challenges include but are not limited to societal stigma, the cyclicity of the symptomology of the illness, poor coping skills that may lead to co-occurring illnesses, inadequate support systems, and poor work skills.

Consumers with severe mental illnesses have difficulty maintaining employment. Even those who are in supported employment status experience terminations due to symptoms of their mental illness, poor interpersonal functioning, job dissatisfaction, dependability issues, and substance abuse (Becker, Drake, Bond, Xie, Dain, & Harrison, 1998; MacDonald-Wilson, Revell, Nguyen, & Peterson, 1991). While consumers without serious disabilities may take for granted that they could find work if they so desired, consumers who are diagnosed with serious or significant disabilities have a “decreased likelihood” that they will transition into and remain in the workforce (Baron & Salzer, 2002; Hayward & Schmidt-Davis, 2003; MacDonald-Wilson, Rogers, & Anthony, 2001).

There is an 82.1% employment rate among those who are not disabled and there is a 41.3% employment rate among those who have a mental disability (Stoddard, Jans Ripple, & Kraus, 1998). Among those with disabilities aged 21 to 64 only 30% are

employed and only 16.4% of those are able to work year-round, full time (US Census Bureau, 2000).

Consumers with serious mental illness such as schizophrenia, depression, and bipolar disorder, therefore continue to face many barriers to successful entry into the workplace. Although many psychosocial and medical interventions are part of the current treatment regimen for those with mental illness, they continue to have difficulties with employment. Psychosocial methods may include psychotherapeutic counseling, supported employment (SE), assertive community treatment (ACT), sheltered workshops (SW), clubhouse model, program with industry (PWI), long-term case management, workplace accommodations, the strengths model of community care, and individual placement and support (IPS) (Barker, 1994). Medical interventions include the use of antipsychotic and mood stabilizing drugs which may include Lithium, Zyprexa, Seroquel, Geodon, Prozac, and Depakote (Glick, Suppes, DeBattista, Hu, & Marder, 2001; McCabe, 2003). While the focus of psychosocial interventions might be the maintenance or increase in a consumer's functionality, the primary focus of medical intervention is to stabilize the consumer's symptoms while also reducing their recurrences (McCabe, 2003).

Psychotherapeutic counseling methods enable persons with bipolar disorder (BP) to be better able to address relapse fears, reduce stress, increase coping strategies, and improve interpersonal relationships (Hilty, Brady, & Hales, 1999; Patelis-Siotis, 2001; Perry, Tarrier, Morris, McCarthy, & Limb, 1999). These methods include individual, family, and group therapy as well as support groups for those who have co-occurring diagnoses such as drug and alcohol abuse. One specific form of therapy used is cognitive-

behavioral therapy which enables consumers to address changes in their thinking pattern which occurs in those diagnosed with BP (Hilty et al., 1999).

Supported employment (SE) has been proven to be an effective method in enabling consumers with serious disabilities to enter and remain in competitive work environments (Anthony, 1980; Wehman, 1987). The focus of SE is that the consumer with a disability is able to work in a competitive setting alongside non-disabled peers and that the consumer has ongoing support. An SE program can be successful if it (a) incorporates involving consumers in all aspects of the workplace, (b) provides supports quickly when issues demand them, and (c) provides cooperation between service providers and family members (Marrone & Gold, 1994). SE may also incorporate rapid job searches, provide consumer preferences in deciding which job he or she wants, and have close relationships with mental health professionals (Bond, Becker, Drake, Rapp, Meisler, et al., 2001).

Assertive community treatment (ACT) incorporates a multi-disciplinary approach in the treatment and support of consumers diagnosed with BP and other severe psychiatric disorders such as schizophrenia and depression. Members of this team may include psychiatrists, psychologists, nurses, case-managers, substance abuse therapists, and vocational rehabilitation counselors (Lieberman, Hilty, Drake, & Tsang, 2001; Phillips, Burns, Edgar, Mueser, Linkins, et al., 2001). Services provided by the team may change depending on whether the consumer is experiencing the acute, stabilization, stable, or recovery phase of the illness (Lieberman et al., 2001). In the acute phase the focus is on modifying medication dosages that could lead to better stabilization, while in the recovery phase the focus may be on work and relationship issues. ACT is designed to

provide long-term individualized services wherever the consumer needs them seven days a week 24 hours a day (Phillips et al., 2001).

Sheltered workshops (SW) were designed as a protected environment providing transitional employment for people with disabilities as they increased in their ability to work in competitive settings (Black, 1992; Rosen, Bussone, Dakunchak, & Cramp, 1993). SW continues to be an option for those whose severe mental illness seems intractable and who rely on institutional work programs to help them be productive (Black, 1992). Some consumers in SW programs have been transferred to SE programs resulting in being able to enter competitive work settings, but researchers have called for some continued implementation of SW programs for consumers with long-term severe mental issues (Rosen et al., 1993).

The Clubhouse model of psychosocial rehabilitation is structured so that peers support each other in work issues, social interactions and empowerment (Stein, Barry, Van Dien, Hollingsworth, & Sweeney, 1999). This model began in the 1940's and historically stressed supportive and cooperative interaction between peers diagnosed with severe mental illness (Stein et al, 1999). Peer support networks have not had wide use among programs that provide services to consumers diagnosed with serious mental illness (Peterson, 1995). Research has shown that consumers engaged in the Clubhouse programs tend to work more hours than persons in ACT programs (Stein et al, 1999).

The Individual placement and support (IPS) program is designed to help consumers diagnosed with severe mental illness quickly enter and remain in the workforce (Lehman, Goldberg, Dixon, McNary, Postrado et al., 2002). The six primary principles of IPS include (1) the goal of competitive employment in integrated settings,

(2) rapid job search, (3) integration of rehabilitation and mental health, (4) attention to the person's preferences, (5) continuous and comprehensive assessment, and (6) time-unlimited support (Bond, 1998). The principles of this model differ from the standard vocational rehabilitation model which advocates assessment, training, and then placement (Bond, 1998). Research has shown that IPS principles better assist consumers in adapting to their work situation because they are invested and interested in the process, they benefit from receiving the help they need quickly, and they have ongoing support (Mueser, Drake, & Bond, 1997).

Long-term case management is shown to greatly benefit consumers with severe mental illness maintain stability and remain in the workforce. Long-term support is advocated primarily because of the prolonged and unpredictable nature of the illness (Frey, 1994). Case management services may include various models: ACT, strengths case management, rehabilitation case management, broker case management, clinical case management, and intensive case management (Mueser, Bond, & Drake, 1998). A meta-analysis of case management studies has shown that consumers utilizing case management services realized greater symptom improvement, used fewer hospital days, made more contact with mental health and other services, and showed greater improvements in level of functioning (Ziguras & Stuart, 2000).

### Statement of the Problem

According to the United States Census (2002) there are 51 million persons with known disabilities. Among those with known disabilities there are 5.9 million persons with a mental illness and of those, 4-5 million persons are diagnosed with serious mental



illnesses (SMI). Empirical research on what helps persons with serious mental illness and especially those with bipolar disorder enter and remain in the workforce is inadequate and confusing.

Researchers have focused on medication and non-medication solutions for enabling those with bipolar disorder who enter and remain in the workforce. In order to maintain psychological stability, some researchers have concluded that adherence to a medication regimen is necessary (Glick et al., 2001). Medication issues relate to utilizing medications that reduce current symptoms and produce the least side effects while addressing the consumer's need for long-term maintenance of symptoms (Glick et al., 2001). Non-medication solutions include psychosocial interventions such as psychotherapy, family support, case management, and vocational specialists. Researchers have called for further investigation in these areas because there appears to be no consensus among them. There is little research in incorporating both the medical and non-medical avenues in enabling consumers with bipolar disorder to enter and remain in the workforce (Bond & Meyer, 1999). Others have advocated for treatments for co-occurring illnesses (Drake, Essock, Shaner, Carey, Minkoff et al., 2001), utilizing the Program for Assertive Community Treatment (PACT) model and other case management programs (Phillips et al., 2001).

A few issues affect the applicability of research conclusions in helping those with bipolar disorder achieve and maintain employment. One issue in researching those with bipolar disorder is that consumers who have been diagnosed with the disorder may display different symptoms thus leading to less conclusive evidence on what works for those in this population. Another issue is that some consumers diagnosed with the illness

may experience co-occurring illnesses such as symptoms of schizophrenia while in the manic phase of the illness or substance abuse thus further reducing the applicability of findings. One final issue is that research findings may not be acceptable or accessible to professionals in the field thus further reducing our ability to provide “best practices” for our consumers with bipolar disorder.

### Purpose of the Study

The purpose of this study was therefore to determine whether the utilization of current “best practices” have or have not been beneficial in determining consumers’ ability to enter and remain in the workforce. Current best practices include utilizing supported employment, assertive community treatment teams, enabling rapid entry into consumer desired jobs, providing time-unlimited support and case management, and providing medication management. These “best practices” have not been extensively studied in consumers with bipolar disorder which raises the issue of generalizability of current research findings to this population (Anthony, Rogers, & Farkas, 2003).

### Research Questions

This study explored the following research questions:

1. How would human service professionals rank the importance of three best practice strategies in helping consumers diagnosed with bipolar disorder remain employed as indicated on a self-report survey?
2. Are there effective strategies that help consumers diagnosed with bipolar disorder remain in the workplace?

## Hypotheses

The null hypotheses for this study are:

- H<sub>0</sub>1. There is no significant difference on the scores of a self-report survey between human service professionals who utilize medication best practices and those who do not to help consumers remain in the workforce.
- H<sub>0</sub>2. There is no significant difference on the scores of a self-report survey between human service professionals who utilize case management best practices and those who do not to help consumers remain in the workforce.
- H<sub>0</sub>3. There is no significant difference on the scores of a self-report survey between human service professionals who utilize supported employment best practices and those who do not to help consumers remain in the workforce.

## Limitations of the Study

This study examined the use of “best practices” in helping consumers diagnosed with bipolar disorder (BP) be able to enter and remain in the workforce. Professionals responded to a survey reflecting best practices in supported employment, case management and medication management. There are some factors that limit the generalizability to the overall population of persons diagnosed with BP. First, this study was not a true experimental design because a convenience sample of service providers was used. Second, it may be difficult for providers to limit their responses to persons diagnosed with solely bipolar disorder since co-occurring disorders may be also be

diagnosed in consumers. Third, providers' long or short experience in working with persons diagnosed with BP can positively or negatively affect their ability to determine which variables can be used successfully. Thus that limitation may also affect the results of this research.

### Definition of Terms

*Consumer:* The individual who lives with a serious mental illness.

*Disability:* In the present context, according to the law, it refers to mental impairment that substantially limits one or more of the major life activities of an individual, and the person has to have a record of such an impairment, and has been regarded as having such an impairment (ADA, Section 902).

*Functional recovery:* the individual is able to perform in his or her job, be able to maintain good interpersonal relationships, and enjoy some form of recreation.

*Schizophrenia:* According to the DSM IV (1994) this is a mental disorder lasting for at least 6 months, including at least 1 month with two or more active-phase symptoms. Active phase symptoms include delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior, and other symptoms. Schizophrenia is accompanied by marked impairment in social or occupational functioning.

*Serious mental illness:* A diagnosable mental disorder found in persons aged 18 years and older that may be long lasting and severe that it seriously interferes with an individual's ability to take part in major life activities.

*Symptomatic recovery:* This is defined as the individual experiencing a lower level of symptoms.

*Symptomology:* the noted abnormalities in an individual's mood, thoughts and behaviors due to the individual's mental illness.

*Treatment compliance:* The individual follows their medication regimen as prescribed by their Medical Doctor.

#### Acronyms

ACES	Achievement Center Easter Seals
ACT	Assertive community treatment
ADRS	Alabama Department of Rehabilitation Services
BP	Bipolar disorder
EAMH	East Alabama Mental Health
FDA	Federal Drug Administration
GRD	The Georgia Department of Labor, Rehabilitation Division
IPS	Individual placement support
MAMHA	Montgomery Area Mental Health Authority
MDRS	Mississippi Department of Rehabilitation Services
NIMH	National Institute of Mental Health
PWI	Projects with Industry
WINS	Winning Ideas Network for schools
SE	Supported employment
SMI	Serious mental illness
SSRI	Selective Serotonin Reuptake Inhibitor
VR	Vocational rehabilitation

## II. REVIEW OF THE LITERATURE

Consumers with disabilities who want to be involved in the world of work have difficulties entering and remaining in the workforce (Baron & Salzer, 2002; Rutman, 1994). Those who live with mental disabilities have higher levels of unemployment than those living with physical disabilities. These individuals continue to face many barriers to successful entry into the workplace. Although many psychosocial and medical methods are part of the current treatment regimen for those with mental illness, they continue to have difficulties with employment.

The purpose of this section is to examine the needs and interventions for those with serious mental illness who want to enter and remain in the workforce. The first section presents data on those with serious mental illness, statistics related to their participation in the workforce, and some societal issues. Next to be addressed will be the comorbidity with other illnesses, and the impact of the illness both on the individual and his or her family. The different medical and psychosocial treatment interventions that have been utilized by professionals in working with those who live with bipolar disorder will then be described. Finally, this review of the literature addresses how accommodations in the workplace can provide viable means to maintaining employment. While the purpose of this paper focuses on helping those diagnosed with bipolar disorder constant reference will be made to consumers diagnosed with serious mental illness or

bipolar disorder. This is due to the lack of research that specifically focuses on only bipolar disorder, and thus where necessary reference will be made to studies that included not only those with bipolar disorder but also those with other serious mental illness such as schizophrenia and unipolar depression.

### Individuals with Disability and Employment

Individuals with disabilities experience difficulties transitioning into and remaining in the workplace (MacDonald-Wilson, Rogers, & Anthony, 2001). Included among those who are categorized as disabled are a group of consumers with psychiatric disabilities. Studies have shown that these consumers have greater difficulties than their peers with other disabilities in finding and maintaining employment due to difficulties in social, emotional, and cognitive functioning (MacDonald-Wilson et al., 2001; Tse, 2002) and remain “underemployed and unemployed” at higher rates than individuals who do not have a disability (Fabian, 1999).

According to the United States Census (2002) there are 51 million consumers with known disabilities. Among those with disabilities who are not institutionalized between the ages of 21 to 64 there is a 30% employment rate. Only 16.4% of those are able to work year-round, full time (US Census Bureau, 2000). Of the 5.9 million consumers diagnosed with a mental illness, 4-5 million are diagnosed with serious mental illnesses (SMI). These consumers who are diagnosed with serious or significant disabilities have a reduced possibility that they will achieve employment (Hayward & Schmidt-Davis, 2003). Persons without a disability in the general population have an

82.1% employment rate, but the employment rate among those with a mental disability is only 41.3% (Stoddard, Jans, Ripple, & Kraus, 1998, p. 10).

Even though consumers with psychiatric disabilities desire to enter the workforce, many are unable due to system barriers, stigma, and reduced functionality (Fabian, 1999; Hayward & Schmidt-Davis, 2003; Rutman, 1994). System barriers include time-limited services, poor response of the system to the cyclical nature of mental disorders, and poor cooperation between community-based agencies and vocational rehabilitation counselors. Stigma towards persons with disabilities is reflected in hiring practices and is a major obstacle towards successful vocational outcomes for persons with severe mental illness (Garske & Stewart, 1999). The very nature of psychiatric disability results in reduction of a consumer's ability to interact with others socially, maintain appropriate cognitive and affective functioning, and perform necessary daily basic functions. The Social Security Administration and the Rehabilitation Services Administration are addressing the relevant issues aimed at reducing the dependency on governmental cash benefits by persons with disabilities while helping them to find employment.

### *Social Security Issues*

The federal and state governments have in place a system that provides an income for individuals with disabilities. Presently there are two programs that provide monetary and health benefits to consumers with disabilities — Supplemental Security Income (SSI) and Social Security Disability Income (SSDI). According to the Social Security Administration (2004), SSI is paid to individuals who are disabled, blind, and who have limited income and resources, while SSDI is paid to those who have a work history. Since the inception of these two programs, and especially after the Rehabilitation Act of



1973, there was a steady increase in both the number of individuals served and the types of disabilities covered (U.S. Social Security Administration, 2004). This increase is becoming a larger portion of state and federal budgets. In 1998, 4.5 million consumers were receiving SSI (U.S. Social Security Administration, 1998). By January 2003, two million more individuals were receiving Federal SSI payments averaging \$381 a month (U.S. Social Security Administration, 2003). Those who have mental disorders make up the single largest group of persons with disabilities and receive approximately 25% of all federal disability funds (Garske, Williams, & Schiro-Geist, 1999, p.39).

Due to the rise in numbers of individuals who are considered disabled and the resulting increased costs in supporting these individuals, it is becoming increasingly evident that research needs to focus on how to assist persons with disabilities to transition into and maintain employment. Even though Social Security is a benefit, some consider it a disincentive for those with disabilities returning to or entering the workforce due to their over-reliance on Social Security and/or fear of losing it (Mowbray, Bybee, & Collins, 2000). The Social Security Administration recognizes this fact and has instituted the Ticket to Work program. One of the goals of this program states that “expanded employment opportunities for these individuals also will increase the likelihood that these individuals will reduce their dependency on Social Security and SSI cash benefits” (20 CFR 411.105).

An added system cost to the Social Security system is the financial support received by consumers with long-term severe disabilities. A significant number of those on long-term disability have not historically paid into the present system but will continue to be served by it (Garske, Williams, & Schiro-Geist, 1999) unless service

providers utilize the tools now at their disposal to enable them to become workers. One of the resulting benefits is that these new workers will be contributing to the tax base (Moon & Lehman-Griffin, 1988).

### *Rehabilitation Focus*

The focus of present Federal Vocational Rehabilitation (VR) legislation is to enable consumers with all types of disabilities to enter and to remain in the workforce thereby being able to “achieve equality of opportunity, full inclusion and integration in society, employment, independent living, and economic and social self-sufficiency, for such individuals” (Rehabilitation Act of 1973, Sec 2(a)(B), amended). Those found eligible receive VR services aimed at both enabling them to work while also addressing their disability (Gibbs, 1991). Those who have the most significant disabilities have the highest priority in receiving services (Rehabilitation Act of 1973, amended). An 8 year longitudinal study presented to the Rehabilitation Services Administration underscores the need for providing services to people with severe disabilities. Hayward and Schmidt-Davis (2003, p. 9) in their final report to the Vocational Rehabilitation Services Administration noted that those who are mentally ill make up the second largest group of consumers with significant disabilities who receive services. The Vocational Rehabilitation Services Administration wants services focused on this group of disabled persons because successful closure rates, especially for those with psychiatric disabilities, have not progressed over the years in spite of many efforts to do so (Rutman, 1994).

### *Low Skill Work*

Persons with disabilities often times find themselves at the unskilled end of the work spectrum with 25% of persons with disabilities working as machine operators, food

preparers, service jobs, or sales (Packaged Facts, 1997). Rarely are these individuals seen working as teachers, physicians, computer programmers, or police and firefighters (Packaged Facts, 1997). With such a significant percentage of persons with disabilities working in low wage labor market jobs it will be difficult for them to enter occupations with the largest projected growth rates: systems analysts, general managers and top executives, registered nurses, computer support specialists, and teacher assistants (Bureau of Labor Statistics, Employment Projections, 1999). This is problematic because growth in employment areas such as administrative support functions, fabricators and laborers is expected to be very slow as American industry continues to experience a shift from manufacturing to more computer and systems management (Bureau of Labor Statistics, Employment Projections, 1999). Persons with disabilities may not get opportunities to work in a broad range of industries with a broad range of co-workers further limiting their expectations for future employment (Fabian, 2000). Researchers are using Social Cognitive Career Theory (SCCT) to explore how persons with severe mental illness view themselves and the environment in which they function, the relationships they have, and the behaviors they engage in to help them learn how to explore careers rather than settling for any job (Fabian, 2000; Kravetz, Dellario, Granger, & Salzer, 2003; Strauser, Lustig, Keim, Ketz, & Malesky, 2002). Fabian (1999) proposes that focusing on consumers' strengths and careers will lessen the dependence on low-skill jobs by persons in this disability group.

#### *Cost of Services*

Several states and the federal government have begun to experience funding shortfalls as they respond to ever increasing numbers of persons who are supported by

SSI and SSDI and other publicly funded programs. According to the Government Accounting Office (GAO), as of 1990 the direct costs for serving those with mental illness was \$69.3 billion and the indirect costs increased the total to \$78.5 billion and this continues to rise (GAO/HEHS-94-34). The indirect costs, which cannot be accurately measured, include the legal, judicial, social services, jail, probation and other sectors of society who help in the care of persons with severe mental illness (Hu & Jerrell, 1998). The societal costs of unipolar depression have been studied widely but to date few studies delineate the costs of bipolar disorder (Simon, 2003). These societal costs include reduced or lost productivity due to the illness, companies needing to hire replacement workers during periods when identified workers experience increase in symptoms, and increased use of overall medical services that may include services not primarily aimed at reducing the unipolar depressive symptoms (Simon, 2003). According to Hilty, Brady, and Hales (1999, p. 202), in 1990 bipolar disease cost \$15.5 billion in reduced or lost output in the labor market — days not worked as the outcome. They report that since bipolar disorder is a chronic disease involving ever increasing long-term direct and indirect costs, it may be time for us to weigh the cost of present treatment versus the long-term economic burden on the economy (Hilty et al., 1999).

Bovbjerg's report to Congress (2001, p. 1) indicated that in 1999, 17% of all Social Security beneficiaries were disabled beneficiaries and their families. Workers accounted for 85% of all beneficiaries and 25% of those beneficiaries had diagnoses of mental disorders with the number continuing to rise each year (Social Security Administration, 2002). It thus seems that present funding streams may not be able to handle the ever-increasing disability roles. This is not a new issue since even as early as

1981 researchers were suggesting that facilitating individuals with disabilities into the workforce would reduce the needed public funding for this group (Wehman, 1981).

#### *Rehabilitation Closure Employment Rates*

Rehabilitation closure rates for consumers with mental disabilities have been lower than those for consumers with physical disabilities (Marshak & Bostick, 1990; Rutman, 1992). Rutman (1992, p. 15) reported that between 1984–1988 employment rates for persons with physical or sensory disabilities averaged 76% while the employment rates for persons with mental illness was 57%. In 1992, Andrews, Barker, Pittman, Mars, Struening and laRocca examined closure rates for 545,746 individuals between 1977 and 1984 who entered the competitive workforce. They reported that successful rehabilitation rates were much higher for individuals with physical disabilities than for individuals with psychiatric disabilities even though the latter had higher rates of competitive employment. There was an increase in the number of persons with severe disabilities being served by the state-federal VR system primarily due to the Rehabilitation Act of 1973 (Andrews et al., 1992).

Marshak and Bostick (1990) reported similar findings among a sample of persons with physical and mental disabilities. Those with severe psychiatric disabilities had a 54% unsuccessful closure rate and a 25% successful closure rate compared to an over 50% successful closure rate for those with physical disabilities (Marshak & Bostick, 1990, p. 247).

Persons with disabilities are not always aware of or willing to engage those who can help them in transitioning into the work force thereby maintaining the high percentage of those who are unemployed. Rutman (1994, p. 15) reported a poll that

showed only 60% of persons with a disability were familiar or had contact with the federal/state VR system. Consumers and family members who want more access to services have to be more involved in the consumer empowerment movement. By assuming a more assertive stance in advocating for consumers' role in society, individuals with disabilities and their families will function more as active participants in their interactions with professionals and the systems which provide them services.

Overall, researchers have found that consumers experiencing significant disabilities as visual impairment or mental illness were less likely to be competitively employed than those consumers who had other less severe disabilities such as physical disabilities (Hayward & Schmidt-Davis, 2003). Being able to achieve competitive employment correlated positively with knowing different jobs, the non-monetary benefits of jobs, being young, having high gross motor and cognitive functioning, and not being too dependent on social security benefits (Hayward & Schmidt-Davis, 2003).

#### *The Value of Work for Persons with Disabilities*

Neff (1988) noted that work is not just an end in itself but rather that “work is an instrumental activity carried out by human beings, the object of which is to preserve and maintain life, which is directed at a planned alteration of certain features of our environment” (p. 6). Vocational rehabilitation (VR) and other support programs have had little success in helping consumers who have psychiatric disabilities become part of this endeavor called work (MacDonald-Wilson et al., 1991). Some of the reasons put forward in the literature include: ungainly bureaucratic systems, societal stigmatization, slow and poor support from VR and other support systems, the cyclic nature of the illness, and the early onset of the illness that results in lost social and work skill acquisition (Freedman &

Fesko, 1996; Tse & Walsh, 2001). Work is an important facet of life for all people and those who are living with psychiatric illnesses are no exception.

Freedman and Fesko (1996) questioned family members and consumers with significant disabilities about the meaning and value of work in their lives. When asked to describe different aspects of work, families and consumers offered differing opinions: consumers were most concerned about work productivity, compensation and benefits, and overcoming stigma and discrimination, while family members voiced concern over psychological functioning, self-esteem and socialization (Freedman & Fesko, 1996). Both consumers and family members also addressed the importance of how consumers were treated at work, the support they received from supervisors and providers (job coaches), whether or not to disclose their illness, and being placed in menial jobs (Freedman & Fesko, 1996). Even though it has been reported that consumers with severe mental illness and other disabilities usually are placed in low-skill jobs (Fabian, 1999), other researchers reported that consumers and their families paid more attention to being placed in menial jobs because of the consumers' level of education and job experience before being diagnosed with the illnesses (Freedman & Fesko, 1999).

Consumers with long-term mental illness thus do not seem to have realistic expectations about the relationship between work and compensation. While in the Freedman and Fesko study (1999) consumers expected to be paid more because of their prior experience and education, in another study (Becker, Bebout, & Drake, 1998) consumers expected to be paid more based on an inaccurate understanding of the relationship between type of work and compensation. In the latter study researchers suggested that lack of work experience and having others manage their finances might

have led the consumers in the study to have such unrealistic expectations even though they were able to get jobs based on their preferences (Becker et al., 1998).

A commonly held view is that when consumers have the opportunity to work in their preferred jobs their self-esteem increases. However, when work is used as the outcome measure there seems to be a weak association between work and self-esteem (Torrey, Mueser, McHugo, & Drake, 2000). In their sample of consumers with serious mental illness (SMI), Torrey et al. (2000) noted that increased self-esteem was reported by those consumers who worked the longest period of time. Consumers who reported high self-esteem experienced few symptoms of suicidality, depression, anxiety, and guilt (Torrey et al.).

It has been shown that individuals with disabilities can achieve competitive employment via supported employment. The Rehabilitation Act of 1973 (amended) has as one of its tenets that persons with disabilities be able to enter competitive employment in an integrated setting. Persons diagnosed with severe disabilities now have the supports that could enable them to manage their lives better and to enter and maintain employment (Wehman, 1988). Those diagnosed with severe mental illnesses like bipolar disorder need special supports in order to be able to enter the labor market and to work competitively.

### Bipolar Disorder and Employment

The *Diagnostic and Statistical Manual of Mental Disorders*, 4<sup>th</sup> edition (DSM IV, 1994) classifies mental disorders. Accordingly, “A person with a serious mental illness is defined as: An individual who meets the criteria for a DSM disorder during a 12-month period (excluding substance use disorders and developmental disorders) causing



functional impairment.” Functional impairment is defined as substantial interference with one or more major life activities including basic daily living skills (e.g., eating and bathing), instrumental living skills (e.g., maintaining a household and managing money), and functioning in social, family, and vocational/educational contexts (Task Force on the Homeless and Severe Mental Illness, 1992).

Severe mental illness (SMI) usually includes those who are diagnosed with schizophrenia, depression, bipolar and other mood disorders, and anxiety disorders. Symptoms of SMI may include experiencing auditory and/or visual hallucinations, paranoia, isolation from others, or behaving in odd or dangerous ways (DSM-IV, 1994). Those who experience these symptoms might also face barriers to successful employment and community integration reflected in the attitudes among professionals and others (Gething et al., 1994; Pescosolido, Monahan, Link, Stueve, & Kikuzawa, 1999). Others experience poor responses to stress (Bidzinska, 1984; Ellicott et al., 1990) and experience cognitive, perceptual, affective, and interpersonal deficits (Rutman, 1994).

Persons with disabilities have to cope with the difficulties of low incomes, poor housing, broken relations, and poor self-esteem. Mental illness is cyclic and the very nature of the disease may lead to swings in a person’s ability to be productive. Quality of life (relational and emotional functioning) is reduced in those experiencing various forms of mood disorders (Simon, 2003; Vojta, Kinosian, Glick, Altshuler, & Bauer, 2001).

A study of 86 consumers diagnosed with various forms of bipolar disorder (BP) found that those experiencing mania/hypomania reported reduced quality of life and those experiencing both mania and depression reported reduced quality of life mainly due to the depressive component of the illness (Vojta et al., 2001, p. 191). The researchers

(Vojta et al., 2001) posited that stressors, poor functional status, enduring traits, comorbid illnesses like substance abuse, or poor coping strategies may contribute to quality of life issues.

The National Institute of Mental Health (NIMH, 2001) estimates that there are 44 million consumers who have some form of diagnosable mental illness that meets the criteria found in the Diagnostic and Statistical Manual (DSM-IV, 1994). In the general population, it is estimated that three to seven percent have various forms of bipolar disorder (Hilty et al., 1999). Clinicians are urged to consider performing a differential diagnosis with persons diagnosed with unipolar depression (Hilty et al.). According to the DSM-IV (1994) bipolar disorder (BP) includes bipolar I, bipolar II, cyclothymic disorder, and bipolar disorder not otherwise specified. Bipolar I affects men and women equally, while bipolar II mostly affects women. The disease is usually first noticed during the ages of 15–19 or 20–24 but most consumers wait several years before seeking treatment (Hilty et al., 1999, p. 202). This has serious treatment implications as will be described later. No two persons might share the same etiology and each person has his or her own experience (Goin, 2002; Rutman, 1994). Consumers who are in the manic phase of the disease may display symptoms such as “abnormally elevated, expansive, or irritable mood lasting at least one week, with such symptoms as grandiosity, decreased need for sleep, racing thoughts, or excessive involvement in activities that have a high potential for painful consequences” (DSM-IV, 1994).

Secondary mania is also described in the DSM-IV (1994) as substance-induced mania or mania due to a general medical condition. Depressive symptoms may include depressed mood, reduced interest or pleasure in most activities, significant weight loss or

weight gain, insomnia, agitation, fatigue, reduced ability to concentrate or make decisions, and suicide plan or attempt (DSM-IV, 1994). Consumers who experience this disorder may also experience, while in an extreme manic phase, psychotic symptoms (delusions, hallucinations, disorganized speech or behavior resulting in cognitive deficits and poor functional skills) (DSM-IV, 1994). Some researchers have reported that even though psychotic symptoms can be prevalent during manic phases of the illness, the primary issues still revolve around mood instability (Ketter, Wang, Becker, Nowakowska, & Yang, 2004). For consumers who experience depressive symptoms, suicide risk must be constantly evaluated. There is a 15% suicide risk (Glick et al., 2000, p. 54) with 25% of consumers having reported attempting suicide at some time and 11% succeeding (Hilty et al., 1998, p. 201).

In exploring bipolar disorder, it is necessary to examine how functional limitations, cognitive impairment, stigma, comorbid issues, and stress, affect the ability to work of those diagnosed with the illness.

### *Functional Limitations*

It is important for consumers with long-term SMI and their support system (family and others) to have a clear understanding of their historic and current levels of functioning in order to be able to predict future functioning levels. Poor functional outcomes have been reported in long term studies of consumers with bipolar disorder (Goldberg & Harrow, 2003) necessitating early and maintained symptom stabilization. Consumers with serious mental illness (SMI) report that they experience social, interpersonal, and emotional problems; have difficulty accessing educational resources; have limited finances; experience difficulties managing their mental illness symptoms;

are unable to concentrate; and find it difficult to deal with competing responsibilities (Mowbray & Megivern, 1999).

There appear to be many issues that limit the functionality (e.g., daily performance, relationships, and recreation) and employment of those with SMI. These issues include the nature of the illness, the stigma attached to having the illness, medication response, stability issues, disincentives, poor history of work skills, poor self-awareness, and inadequate support systems (Dinos, Stevens, Serfaty, Weich, & King, 2004; Garske & Stewart, 1999).

Consumers with BP disorder have poor socialization skills along with low self-esteem resulting in fewer social interactions with close friends and others (Bauwens, Pardoen, Staner, Dramaix & Mendlewicz, 1998; Bellack, Morrison, Mueser, & Wade, 1989; Blairy, Linotte, Souery, & Papadimitriou, 2004). Bauwens et al. (1998) tracked 51 (27 bipolar, 24 unipolar) clients in recovery for one year focusing on the relationship between some social adjustment variables such as work, leisure, social activities and return/onset of affective symptoms. Medication compliance was monitored closely to help ensure continued recovery. Early onset of depressive symptoms in both groups was associated with feelings of distress at work and impaired work performance; for those in the bipolar group, however, an onset of hypomanic or manic symptoms was associated with fewer “social interactions” and “social discomfort,” loneliness and boredom (Bauwens et al., 1998). Specifically, persons with BP disorder reported impaired work performance and distress while at work, along with low self-esteem and feelings of loneliness and boredom.

Comparing a larger sample (144) of consumers in remission diagnosed with BP disorder to a sample of controls without a history of any psychiatric symptomatology, Blairy et al. (2004) found that the consumers in the BP disorder group were “less adjusted than normal subjects for leisure activities, relationships with extended family, marital relationships, work and their overall social adjustment” (p. 100). Data also showed that the lower the self-esteem, the lower the adjustment in social, work, and leisure activities (Blairy et al., 2004). The implications from this research are that consumers with BP disorder continue to experience poor socialization even after remission of symptoms, necessitating ongoing and long-term support in order to function in leisure, work, and family environments (Anthony, Cohen, Farkas, & Cohen, 2000; Mowbray, Bybee & Collins, 2000).

Strakowski, Williams, Fleck, and Delbello (2000, p. 193) tracked 42 consumers diagnosed with bipolar disorder for eight months after hospitalization and assessed their functionality. Functionality in this study was defined along four areas: role performance, interpersonal relationships, recreational enjoyment, and sexual activity (Strakowski et al., 2000). Their data show that predictors of functional recovery included: onset of bipolar symptoms after age 20 and higher socioeconomic status, with the latter being identified as the only indicator of recovery in three or four areas of function (Strakowski et al., 2000). Continuous impairment in at least one area of functioning continued in almost all the consumers for the entire eight-month study, suggesting the need for a multi-prong approach to treatment.

Goldberg and Harrow (2003, p. 245) assessed 123 subjects diagnosed with bipolar disorder, psychotic depression and depression at 2, 4.5, 7.5, and 10 years after their first

hospitalization. The consumers with BP disorder experienced poorer “instrumental work functioning” than their depressed cohort (56%–64% versus 80%) at each timed assessment and had higher rates of rehospitalization (p. 250). Those with more rehospitalizations had poorer long-term outcomes (Goldberg & Harrow, 2003). In this study, poor work functioning was described as experiencing “continuous marked symptoms, a very low level of self-support, rehospitalizations, and poor psychosocial functioning” (p. 3). “Good outcome” was defined as “adequate functioning with minimal or no symptoms, no rehospitalizations and good work functioning (working at least half of the time in the last year)” (p. 3).

Researchers have reported long-term psychosocial impairment and inability to maintain employment in a sample of persons diagnosed with bipolar disorder. Coryell et al. (1998) reported that this impairment and inability to maintain employment was mainly due to long term affective symptoms. An earlier study by Coryell et al. (1993) showed that even 30 to 40 years after their first symptoms of mania, 24 % of the sample were unable to function in the work environment.

In order to determine why persons with SMI were unsatisfactorily terminated, researchers (Becker, Drake, Bond, Xie, Dain, & Harrison, 1998, p. 71) analyzed the terminations of 63 consumers who were part of the New Hampshire Supported Employment Study (Drake, McHugo, Becker, Anthony, & Clark, 1996). In the Drake et al. (1996) study consumers had been randomly assigned to one of two supported employment programs – Individual Placement Support (IPS) and Group Skills Training (GST). The data suggested that consumers were terminated due to interpersonal issues

related to the mental illness, dissatisfaction with the work, quality of work, dependability, substance abuse, and anxiety issues (Becker et al., 1998).

Drebing et al., (2002) examined the issue of work functioning in 25,480 adults who had coexisting psychiatric and substance use disorders (SUD) who were served by the Veterans Health Administration. Contrary to popular belief regarding the relationship between drugs and work functioning, the data in this study showed that consumers with the coexisting disorders showed “no functional deficit in the domain of work and no added risk of non-compliance with vocational rehabilitation associated with a coexisting SUD among vocational rehabilitation participants compared to participants with psychiatric disorders alone” (Debring et al., 2002, p.11).

### *Cognitive Impairment*

Compromised cognitive ability is an ongoing difficulty faced by those who are SMI (Dickerson et al., 2004; Hoff et al., 1990; Rossi et al., 2000; Tabares-Seisdedos et al., 2003). Some studies have suggested that the cognitive difficulties faced by this population are similar to those faced by persons with schizophrenia and may get worse over time and after recurring episodes of the illness (Hoff et al., 1990; Hoffman, Kupper, Zbinden, & Hirsbrunner, 2003; Rossi et al., 2000). Rossi et al. (2000) compared a cohort of currently stable bipolar and schizophrenic subjects with a control group of healthy subjects. The subjects with bipolar disorder displayed “perseverative and unique errors” similar to the schizophrenic subjects. Overall in the three areas explored (number of categories achieved, numbers of perseverative errors, and unique errors) subjects with bipolar disorder displayed results between those of the schizophrenic group and the

control group, indicating some neurocognitive deficiencies even when they were in a stable phase of the illness (Rossi et al., 2000).

Cognitive, perceptual, affective, and interpersonal skills are directly affected by the two extreme poles of this illness (Rutman, 1994). Cognitive deficits affect one's thinking patterns while perceptual deficits affect being able to accurately understand what is occurring around you. Affect relates to one's mood, and interpersonal deficits reflect how one interacts with family and others in different environments. Persons who experience mania may display symptoms similar to schizophrenia and may receive anti-psychotic medications. Levine, Chengappa, Brar, Gershon, and Kupfer (2001) studied 457 subjects who were diagnosed with bipolar disorder and found that their level of functioning was related to both the severity of the illness and the combination of medication they received.

Unemployment, independent living, being unable to drive, and suicidality seem to be directly related to the cyclical nature of the illness (Levine et al., 2001). More than half of the subjects in Levine's study had attempted suicide, with females and those who were under 40 years of age attempting suicide more often (Levine, et al. 2001, p. 46). This alarming rate of suicide attempts has been noted by other researchers (Dilsaver, Chen, Swann, Shoiab, & Krajewski, 1994; Roy-Byrne, Post, Hambrick, Leverich, & Rosoff, 1988; Strakowski, McElroy, Keck, & West, 1996).

### *Stigma and the Public Response*

Individuals with disabilities have to deal not only with the immediate and long lasting effects of their illnesses and conditions, but they must also must deal with the negative stigma society has attached to these disabilities. Community attitudes have long



been negative toward persons with disabilities (Brown & Bradley, 2002; McLaughlin, Bell, & Stringer, 2004). Attitudes persist that people with SMI are unpredictable, destructive, have diseases that others may catch, cannot be habilitated, and should be seen and not heard. These negative attitudes seem to be even stronger towards persons who have long-term mental illnesses compared to those that have a physical disability, and these negative attitudes drive how people in the community as well as employers respond to their social and work needs (Brown & Bradley, 2002; Fabian, Edelman, & Leedy, 1993; Pescosolidi et al., 1999). These negative attitudes may also determine the support available and utilized in the workplace and in the daily life events of the individual with the illness (Brown & Bradley, 2002). Thus researchers call for focused intervention strategies at three levels: the individual's peers and supervisors, the work group, and the entire business (Fabian et al., 1993).

Since employers are no less prone to these negative stereotypes of those who have mental illnesses, they must be educated to help promote more positive perceptions about those with SMI (Corrigan et al., 2003). McLaughlin, Bell, and Stringer (2004) researched a sample of 600 subjects who were disabled and working. They reported that co-workers' perceptions of the job performance of the person with the disability were the most cogent factor in determining acceptance, suggesting an ongoing need for further employer/employee education on disabilities in general and for specific disabilities (McLaughlin et al., 2004). Stigmatic beliefs are held even by supporting professionals and family members. Consumers debate about disclosing their illness and treatment to family members and employers as a result of their own subjective feelings about the stigma or having experienced overt discrimination and even violence (Dinos et al., 2004).

Garske and Stewart (1999) suggested that it is the stigma of the illness rather than the physical limitations that keep the consumer from satisfying his or her life goals.

Rutman (1994) reported that barriers to employment and community integration also include problems caused in the following areas - the person's instability, prescribed medication issues, consumers' lack of interest in the value of work and social impassiveness, service systems that consumers find it difficult to maneuver in, and work disincentives created by social security. Consumers' instability is usually attributed to the cyclic nature of the illness' episodes and their not wanting to take medications based on their prior experience with medications (they can be harmful and produce disruptive side effects) create natural barriers to employment (Rutman, 1994).

Even though this population is an untapped resource of workers that our society could use, the stigma associated with having a mental illness is very strong in our society and predicting work readiness, vocational outcomes, and readiness for change can be difficult (Rogers et al., 2001; Rutman, 1994; Waghorn, Chant, & Whitehead, 2002).

### *Comorbid Issues*

In planning employment strategies, consumers and providers must remain alert to the wide range of possible symptoms and the possibility of comorbid illnesses (drug and alcohol abuse, anxiety and personality disorders) that may accompany those who are diagnosed with bipolar disorder (Becker et al., 1998; Drake et al., 2001; Glick et al., 2001; Henry et al., 2001; Keck & McElroy, 1998; Simon et al., 2003; Waghorn & Chant, 2002). These accompanying illnesses and issues exacerbate the difficulties facing those with SMI because they are forced to handle several syndromes, symptoms and situations, thereby necessitating multiple support systems in order to maintain a viable level of

functioning. Drake et al. (2001) reported that substance abuse is the most common and clinically significant comorbid disorder among adults with SMI. Drug and alcohol abuse has been reported as high as 60% in consumers with BP (Glick et al., 2001, p. 53). Those diagnosed with bipolar disorder may, in addition to exhibiting mood instability, display some schizophrenic symptomatology (Ketter et al., 2004). Medication compliance and symptom monitoring become especially important when comorbid issues need to be addressed in a consumer's treatment plan.

A study comparing 277 bipolar and 678 unipolar depressives to 469 controls found that bipolar patients had higher usage rates of stimulants like amphetamines, sedatives, cocaine and alcohol, and of ever having abused a drug than the other two groups (Winokur et al., 1998). Of interest in this study was the difference in relapse times; the average relapse time for non-drug using consumers with bipolar disorder was 100 weeks versus 148 weeks for drug using consumers with bipolar disorder. Relapse times are very important and further research will have to be conducted to explore these results. This research suggests that mood stabilizers be utilized to manage the affective, drug and alcohol issues experienced by persons with BP disorder (Winokur et al., 1998).

### Stress

Persons with SMI seem to be more severely affected than others by stressors (Ellicott, Hammen, Gitlin, Brown, & Jamison, 1990; Miller & Miller, 1991; Tse, 1999). In one study conducted with 97 subjects who were clinically diagnosed with both unipolar and bipolar disorder, acute and chronic stress was linked to higher incidences of marital and family conflicts, somatic illness, higher reported work overload, emotional and ambition failures, and lack of success (Bidzinska, 1984). A more extensive study

conducted over 2 years among 61 subjects showed a higher relapse rate among bipolar subjects who suffered from high stress levels (Ellicott et al., 1990). A two year study conducted by Ellicott et al. (1990) on 61 subjects showed that high levels of stress were more damaging to persons with severe psychiatric problems than the general population. Those who suffered from high stress levels compared to those who suffered from low and average stress levels had a risk level 4.53 times higher than the no-stress control group (Ellicott et al., 1990, p. 1196).

### *Employment Issues*

Employment rates for those diagnosed with BP disorder range from 27% to 72% (Coryell et al., 1993, p. 3). In a 4.5 year longitudinal follow-up study of 51 bipolar and 49 unipolar patients, over 60% had experienced poor adjustment in one or more areas of functioning (Goldberg, Harrow, & Grossman, 1995). A 30-year longitudinal study of persons with bipolar disorder also showed poor work performance and adjustment (Tsuang, Woolson, & Fleming, 1979). Medication helps to prevent relapses and rehospitalizations, in the process enabling the consumer to maintain recovery, which may involve work. In the 30 year longitudinal study, those patients who took their medications as prescribed had better overall functioning (Tsuang et al., 1979).

Bipolar patients experience more work impairments than unipolar patients (Goldberg, Harrow, & Grossman, 1995). Tse and Walsh (2001) reported that both longitudinal and cross-sectional studies show that even though consumers with bipolar disorder tended to have higher employment rates than their peers with other severe psychiatric disorders, they still had lower employment rates than the general population.

Garske and Stewart (1999) suggested that the barriers faced by those with BP disorder could be considered to be both external and internal. External barriers may include others' attitudes, Social Security disincentives, lack of access to vocational services, and transportation issues, while internal barriers may include low self-esteem, feelings of rejection, and cognitive and functional limitations (Garske & Stewart, 1999; MacDonald-Wilson, Rogers, & Massaro, 2003).

## Treatment of Bipolar Disorder

### *Intervention Overview*

There are recognized best practices and standardized treatments for bipolar disorder that have been discussed in the literature, even though, at times, they appear to be conflicting. Evidenced-based practices include (a) psychopharmacologic treatment (Glick, Suppes, DeBattista, Hu, & Marder, 2001), (b) therapy (Perry, Tarrier, Morriss, McCarthy, Limb, 1999; Scott, Garland, & Moorhead, 2002), (c) family psychoeducation (Pitschel-Walz, Leucht, Bauml, Kissling, & Engel, 2001), (d) integrated treatments for mental illness and substance abuse (Drake et al., 2001), (e) Program for Assertive Community Treatment and other case management programs (Phillips et al., 2001; Stein, Barry, Van Dien, Hollingsworth, & Sweeney, 1999), and (f) supported employment (Hirsch, 1989; Wehman, 1981). Consumers and professionals need to be aware of these practices since drug therapy alone does not provide the person experiencing long-term serious mental illness with methods to become more integrated and to access community services or to obtain employment (Anthony, 1980).

The American Psychiatric Association (APA, 2002) has produced Practice Guidelines for the Treatment of Patients with Bipolar Disorder which suggests creating a therapeutic alliance with the consumer to enhance managing the symptoms, encouraging treatment compliance, addressing psychosocial stressors, maintaining ongoing psycho-education and relational issues (APA, 2002). Drake et al. (2001) stress the importance of focusing on the goals of consumers with SMI who want to be independent, employed, and have fulfilling relationships. The Recovery Model proposed by Anthony (1993) incorporates many solutions focused on helping the person with a disability function at his or her highest capacity with the recognition that psychiatric disabilities are long-term, requiring both psychiatric and social services intervention (Jacobs, Davidson, Steiner, & Hoge, 2002). Some of the core attributes of the Recovery Model include that there must be people who can be trusted to be there in times of need, recovery does not depend on one's view of the origin of the illness, recovery can occur even when symptoms reoccur, recovery is a personal process that does not need professional intervention, and the person in recovery has to have choices (Anthony, 2000). In view of this model, researchers suggest that we avoid the "single model trap" incorporating whatever works from other models and practices so that we may better serve our consumers (Kramer, Anthony, Rogers & Kennard, 2003).

### *Medical Interventions*

The goal of pharmacological treatment of BP disorder is to stabilize the extreme polar symptoms of depression or mania, reduce or stop the consumer from cycling, and prevent recurrences of the symptomatology (McCabe, 2003). While some psychosocial interventions (i.e., therapy, case-management, independent living skills) are used based

on empirical support and established written practice guidelines, researchers have not fully agreed upon the medical interventions (Geddes & Goodwin, 2001). A meta-analysis of medical interventions in countries around the world showed that medical doctors vary in the drugs used to maintain stability in persons who are diagnosed with bipolar disorder (Geddes & Goodwin). On one side of the issue are those who advocate for the use of anticonvulsant drugs (i.e., Depakote) and on the other side are those who advocate for Lithium and other standard medications, noting that enough research has not been done to warrant the use of anticonvulsants (Geddes & Goodwin, 2001). This can be confusing to consumers, family members, and other support systems because consumers who suffer from the cyclical nature of this illness want to maintain medical stability in order to benefit from the psychosocial interventions that will better enable them to enter the workforce.

Medical doctors and other professionals utilize drugs both for their primary and secondary uses. Depakote has been approved by the federal drug administration (FDA) for use as an anticonvulsant (primary use). However, some professionals use this drug (successfully) as a mood stabilizer, even though it has not been approved as such by the U.S. FDA (secondary use). Both FDA approved (Lithium, Zyprexa, and Depakote) and secondary use non-FDA approved (i.e., Risperdal, Seroquel, Geodon, Procardia, Topamax, Prozac) drugs are used in the treatment of this disorder (Glick, Suppes, DeBattista, Hu, & Marder, 2001; McCabe, 2003). These drugs belong in the anticonvulsant, antidepressant, typical and atypical antipsychotic drug classes (Glick et al, 2001; McCabe, 2003). When consumers exhibit psychotic symptoms while in the extreme manic phase of the illness, they might be prescribed atypical antipsychotics from

a new generation of drugs called Selective Serotonin Re-uptake Inhibitors (SSRI) which include Zyprexa, Risperdol, Seroquel, and Clozapine (Glick et al., 2001). These new SSRIs were introduced to address consumers' concerns about developing such side effects as Akathisia, Parkinsonism, Tardive Dyskinesia, extrapyramidal symptoms (EPS), blurred vision, poor cognitive functioning, and dry mouth after long-term use of older traditional antipsychotics (Thorazine, Mellaril, Haldol, Prolixin) (Bond & Meyer, 1999).

Consumers with akathisia describe a feeling of restlessness and being unable to sit still, resulting in constant pacing. Akathisia usually develops after a change in medications used to treat EPS. EPS refers to involuntary movements that include muscle rigidity, tremors, shuffling gait, and restlessness that may occur as side effects of certain psychotropic drugs. Tardive dyskinesia (TD) is a very serious side effect of psychotropic medicine and may become permanent. TD refers to neurological changes like involuntary tongue, jaw, or mouth movements that can occur in consumers who have taken certain psychotropic drugs over a long period of time. Parkinsonism refers to Parkinson-like symptoms (uncontrollable and severe muscle tremors, stiff gait, loss of facial expression, and withdrawal) seen in consumers who take certain psychotropic drugs. Due to these side effects, consumers have routinely stopped or reduced their medication compliance (Bond & Meyer, 1999; Glick et al., 2000) and are more prone to have medication compliance issues if they were actively abusing substances (Keck et al., 1998).

Consumers with SMI are always at risk for rehospitalization (Yamada, Korman, & Hughes, 2000). Sullivan, Wells, Morgenstern, and Leake (1995) examined risk factors that could be modified for rehospitalization in the SMI population. Out of 101 subjects more than one-half were noncompliant with medication despite the fact that 66% thought



that medication had been “overall very helpful.” Twenty-nine percent had problems with alcohol abuse, while only between 5% and 10% used drugs. The most commonly used drug was marijuana. Transportation access barriers were the most common complaints: 22% of the subjects were said to have missed visits in the past 6 months because of a lack of transportation and 10% had missed taking medication because of having no way to get to the pharmacy. More than one-half did not know their own diagnosis. Family rejection of the consumer, alcohol abuse, and medication noncompliance were the identified risk factors that appear to have the greatest effect on hospital readmissions (p. 1153).

Suicide risk must be constantly evaluated for consumers who experience affective disorders (Bostwick & Pankratz, 2000; Glick, et al., 2000). So far, research has failed to portray definitive suicide risk factors (Bostwick & Pankratz, 2000). Among those who have an affective disorder, the risk of suicide follows a continuum: those at the highest risk for suicide are those who were recently hospitalized for a suicide attempt or ideation, next would be those who had ever been hospitalized for any psychiatric reason followed by those who are outpatients living in the community (Bostwick & Pankratz, 2000).

Depakote, Tegretol, and Neurontin are among the anticonvulsant drugs predominantly used at present for consumers with BP who are primarily experiencing mood swings (McCabe, 2003). Multiple drug therapy has also been suggested in the literature to address maintaining euthymic states (Glick et al., 2000; McCabe, 2003). Another method, electroconvulsive therapy (ECT) which was introduced over 50 years ago, continues to be utilized as a treatment for consumers with bipolar disorder who are in the first trimester of pregnancy, who experience rapid cycling, have treatment resistant

mania, or who have not benefited from other drug treatments (Hilty, Brady, & Hales, 1999; Mukherjee, Sackheim, & Schnur, 1994).

### *Therapeutic Interventions*

Therapy has been used successfully in the treatment of BP disorder (Hilty, Brady, & Hales, 1999; Perry, Tarrier, Morriss, McCarthy, Limb, 1999; Scott, Garland, & Moorhead, 2002). Various forms of therapy – individual, family, group - have been used to address fears of relapse, emotional issues, problems with self-esteem, daily functioning, interpersonal relationships, and other cognitive issues (Hilty, Brady, & Hales, 1999; Goin, 2002; Glick et al., 2001). Cognitive-behavioral therapy has been shown to help consumers monitor symptoms, provide training in enhancing coping strategies for dealing with stressors, and facilitate medication compliance (Hilty et al., 1999; Patelis-Siotis, 2001; Perry et al., 1999). Perry et al. found increased social functioning, work performance, and relapse time among the benefits of therapy in their study with consumers who were assessed at baseline, six, twelve, and eighteen months. The experimental group of randomly assigned BP consumers who had received counseling and developed a plan to implement when specific symptoms presented, had a longer relapse time to a manic episode of 65 weeks compared to the control group of BP consumers who experienced relapse after 17 weeks (Perry et al., 1999).

Another study used scores on the Global Assessment of Functioning (GAF) scale and other instruments as outcome measures. The consumers in this study had cognitive therapy to address treatment goals, coping skills, treatment compliance, and relapse recognition. These consumers showed higher GAF scores and fewer symptoms than the control group (Scott, Garland, & Moorhead, 2001). In still another study assessing 103

consumers with bipolar disorder, those that received both cognitive therapy and mood stabilizers, reported fewer mood symptoms, admissions, and higher social functioning when compared to the control group that only received mood stabilizers (Miller, 2003).

#### *Family/Psychoeducational Intervention*

The family and the identified member with SMI often deal with the stigma attached to this illness and at times may have to interact with the legal, law enforcement, and other health care systems like family medical doctors (Griswold & Pessar, 2000). Family education needs to cover monitoring and identification of symptoms and relapse issues, high-risk behaviors, suicide risk, and interventions necessary especially when symptoms of severe depression and/or mania present (Griswold & Pessar, 2000). Drake et al., (2001) recommended a more integrated approach that involves other professionals and supports as necessary when the co-occurrence of alcohol and drug abuse is present in persons who suffer from mental illness. Another very important issue for families to consider is that young men in early phases of the illness are at a high risk for suicide if they have attempted suicide before or if they abuse alcohol (Simpson & Jamison, 1999).

Consumers with BP disorder want to be able to manage their illness and to function independently. Getting a better understanding of the illness can be achieved through both professional and peer teaching (Mueser et al., 2002). Understanding one's illness (e.g., symptoms, medications and their side effects, current functioning) is closely linked to recovery that Anthony (1993) describes as providing new meaning and purpose as the consumer moves beyond the calamitous effects of his or her illness. Predicting the daily course of the disease has become a necessity for persons with all forms of serious mental illness because they are always at risk for rehospitalization (Yamada, Korman, &

Hughes, 2000) and therefore a concise understanding of each consumer's illness pattern is extremely useful in guiding treatment (Hilty, Brady, & Hales, 1999).

Teaching occurs in many different arenas. Some consumers are taught in adult day programs, support groups, or as part of their individual or group therapies, while others are taught as part of case management intervention. Close symptoms monitoring by both consumers and support staff enables quick access to services that could help in preventing the sudden decompensation that many persons with SMI experience with resulting rehospitalization. One study suggested that the number of previous admissions and being male and young were highly correlated with, if not predictable of, being readmitted to a hospital (Dayson, Gooch, & Thornicroft, 1992). Another study found that other predictors of rehospitalization included consumers not complying with their medication regimens, alcohol abuse, and consumers experiencing family rejection (Sullivan, Wells, Morgenstern, & Leake, 1995).

#### *Increasing Self-Efficacy*

People with disabilities need to feel empowered to regain control of their lives. Persons living with severe mental illness may be able to function with minimal symptoms as a result of medications; however, secondary symptoms such as lack of motivation, hopelessness, poor self-esteem and social skills, and inability to set and carry out goals may persist and require intervention (McGurrin & Martin, 1994). Consumers must be able to self-initiate some parts of their recovery program. Cook and Jonikas (2002) report that some rehabilitation models like the clubhouse and assertive community programs (ACT) focus on helping consumers learn to exercise self-determination that enables them to navigate their environment.

People with disabilities have a sense of powerlessness as they navigate their lives around their illness, family settings, and helpers. To combat this they must be able to have an accurate understanding of their present abilities and be able to set realistic expectations (Wehmeyer & Bolding, 2001). Systemic issues such as limited treatment choices and activities, and reduced number of available staff reduce consumer empowerment (Linhorst & Eckert, 2003). Research shows that consumers living with serious mental illness can be empowered when the following conditions are met: consumers must have their symptoms under control to be able to take part in making decisions and must have the ability to make decisions; they must have access to resources such as advocates, group support, and support staff; there must be incentives for both staff and consumers to participate in making decisions; consumers must have meaningful choices, and there must be organizational support for all parties to share in making decisions for consumers (Linhorst & Eckert, 2003).

In the present recovery paradigm, self-determinism is expressed as the role of the person with a psychiatric disability shifting from being an object of intervention to that of someone needing an accommodation in order to function and as a person being empowered to make decisions (Anthony, 1993; Arons & Schauer, 1994; Cook & Jonikas, 2002). Anthony (1980) noted that for psychosocial professionals the issue is “can the helpee, given her or his present level of symptomatic behavior, demonstrate the skill behaviors necessary to function in the community with a minimum amount of support from mental health workers” (p. 30). Mueser et al. (2002) report that “recovery” from psychiatric disorders includes a range of interventions. These interventions can be

addressed by a better-educated and highly motivated and determined consumer, his or her family members, and the multidisciplinary treatment team.

#### Community Intervention Models Focusing on Employment for Individuals with BP

There are many community-based models that enable persons with severe disability to enter the workforce. These models include supported employment, sheltered workshop programs, community rehabilitation programs, assertive community treatment, clubhouse, projects with industry, individual placement, and transitional employment (Barker, 1994). Researchers have found that some programs incorporate components of various models as they seek to adjust to the needs of their consumers (Barker, 1994). This “responsive service system” attends to the individualized needs of local consumers, offering them only the services they require while providing them an array of choices from which to choose (Barker, 1994; Cohen & Anthony, 1988). Research conducted with 42 community based rehabilitation programs found that consumers’ highest concerns were related to quality of employment and services, and the ability to make informed choices (Thomas, Menz, & Rosenthal, 2001).

#### *Supported Employment*

Supported employment (SE) was originally designed to enable persons with mental retardation to enter the workforce. The principles of SE have been generalized for use with consumers who have other severe disabilities, helping them gain entrance into competitive employment (Hirsch, 1989; Wehman, 1987). Decades of research have shown that SE helps persons with developmental and mental disabilities to find a way to enter the world of work (Anthony, 1980; Wehman, 1981; Wehman & Moon, 1988).

Competitive employment resulting from supported employment programs benefits individuals with disabilities because it provides not only benefits and higher incomes, but it also provides persons with disabilities opportunities to work alongside non-disabled co-workers, thus improving their community integration (Wehman, 1988). SE incorporates three elements: “competitive work, an integrated work setting, and the provision of ongoing support” (U. S. Department of Labor, 1993). Utilizing SE principles helps to reduce the myths about consumers with SMI: SMI consumers’ illness will only get worse as they get older, SE principles cannot be used to help persons with SMI, and persons with SMI are too fragile to handle the stress of entering the workforce (Marrone & Gold, 1994). Researchers have noted several characteristics of a supported employment program for consumers who have SMI: (a) consumers must be physically and socially involved in all aspects of the workplace to ensure relationship building, (b) providers must intervene with the consumer in a “non-obtrusive” way, (c) supports must be quickly available when problems arise, (d) all avenues of the consumers’ life must be addressed in the plan, (e) service providers and significant others must cooperate, (f) opportunities should exist for career growth, (g) the consumer is the primary customer of the SE process and not the employer, and (h) the SE provider must advocate for the consumer in relating to the employer to reduce discrimination and stigma (Marrone & Gold, 1994).

Other researchers (Bond et al., 2001) have theorized that an SE program must incorporate a commitment to competitive employment as an achievable goal for its consumers. An SE program should incorporate rapid job searches, consumers’ preferences in deciding jobs, consumers’ strengths and experiences, follow along services that are not time limited, and close integration with a mental health treatment team (Bond

et al.). These elements are included in the literature as part of the individual placement and support (IPS) model that has been shown to be very beneficial in getting persons with severe disabilities into the workforce (Bond, 1998; Drake et al., 1999). This model contrasts with other delivery models and individual treatments because services are grouped to enhance rapid placement of the consumer into the job of his or her choice. The consumer is then provided the necessary supports to enable him or her to remain on the job (Moon & Lehman-Griffin, 1988).

Researchers (Drake et al., 1999) in an inner city tracked 150 persons with severe mental disorders. The data showed significant differences between those who were receiving IPS services versus those who were receiving “enhanced vocational rehabilitation” (EVR). In this study IPS services involved joint services from mental health and vocational professionals that included rapid job search and individualized ongoing support. By contrast EVR services involved agencies recommended by rehabilitation services providing pre-vocational training and paid work adjustment. Those in the IPS group were more likely to be employed in competitive settings, worked longer and had higher earnings than those in the EVR group. The results of this study are similar to those shown in several other studies (Bond, Drake, Mueser, & Becker, 1997; Drake, McHugo, Becker, Anthony, & Clark, 1996; Kregel, Wehman, & Banks, 1990).

Becker et al. (2001) researched ten community mental health centers and found strong correlations between the level of competitive employment and two components – provision of community-based services and utilizing employment specialists. Community-based services reduced the need for the consumer and the team to generalize skills learned in a facility to the work site and consumers benefited greatly by having an



employment specialist who focused solely on helping them in their particular work environment (Becker et al., 2001). The data also showed strong to moderate correlations between competitive employment and a zero-exclusion policy and work-based assessment. Zero-exclusion advances the idea that consumers are not screened out for readiness to work but are given a chance to work and the necessary supports are provided (Bybee & Mowbray, 1996). Wehman (1988) writes that zero exclusion means people with severe disabilities need services that are specialized and time-unlimited to ensure their successful entry into the workforce. A “low-reject” policy enables consumers to have more input in their treatment goals, and be able to leave and/or re-enter the job market based on their current functioning and ability to make the transition to employment (Marrone & Gold, 1994).

Other benefits have been realized by utilizing SE. Handler et al. (2003) reported on the implementation of SE in a small community-based program. No consumer was turned away irrespective of work experience; employment specialists worked with consumers on goals, preferences, job development and placement; and there was a push to get the consumer employed as soon as possible. Sixty-seven percent of the consumers helped were SMI and 91 % received disability benefits. The implementation of this evidence-based practice — SE — showed positive results in that community (Handler et al., 2003, p. 961).

Individual placement and support model (IPS), enclave, and mobile work crew are kinds of supported employment strategies that have been described in the literature (Hirsch, 1989). According to Moon and Lehman-Griffin (1988) the IPS is the “most normalizing” of the four models. In this model a job coach trains the worker and

maintains contact with the worker as long as is necessary so he or she is able to remain employed. Job readiness is not required in this model. Enclaves are “group supported employment” that employ continuous on-site supervision for workers. These workers may not have the potential to enter and maintain competitive work in the community. The mobile work crew is a group of eight or fewer individuals who are supervised, and it has the flexibility to travel throughout the community providing services.

Crowther, Marshall, Bond, and Huxley (2001) analyzed eleven studies comparing supported employment with prevocational training and standard community care for consumers with severe mental illness. The consumers in supported employment were more frequently employed in competitive employment, earned more and worked more hours monthly than their peers in standard community care or in prevocational training. Their study examined the number of consumers engaged in competitive employment at 4, 6, 9, 12, 15, and 18 months. Researchers suggested good generalizability as results indicated that more than one group (women, ethnic minorities, those with schizophrenic symptoms) benefited from supported employment (Crowther et al., 2001). In another review of trials and experiments comparing SE to other methods, 58% of consumers in the SE programs achieved competitive employment compared to 21% in the control groups (Bond et al., 1997). In that review two other outcomes were noted — those in SE earned more and stayed on the job longer (Bond et al., 1997).

Thus the goal of supportive employment is to allow individuals with disabilities access to work environments where they are able to engage with non-disabled co-workers and become more normalized (Drake et al., 1998; Wehman, 1988). Researchers continue to explore avenues that integrate workers with disabilities into the work environment

(Storey & Certo, 1996). An analysis of studies and case reports conducted on natural supports shows that when individuals with disabilities receive support in their working environment from peers and others, they are able to have better relationships and remain on the job longer (Storey & Certo, 1996).

Work environments could be termed either competitive or non-competitive. Competitive employment allows the person with a disability-increased opportunity for higher pay with benefits above minimum wage as well as community integration (Drake et al., 1998; Wehman, 1988). Non-competitively employed workers who have a disability might be paid below the minimum wage. Over time some research has shown that there seem to be higher numbers of persons with severe disabilities engaging in non-competitive work in centers, with few of their counterparts engaged in competitive work in the communities where they live (Whitehead, 1979). According to Wehman (1981) the vocational rehabilitation field has no excuse for it has the “technologies to enable more individuals with severe disabilities to be able to work for a competitive wage and be able to integrate into the community” (p. 12).

Drake et al. (1998) reviewed three variations in supportive employment to determine which had the highest viability for helping individuals with severe disabilities enter and remain in the workforce. They wanted to determine how 10 mental health centers in New Hampshire had increased employment rates from a low of 7% to 22% (p. 494). They recognized that modified versions of supported employment were being utilized. The research identified three key areas — more consumers entered the workforce as centers increased their proportion of money spent towards supportive

employment, as they increased their commitment to supportive employment, and they adopted an ideology of normalization (Drake et al., 1998).

### *Sheltered Workshops*

Even though the value of sheltered workshops in the lives of those with severe disabilities have been called into question, research still shows that it is a valuable option for those with severe disabilities (Rosen et al., 1993; Visier, 1998). Sheltered work was initiated to serve as a form of transitional employment, but few consumers employed in these settings enter competitive work settings (Black, 1992). Reasons given for the poor competitive vocational outcomes of those in sheltered work include the need for high numbers of staff to serve this population, their slow return to normal productive capacity due to the nature of their illness, and being part of a system that wants to keep their industrious and productive workers in order to continue being financially productive (Black, 1992). Black (1992) also noted that consumers who are productive in these settings are not usually the ones moved into competitive employment, and these consumers tend to be paid below the minimum wage.

### *Assertive Community Treatment (ACT) and Other Community Models*

Assertive Community Treatment (ACT) is an intense multi-disciplinary approach that has been shown to increase the functionality of persons with severe mental illness (Mowbray, Bybee, & Collins, 2000; Phillips et al., 2001; Wasmer, Pinkerton, Dincin, & Rychlik, 1999). The team provides services 24 hours a day, seven days a week and may be composed of professionals from psychiatry, nursing, social work, substance abuse management and vocational rehabilitation who will be able to provide a wide range of services and who are competent in many evidence-based practices (Lieberman, Hilty,

Drake, & Tsang, 2001; Phillips et al., 2001). This team of professionals must be able to relate well with the consumer and his or her family. As opposed to traditional case-management methods, ACT utilizes a low consumer to staff ratio while focusing on medical management, help with accessing services in the community, close monitoring of symptoms, rapid intervention during crises, entry into the job market, and community integration.

Another community model, the Clubhouse Model of psychosocial rehabilitation, focuses on work issues, consumer empowerment, social interactions and support (Stein, Barry, Van Dien, Hollingsworth, & Sweeney, 1999). In one study comparing three ACT programs with a clubhouse program, researchers found that clubhouse members were more inclined to be involved in community activities and worked more hours (Stein et al., 1999). Stein et al. concluded that when consumers served by the ACT team were deemed medically stable, those intensive ACT services could be reduced and eventually stopped, allowing those stable consumers to receive peer support resulting in high levels of community integration and work. Due to the cyclical nature of mental illness, Wasmer et al. (1999) suggested that consumers be able to stop/reenter ACT services based on their need.

The Strengths Model of community care has also been successfully used in enabling persons with severe mental illness to integrate into the community. While in the ACT model there is a treatment team, in this model contact is primarily between the consumer and a single case-manager, and there is a focus on consumer strengths rather than on consumer pathology (Barry, Zeber, Blow, & Valenstein, 2003). A two year follow-up study with 174 consumers diagnosed with severe mental illness showed that

consumers utilizing either ACT or the Strengths model reduced symptomology, reduced inpatient care, and decreased scores on a psychiatric rating scale. The researchers did note that consumers utilizing the Strengths Model had improved functioning over those utilizing ACT services (Barry et al., 2003). In the 30-month follow-up study of the original ACT program consumers had also reported fewer inpatient hospital days (Mowbray, Collins, Plum, Masterton, & Mulder, 1997).

The Program for Assertive Community Treatment (PACT) also has been shown to provide cost benefits. Research conducted using three case management models over 18 months showed that all of the case management models resulted in cost reductions of 50%–60% (Hu & Jerrell, 1998, p. 29). In another PACT program, 63 consumers diagnosed with severe mental illness were provided intensive vocational and clinical services for five years. Fifty-six percent were able to work in competitive settings and meet vocational closure criteria (Ahrens, Frey, & Senn-Burke, 1999, p. 21). The researchers noted that being middle-aged, having an early onset of the illness, being unemployed for most of the year previous to being employed, and being an active drug or alcohol abuser were among the risk factors that led to poor vocational outcomes (Ahrens et al., 1999).

Transitional employment is a time-limited service aimed at allowing persons with disabilities to enter competitive work slowly (McGurrin & Martin, 1994; Grieg, Zitto, & Bell, 2004). Grieg et al. (2004) report that this program is well accepted by businesses and consumers because salaries are paid by state vocational rehabilitation services and it gives businesses time to evaluate the social skills and productivity of the consumer while giving the consumer time to acclimate to the competitive business environment. Grieg et

al. (2004) report on an ongoing hybrid program combining transitional services and supported employment which so far has resulted in 41% of consumers finally entering supported employment services with employer paid salaries and 61% having completed one year of work (p. 242). This program shows promise in helping persons with severe mental illness enter and maintain competitive employment.

Another program, Projects with Industry (PWI), fosters partnerships between the public and private sectors to make available training and eventual competitive employment for consumers with disabilities (Greenwood, Schriener, & Johnson, 1991). The data from a survey of rehabilitation specialists from 32 states involved with the PWI program found that employers were more willing to hire consumers with physical disabilities for professional and managerial positions than consumers with any other disabilities and that consumers with mental disabilities would face difficulties in obtaining promotions (Greenwood et al., 1991). However the data also showed that employers were willing to work with consumers with disabilities when they were able to have continued vocational rehabilitation support (Greenwood et al., 1991).

#### *Long-Term Case Management Support*

Consumers living with severe and persistent mental illness require ongoing support due to the cyclical and encompassing nature of the illness (Frey, 1994). Case management is a means to answer the many needs of both the treatment team and the consumer (Anthony, Cohen, Farkas, & Cohen, 2000). Case management is described as the tool to address the various goals of consumers while helping them to navigate the community of service providers (Anthony et al., 2000). According to Anthony et al.

(2000) case management involves “connecting with clients, planning for services, linking clients to services, and advocating for service improvements.”

This method of providing services enables the consumer to be connected with providers from psychiatry, mental health, vocational rehabilitation, and other local and state agencies (Frey, 1994). Vulnerable consumers now have the ability to form a bond with a team member whose job is to advocate for him or her and ensure that all necessary services are received. Ziguras and Stuart’s (2000) meta-analysis of 35 case management studies shows that when compared to no case management services those consumers that did receive case management services displayed symptom improvement, stayed less in the hospital, had more contacts with their treatment team, had improved social functioning skills, and had greater satisfaction with the care they were receiving. This contrasts the poor support some consumers have reported in other research (Mowbray & Megivern, 1999).

One of the most important functions of case managers is to help consumers set goals (Anthony et al., 2000). Anecdotal evidence from staff and consumers show that consumers can set goals when given the chance and assistance (Anthony et al.). Lecomte, Wallace, Perreault, and Caron (2005) researched the relationship between consumers’ (N = 165) perceived goals and the help they received in meeting those goals. Two of the highest goals mentioned were improving cognitive ability and maintaining a job. Consumers in this study felt that they were receiving the necessary services in those areas that were most important to them and those with high concordant scores also scored higher than their peers on quality of life issues (Lecomte et al., 2005). Case managers who are not part of an ACT team may not have the abilities to manage caseloads of



consumers with severe mental illness. A research demonstration project, Project WINS, (Winning Ideas Network for Schools) incorporated the Choose-Get-Keep model to help consumers enter and remain in the workforce (Mowbray et al., 2000). In this WINS model consumers are helped to choose a career, to get a job that matches that career choice, and are helped to keep the job as long as they feel comfortable with it (Mowbray et al.). The WINS project evaluated 279 consumers at baseline, nine, and eighteen months. Consumers were able to work more when they received more services and the researchers suggest that more emphasis should be placed on vocational services and higher educational opportunities, an area that consumers feel they have not received much help in (Mowbray & Megivern, 1999). Mowbray and Megivern (1999) advocate especially for supported employment in enabling consumers living with mental illness to enhance their work skills. They urge service providers to be updated on the latest technologies in vocational rehabilitation that address persons with mental illness aimed at recovery.

#### Predictors of Entering Competitive Work and Long-Term Medical Stability

Researchers have failed to agree on a set of predictable variables that result in higher workforce participation for persons with SMI. The many variables mentioned in the literature seem to depend on the narrow definition of functionality (e.g., post-hospital employment, competitive employment, history of hospitalizations, being ready to work, remaining on the job) employed by various researchers. Focusing on post-hospital employment, Anthony (1980) reported that research had shown five demographic variables to be significant – number of previous hospitalizations, length of the last

hospitalization, employment history, marital status, and diagnosis, while race, occupational level, age, educational level, and sex were either tentative or not significant. In their benchmark and much quoted study, Anthony and Jansen (1984) noted that diagnosis, current symptoms, ability to function in one environment, demographic variables such as age, gender, ethnicity, and intelligence, aptitude, and personality largely failed to predict whether a person benefits from vocational rehabilitation and finds a job.

Recent studies have both agreed and disagreed with these results (Bolton, Bellini & Brookings, 2000; Hoffman, Kupper, Zbinden, & Hirsbrunner, 2003; Waghorn, Chant, & Whitehead, 2002). In a retrospective study of 4,603 consumers who had been successfully closed as rehabilitated, Bolton et al. (2000) considered all three phases of the rehabilitation process (taking personal history, functional assessment and limitations profile, and services annotated in the rehabilitation plan) and reported that job placement services, getting a good personal history, providing training and restorative services, and the amount of time in rehabilitation predicted competitive employment and salary at closure. Even though functional limitations displayed minimal relationships with employment outcomes in this sample of consumers, counselors are encouraged to use it in combination with other data in planning services.

In addition to current skills, limitations, and use of rehabilitation services, other research has shown that being able to benefit from instruction and learning about staying on task, history of illness, age of onset, marital status, pre-morbid work adjustment, and education predicted job readiness and vocational outcome (Strauser et al., 2002; Waghorn et al., 2002). In their sample, Waghorn et al. (2002) found that employment in the current and past year was predicted by chronic illness, age of onset predicted work functioning,

number of hospital admissions predicted absenteeism, education predicted current employment, and poor pre-morbid adjustment predicted negatively on vocational outcome.

In another study, a history of being hospitalized in the last two years resulted in a 42% chance of being employed (Mowbray & Bybee, 1995, p. 27). The predictors of working at the start of the study included level of functioning, having positive attitudes about work, and few contacts with family during the month (Mowbray & Bybee, 1995). Hoffman et al. (2003) agreed with Anthony and Jansen (1984) that successful work in one environment does not predict successful work in a different environment, and would agree with Bond (1998) that the best solution would be to put the person to work to determine how they would function in that environment. Anthony (1994) has proposed that factors such as consumer preferences, satisfaction with current conditions, consumers' commitment to change, self-efficacy, and consumer's environmental and self-awareness, should be explored to add to the data on vocational outcomes. Becker, Bebout, and Drake (1998) addressed that issue by examining the work preferences of 152 consumers with SMI. In their sample the data showed that consumers did have specific job preferences, they were able to get jobs based on those preferences, but their desired salaries and hours worked were lower than they wanted. Becker et al. (1998) speculated that poor work histories and having case managers handle their finances may have led the consumers to have unrealistic salary and workable hour expectations.

Rehabilitation professionals (N = 118) were surveyed regarding their perceptions of the importance of several clinical and demographic factors that enabled persons with SMI to enter and remain in the workforce (Tsang, Lam, Darasi, Ng, & Chan, 2000). The

key factors included social-vocational competence, work history, psychosocial support, demographic factors (age, educational level, vocational skills), and medical history (diagnosis, marital status, number of previous hospitalizations) (Tsang et al., 2000). It is very important for consumers with SMI to interact socially both in their community and with co-workers. Predictors for entry into competitive work from three ethnographic studies include: consumers need to have some hope in maintaining their mental and physical health with professional help, consumers need to belong and participate in some positive social group, and be able to materially support themselves (Alverson, Alverson, Drake, & Becker, 1998).

Macias, DeCarlo, Wang, Frey, and Barreira (2001) explored the issue of work interest as a predictor of competitive employment. One hundred and sixty-six consumers who had been enrolled in either a Clubhouse program or an Assertive Community Treatment program were followed for 2.4 years. Those who expressed a work interest were able to find competitive work compared to those who did not (51.3% versus 28.6%). When the consumers in this study who had expressed no interest in work were given vocational support, 29% of them did engage in competitive employment (Macias et al., 2001, p. 287). This emphasizes the role the service team can play in providing ongoing support.

In other studies, full treatment compliance and shorter periods of illness were reported as predictors of syndromic recovery, while higher social class was predictive of functional and symptomatic recovery (Keck et al., 1998). Even with syndromal and symptomatic recovery, many consumers show psychosocial deficits (Coryell et al. 1998; Goldberg, Harrow, & Grossman, 1995). Since work functioning is of primary

importance, service providers and consumers must be aware and highlight the long-term effects of this disease and the long-term supports needed to maintain quality of life. In a longitudinal study of 113 consumers who suffered from bipolar disorder, predictors for functioning 15 years later included: poor functioning in the five years before baseline and ongoing depression in the two years after baseline (Coryell et al., 1998).

### Workplace Accommodations

Individuals who live with the effects of a SMI need accommodations in order to enter the work-force and maintain their jobs (Becker et al., 1998). The passage of the ADA (1990) changed the accommodation landscape. Research just prior to the passage of the ADA with 127 Fortune 500 companies, found that only 23 had either formal or informal policies regarding the employment of persons with disabilities and that these policies were mostly driven by affirmative action (Jones, Gallagher, Kelly, & Massari, 1991). According to the Americans with Disabilities Act of 1990 (ADA), Title I, employers are prohibited from discriminating against qualified individuals with disabilities in job application procedures, hiring, firing, advancement, compensation, job training, and other terms and conditions of employment. According to the ADA (1990) a “qualified individual” is a person with a disability who can, with or without reasonable accommodation, perform the essential functions of the job. Reasonable accommodations may include leaves of absence, flexible work schedules, changes in leave policy, physical workplace modifications, access to special equipment, adjusting supervisory interactions, provision of a job coach, job reassignment, counseling, peer and employer training

(Fabian et al., 1993; MacDonald-Wilson, Rogers, Massaro, Lyass, & Crean, 2002; Mank, Oorthuys, Rhodes, Sandow, & Weyer, 1992; Sahi & Kleiner, 2001).

Accommodations must be reasonable and are often requested to address consumers' limitations in social, emotional and cognitive arenas of functioning (Dickerson et al., 2004; MacDonald et al., 2003). It is important to note that employers cannot provide accommodations unless they are requested by the person with a disability. Consumers must weigh whether to disclose or not. Professionals and managers with SMI (N = 350) in three settings (mental health, health/social services, and technical/business/educational) were asked to respond to questions about their disclosure patterns (Ellison, Russinova, MacDonald-Wilson, & Lyass, 2003). Based on their history of hospitalizations these respondents had experienced significant impairment. In this sample, 86.6% had disclosed their illness (highest disclosures were among mental health workers then those in technical settings and other social/health services). Seventy-four percent had disclosed either when applying for the job or within one year. Income and diagnosis were the reported reasons for the timing of the disclosure. Only 30% discussed needed modifications. A summary of the results showed that: for those who disclosed they had only done so because they felt comfortable in their job, they were more accepting of their illness, and they had made a good fit between their illness and their work (Ellison et al., 2003, p. 7). For those who did not disclose, a majority of them had no intention of ever disclosing, feeling confident that they could keep their job without accommodations, and they were afraid of repercussions from peers and supervisors (Ellison et al., 2003).

In a study of 63 SMI consumers who had experienced unsatisfactory terminations, the consumers reported that they would have needed flexible hours, more training and employer support, feedback, or modified working conditions to have remained on the job (Becker et al. 1998). Consumers who experience long-term cognitive impairment need accommodations, but are, at times, unable to ask for them. Contrary to some earlier studies that showed limitations predominantly in the areas of social, interpersonal, and emotional limitations, MacDonald-Wilson et al. (2003) reported that cognitive limitations were the strongest and most reliable predictor of accommodations. This longitudinal study involved 191 employed consumers in 22 SE programs in three states and focused on the accommodations consumers needed for specific work behavior limitations. These cognitive areas included: learning the job, being able to concentrate on tasks, following schedules, being able to assess one's job performance, problem solving, literacy skills, and being able to work independently (MacDonald-Wilson et al.). Those consumers who experienced limitations in these areas received more support from peers and supervisors than those consumers with physical limitations.

Employers who have had more contact with persons with disabilities tend to be more flexible in their hiring and accommodations for those who are SMI (Diksa & Rogers, 1996; MacDonald-Wilson et al.). One of the roles of the ACT and other support teams is advocacy by means of ongoing relationships with industry (Diksa & Rogers, 1996). These contacts will help foster positive relationships and trust among the various stakeholders. Industries who have past experiences with persons who have SMI also relate fewer fears about consumers' symptoms, notably violence and poor productivity (Diksa & Rogers, 1996). This is a positive step in reducing community and especially

employers' negative stigma about persons who live with SMI. One of the surprising results from a sample of SE programs was that 12% to 17% of individuals and programs were not being monitored as to how successful the individuals with disabilities were on the job (Peterson, 1995, p. 6). This highlights the need for better contact to ensure that both employer and consumer goals are being met. In this sample, job coaches and case managers were providing the necessary contact with families and businesses.

### Summary

The preceding literature review focused on the issues surrounding the relationship between having a diagnosis of bipolar disorder and being able to work and function in the community. Research findings were shown related to enabling persons diagnosed with SMI and specifically bipolar disorder enter and remain in the workforce. The issues discussed included Social Security disincentives, symptomology issues, medication issues, medical and psychosocial interventions, predictors of entering the workforce, and accommodations.

Persons diagnosed with this disorder face many obstacles to maintaining employment. Fortunately, individuals who live with severe and/or persistent mental illness now have tools to enable them to enter and remain in the workforce (Wehman, 1998). Research has shown many areas in which both they and their support system can utilize in this endeavor. Most researchers have examined case management, medication management, and supported employment as singular issues but there appears to be a need to explore how combining these interventions together could increase consumers' ability to being employed. There is need to attend to as many intervention modalities as possible in



many avenues. It has been shown that medical areas must include a thorough and ongoing review of symptomology and medical interventions (psychotropic and non-psychotropic medicines). It has also been shown that families must be closely involved as they seem to be most able, at times, to be the sole link between the consumer and the community. To this end service providers must be accessible to provide the needed education and other supports required. Service providers must be adequately trained in current delivery models that are shown to provide the needed outcomes. Supported employment and case management methods have been shown to provide the necessary path to work for those with serious mental disorders. Research has also shown that consumers with severe mental illness need non-time limited support because the illness is ongoing and cyclical.

### III. METHODOLOGY

In this chapter the research methodology will be discussed. The research questions, hypotheses, participants, data collection, instrument, and procedures will be discussed.

A survey was administered to human service professionals that currently work with the population of persons diagnosed with bipolar disorder and other serious mental illness. The survey asked these professionals to respond to statements that reflect best practices toward this population in the areas of supported employment, case management and medication management. Professionals in this research included case managers (clinical and non-clinical), rehabilitation counselors, vocational and employment specialists, mental health counselors, and nursing staff.

The research was designed to answer two research questions:

1. How would human service professionals rank the importance of three best practice strategies in helping consumers diagnosed with bipolar disorder remain employed as indicated on a self-report survey?
2. Are there effective strategies that help consumers diagnosed with bipolar disorder remain in the workplace?

In seeking to answer these questions the following null hypotheses were developed:

- H<sub>0</sub>1. There is no significant difference on the scores of a self-report survey between human service professionals who utilize medication best practices and those who do not to help consumers remain in the workforce.
- H<sub>0</sub> 2. There is no significant difference on the scores of a self-report survey between human service professionals who utilize case management best practices and those who do not to help consumers remain in the workforce.
- H<sub>0</sub> 3. There is no significant difference on the scores of a self-report survey between human service professionals who utilize supported employment best practices and those who do not to help consumers remain in the workforce.

### Participants

The primary researcher contacted the directors of eight agencies requesting their participation in the research project. They were asked to identify those staff who directly worked with persons diagnosed with bipolar disorder. The survey was administered to this nonrandom sample of identified human service providers that currently work with consumers diagnosed with bipolar disorder. The survey asked these professionals to respond to statements that reflect best practices in supported employment, case management and medication management. These human service providers included case managers (clinical and non-clinical), rehabilitation counselors, vocational and employment specialists, mental health counselors, and nursing staff. These professionals were recruited from agencies in the southeastern United States. Three agencies from

Region IV of the Federal/State Vocational Rehabilitation System (Alabama, Georgia, Mississippi), two community mental health agencies in Alabama, and one vocational rehabilitation subcontractor in Alabama agreed to participate in this research project. Two agencies — a community mental health agency and a state rehabilitation agency — declined to participate in the research project.

### Procedure

The Institutional Review Board (IRB) of Auburn University gave its approval for conducting this research with various agencies serving those diagnosed with bipolar disorder. Those agency directors who had previously agreed to participate in the research project were again contacted to finalize the procedure for completing the surveys. They were given information relating to the scope of the research, the possible benefits and risks, and were shown the survey instrument. Five agencies, Alabama Department of Rehabilitation Services (ADRS), Mississippi Department of Rehabilitation Services (MDRS), The Georgia Department of Labor, Rehabilitation Division (GRD), Montgomery Area Mental Health Authority (MAMHA), and the Achievement Center Easter Seals (ACES) chose to identify those human service providers who were directly involved in providing services to the intended population and informed the researcher on how many surveys to provide them. The other agency, East Alabama Mental Health (EAMH), allowed the researcher to directly contact their employees and solicit their participation. EAMH nurses, counselors, and case managers were asked to complete the survey if they provided services to consumers diagnosed with bipolar disorder.

The five agencies received packages containing the consent letter (Appendix A),

the survey (Appendix B), and stamped mailers in which each participant could return the completed survey. The consent letter stated the purpose of the research, the rights of the participants, and how to return the survey to the primary researcher when they were completed. The survey was anonymous and confidential. Follow-up contact was only made to contacts in two agencies by phone and email three weeks after the initial packages were sent out to encourage respondents to complete the surveys. The initial response from those 2 agencies was 13 surveys and after the follow-up 8 more surveys were returned. Three hundred and forty two surveys were sent out to the agencies and 208 were returned for a return rate of 61%. Of the 208 surveys returned; 15 were from ADRS, 134 were from GRD, 19 were from MDRS, 14 were from MAMHA, 21 were from EAMH, and 5 were from ACES.

#### Instrument

This project sought to expand on the knowledge base of how persons diagnosed with bipolar disorder were able to enter and remain in the workforce. Researchers have previously focused on addressing singly the issues of medication management, case management, and supported employment with little research incorporating both the medical and non-medical avenues for consumers diagnosed with BP (Bond & Meyer, 1999). Others have advocated for treatments for co-occurring illnesses (Drake et al., 2001), utilizing the Program for Assertive Community Treatment (PACT) model and other case management programs (Phillips et al., 2001).

The present survey was developed from current research dealing in three areas (medication management, case management, and supported employment). In the area of

medication management, questions were developed from the American Psychiatric Association (APA) worksheet on bipolar disorder (BP) and from research (Glick, Suppes, DeBattista, Hu, & Marder, 2001; Scott, Garland, & Moorhead, 2002) resulting in questions that addressed medication compliance, symptom monitoring, family intervention, and co-occurring illness intervention. In the area of case management, questions were developed from research on assertive community treatment (ACT) teams and other case management models (Phillips et al., 2001; Stein, Barry, Van Dien, Hollingsworth, & Sweeny, 1999) resulting in questions that addressed the importance of the team approach, regular interventions, continuous and long term service, relapse prevention, and community contact. In the area of supported employment, questions were developed from research (Bond, 1998; Hirsch, 1989; Wehman, 1981) resulting in questions that addressed the importance of providing close support in the workplace, employer contact, competitive work, normalization, and agency collaboration.

The survey was divided into a demographics area and 3 sections. In the demographics area participants were asked to note their gender, age, ethnicity, certifications/licenses, the position they held in the agency, their educational level, and the number of years they had been providing services to persons diagnosed with a serious mental illness. In section 1 the participants were asked to note their responses to each statement on a 5-point Likert type scale containing responses from strongly disagree to strongly agree. Section 2 of the survey asked respondents to note their responses to each statement on a 5-point Likert type containing responses from very ineffective to very effective. Section 3 asked participants to indicate on a 5-point Likert type scale the degree to which they used either case management, supported employment, or

medication management. A total of 87 items were initially selected from these three areas. Those 87 items were examined for face validity by the primary experimenter and were decreased to 63 items after carefully selecting out statements that showed overlap in ideology. A final 63 items (19 for medical management, 26 for case management, and 18 for supported employment) were selected for inclusion in the survey. Three additional statements were developed for the professionals to indicate the degree to which they used each of the three practices. Professionals thus had to respond to 66 statements in this survey.

### Summary

In this chapter the research questions, hypotheses, participants, data collection, instrument, and procedure were presented. In addition the study design, and sample population were also presented. Chapter IV presents the results of the statistical analyses conducted in the study.

## IV. RESULTS

This study examined the use of best practices by service providers in the areas of medication management, case management, and supported employment as they related to enabling consumers diagnosed with bipolar disorder enter and remain in the workforce. This chapter presents the results of the self-report survey. The chapter begins with a description of the sample and its demographics; then, the analyses of the data related to the research hypotheses are presented. Analyses were computed using the SPSS (13.0) software.

### Description of the Sample

Due to the nature of the research, agencies were chosen which reflected service providers with backgrounds in mental health counseling, rehabilitation counseling, case management, medication management, and job development. Six out of eight agencies that were contacted chose to participate: Alabama Department of Rehabilitation Services (ADRS), Mississippi Department of Rehabilitation Services (MDRS), The Georgia Department of Labor, Rehabilitation Division (GRD), Montgomery Area Mental Health Authority (MAMHA), Achievement Center Easter Seals (ACES), and East Alabama Mental Health (EAMH). Two of the six agencies provided community mental health services employing mental health counselors, psychiatric nurses, and clinical and non-



clinical case managers. The three state rehabilitation agencies employed rehabilitation counselors, and the other agency contracted with one of the state rehabilitation agencies to provide job development specialists, job coaches, and supported employment specialists. Out of a possible population of 342 service providers 208 completed and returned the surveys for a return rate of 61%. Responses from the 208 surveys were initially put into an Excel data file and at the end of the data collection period were imported into a SPSS data file.

### Demographic Variables

Among the 208 respondents the majority were female (74%), Caucasian (66%) with a mean age of 46. The majority of respondents were in the age group of 50-59 (35%) (see Table 1).

The mean for professional years working with consumers diagnosed with a serious mental illness was 13 while 68% of the respondents were certified rehabilitation counselors. Other respondents were either licensed as professional counselors (11%), social workers (2%), nurses (3%) or had other licenses or certifications (17%) that may or may not be related to the field. Among the service providers the majority (85%) held masters degrees while 9% held Bachelor's degrees. There were 157 (75%) rehabilitation counselors and 28 (14%) mental health professionals. In this sample, the other positions included case managers (5%), job coach/ job development specialists (3%), and supported employment specialists (2%) (see Table 2).

Table 1

*Majority Age Groups, Ethnicity, Gender*

	n	%
Age		
50–59	73	35.1
40–49	52	25
Ethnicity		
African American	57	27.4
Caucasian	137	65.9
Gender		
Male	52	25
Female	153	73.6

Table 2

*Current Employment Position, Education, Certifications*

	<i>n</i>	<i>%</i>
<b>Current Employment Position</b>		
Supported Employment Specialist	4	1.9
Mental Health Professional	28	13.5
Case Manager	11	5.3
Job Coach/Job Develop Specialist	6	2.9
Rehabilitation Counselor	157	75.5
<b>Educational and Professional Credentials</b>		
Less than Bachelor	5	2.4
Bachelor's Degree	20	9.6
Master's Degree	177	85.1
PhD/EdD	4	1.9
<b>Certifications and Licenses</b>		
Certified Rehabilitation Counselor	114	67.5
Licensed Professional Counselor	18	10.7
Licensed Masters Social Worker (LMSW)	4	2.4
Licensed Nurse	4	2.4

## Best Practices Survey

Since this was a survey designed specifically for this project, a Cronbach's reliability analysis was performed on each of the three sections that make up the survey. The initial Cronbach's reliability analysis of the survey yielded the following results: a coefficient alpha level of .64 for the 19 statements relating to medical management, a coefficient alpha level of .89 for the 26 statements relating to case management and a coefficient alpha level of .71 for the 17 statements relating to supported employment. Statement number 29 was deleted from the statistical analysis due to seeming duplicity with another statement in the survey. In order to increase the reliability of the instrument other statements were deleted from the Medical and Supported Employment sections. Statement 8 was deleted from the Medical Management section thereby increasing the coefficient alpha level to .75 and resulting in a final total number of items at 18. Statement 5 was deleted from the Supported Employment section thereby increasing the coefficient alpha level to .81 and resulting in a final total number of items at 16. The alpha levels of .75 (medical management), .81 (supported employment), and .89 (case management) indicate high reliability for this instrument.

In order to examine construct validity of the instrument a factor analysis was conducted with Varimax rotation. The analysis yielded 16 factors with Eigenvalues greater than 1 which accounted for 66% of the cumulative variance. Factor 1 captured the largest percentage of the variance with 26%. Factors 2 and 3 accounted for 6% and 4% of the variance respectively. Table 3 shows the results of the principle component analysis and varimax rotation. The rotation displays 16 factors.

Table 3

*Factor Eigenvalues and Variance*

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Factor	Eigenvalue	% of Variance	Cumulative %
1	15.39	25.6	25.6
2	3.37	5.61	31.27
3	2.44	4.07	35.34
4	2.16	3.61	38.95
5	1.73	2.88	41.84
6	1.69	2.82	44.67
7	1.62	2.70	47.37
8	1.42	2.38	49.75
9	1.37	2.28	52.04
10	1.36	2.28	54.32
11	1.28	2.13	56.45
12	1.23	2.05	58.50
13	1.15	1.92	60.42
14	1.11	1.85	62.27
15	1.08	1.80	64.08
16	1.01	1.69	65.78

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The survey focused on three best practices (factors). It is surprising that the factor analysis displayed sixteen factors. Further analysis will need to be conducted on these factors. This limitation will be discussed in the Limitation section of the paper.

The research was designed to answer two research questions:

1. How would human service professionals rank the importance of three best practice strategies in helping consumers diagnosed with bipolar disorder remain employed as indicated on a self-report survey?
2. Are there effective strategies that help consumers diagnosed with bipolar disorder remain in the workplace?

In seeking to answer question 2 the following null hypotheses were developed:

- H<sub>0</sub> 1. There is no significant difference on the scores of a self-report survey between human service professionals who utilize medication best practices and those who do not to help consumers remain in the workforce.
- H<sub>0</sub> 2. There is no significant difference on the scores of a self-report survey between human service professionals who utilize case management best practices and those who do not to help consumers remain in the workforce.
- H<sub>0</sub> 3. There is no significant difference on the scores of a self-report survey between human service professionals who utilize supported employment best practices and those who do not to help consumers remain in the workforce.

In order to test these three null hypotheses a one way analysis of variance (ANOVA) was performed to analyse the group means between users and non-users of the

three best practices. In order to respond to question 1 a repeated measures design within-subjects ANOVA was performed to test the differences between the three groups of best practices simultaneously. For statistical purposes respondents were placed into one of two groups. They were considered to use each practice if they indicated a 4 or 5 on the Likert scale and were considered to not use each practice if they indicated a 1, 2, or 3 on the Likert scale.

The means and standard deviations for the 2 groups on each of the three best practices are listed in Table 4. Group 1 refers to those who responded with a 1, 2, or 3 on the Likert scale and group 2 refers to those who responded with a 4, or 5 on the Likert scale.

Table 4

*Means and Standard Deviations for Each of the Two Groups on Each Practice*

Variable	Group #	<i>n</i>	<i>M</i>	<i>SD</i>
Med Management	1	42	4.1704	.50747
	2	158	4.3869	.43158
Case Management	1	38	3.8775	.48087
	2	162	4.0568	.39029
Supp Employment	1	116	3.9483	.42022
	2	84	4.0574	.32824

Results of null hypothesis 1 showed a statistically significant F value on the scores of the self-report survey between the group of human service professionals who utilize medication best practices and the group of human service professionals who do not utilize medication best practices. The observed F value was  $F(1,198) = 7.732, p < .05$ . An F ratio greater than 1 indicates that the differences between the groups are greater than chance therefore null hypothesis 1 was rejected. The statistical power calculation resulted in a medium effect size of .46 for this section.

Results of null hypothesis 2 showed a statistically significant F value on the scores of the self-report survey between the group of human service professionals who utilize case management best practices and the group of human service professionals who do not utilize case management best practices. The observed F value was  $F(1, 198) = 5.919, p < .05$ . An F ratio greater than 1 indicates that the differences between the groups are greater than chance therefore null hypothesis 2 was rejected. The statistical power calculation resulted in a medium effect size of .41 for this section.

Results of null hypothesis 3 showed a statistically significant F value on the scores of the self-report survey between the group of human service professionals who utilize supported employment best practices and the group of human service professionals who do not utilize supported employment best practices. The observed F value was  $F(1, 198) = 3.930, p < .05$ . An F ratio greater than 1 indicates that the differences between the groups are greater than chance therefore null hypothesis 3 was rejected. Statistical power calculation resulted in a small effect size of .29 for this section. Table 5 displays the ANOVA F statistic summary.



Table 5

*ANOVA F Statistic Summary*

Variable		<i>df</i>	<i>F</i>	<i>ss</i>
Med Management	Between Groups	1	7.732*	1.554
	Within Groups	198		39.802
Case Management	Between Groups	1	5.919*	.989
	Within Groups	198		33.080
Supp Employment	Between Groups	1	3.930*	.581
	Within Groups	198		29.241

Question 1 asked how human service professionals ranked the importance of medication management, case management, and supported employment strategies in helping consumers diagnosed with bipolar disorder remain employed as indicated on a self-report survey. Analysis of the data shows that there are differences between the three best practices. A repeated measures design within-subjects analysis ANOVA conducted on the data indicated that medication management had a higher mean (4.344) than the mean for case management (4.030) or the mean for supported employment (4.001). Post hoc analyses performed to determine which best practices were significantly different and which were not. Factor 1 indicates medication management practices, factor 2 indicates case management practices, and factor 3 indicates supported employment practices. The Least Significant Different (LSD) procedure indicated a significant mean difference of

.313 between factors 1 and 2, and a significant mean difference of .343 between factors 1 and 3. There was no significant mean difference at the .05 level between factors 2 and 3.

### Summary

Data analysis and results presented in this chapter addressed the 2 research questions and the 3 null hypotheses. All 3 null hypotheses were rejected indicating that there were differences in the scores on the survey between practitioners who did and did not provide services in the three areas of best practices. The mean scores for medical management practices were higher than the means for case management and supported employment best practices respectively. This indicates that human service providers rated medical management best practices as the most effective set of practices that enable consumers diagnosed with BP to be able to enter and remain in the workforce. Service providers next rated case management best practices as the second most effective set of practices that enable this population to enter and remain in the workforce. Service providers noted supported employment best practices as the least effective of these 3 sets of practices that enable this population enter and remain in the workforce. Post hoc analyses showed that there were significant mean differences between factors 1 and 2 and between factors 1 and 3. Factors 2 and 3 showed no significant mean difference at the .05 level (see Table 6).

Table 6

*Pairwise Comparisons (Post Hoc) (LSD)*

Factor	Factor	Mean Difference
1	2	.313*
	3	.343*
2	1	-.313*
	3	.030
3	1	-.343*
	2	-.030

\* The mean difference is significant at the .05 level

## V. DISCUSSION

This section presents a summary of the present study, contrasts the results of previous research, sets forth implications for further research and presents limitations of the present study. This study examined how service practitioners in the field utilized best practices in medication management, case management, and supported employment to enable consumers diagnosed with bipolar disorder enter and remain in the workforce. Previous studies have shown how each of these 3 best practices individually has benefited persons diagnosed with bipolar disorder enabling them to enter and remain in the workforce. This study compared the 3 best practices together and asked service providers to not only rank which set of practices in their experience seemed to benefit this population the best, but also to determine whether or not each set of practices was beneficial in helping this population enter and remain in the working population.

Consumers with disabilities who want to be involved in the world of work have difficulties entering and remaining in the workforce (Baron & Salzer, 2002; Rutman, 1994). There are 4-5 million consumers diagnosed with serious mental illnesses (SMI) and these consumers who are diagnosed with serious or significant disabilities have a reduced possibility that they will achieve employment (Hayward & Schmidt-Davis, 2003). It is noted that the employment rate among those with a mental disability is only 41.3% (Stoddard, Jans, Ripple, & Kraus, 1998, p. 10). Rehabilitation closure rates for

consumers diagnosed with psychiatric disabilities are lower than the closure rates for consumers diagnosed with physical disabilities (Andrews et al., 1992). Current best practices have not been extensively studied in consumers with bipolar disorder (Anthony, Rogers, & Farkas, 2003) therefore this present research study sought to add to the empirical evidence.

Respondents in this study rated medication management (MM) as the most important best practice enabling consumers diagnosed with BP enter and remain in the workforce. Medication management best practices include taking all prescribed medications, monitoring for suicide risk, access to ongoing psychotherapy, family support, and addressing co-occurring substance abuse issues. These practices are very instrumental in increasing the functioning of consumers diagnosed with BP because this disability is both long-term and cyclical requiring both psychiatric and social services intervention (Jacobs, Davidson, Steiner & Hoge, 2002). Even though there is no consensus on the exact medical intervention needed, there is consensus that consumers who do not follow their medical treatment regimen are more prone to poor functional outcomes and rehospitalizations (Yamada, Korman, & Hughes, 2000).

#### Medication Management Issues

In order to find out how respondents rated the importance of each statement in the survey, the Likert scores for each statement were summed. In this sample, respondents listed in order of importance the following statements: (1) consumers have ongoing family support, (2) consumers receive treatment planning and counseling, (3) consumers see the value of working, (4) consumers are strongly encouraged and monitored in taking

all prescribed medication, (5) consumers have a sense of self-determination, and (6) any co-occurring mental illnesses are actively addressed. It is surprising that some core important medical issues were not addressed in the top tier of this section such as consumers receiving help for co-occurring substance issues, and consumers and their families receiving psychoeducation on the presenting illness. A study has shown that consumers had been terminated due to interpersonal issues related to the mental illness, dependability, and substance abuse issues (Becker et al., 1998). Drug and alcohol abuse has also been reported as high as 60% in consumers with BP (Glick, et al., 2001, p. 53). However it must be noted that researchers do not agree on the relationship between drugs and work functioning because a study of 25,480 adults served by the Veterans Health Administration showed “no functional deficit in the domain of work and no added risk of non-compliance with vocational rehabilitation associated with a coexisting SUD among vocational rehabilitation participants compared to participants with psychiatric disorders alone” (Debring et al., 2002, p.11). Anthony (1993) and Griswold & Pessar (2000) have addressed the issues of recovery and education on symptoms and relapse prevention. Recovery includes understanding the illness (e.g., symptoms, medications and their side effects, current functioning) and family education needs to cover monitoring and identification of symptoms and relapse issues, high-risk behaviors, suicide risk, and interventions necessary especially when symptoms of severe depression and/or mania present (Anthony, 1993; Griswold & Pessar, 2000). One possible explanation is that this sample reflects the disagreement in the field regarding appropriate medical intervention.

## Case Management Issues

Case management (CM) best practices were ranked as the second of three best practices in this research. Case management best practices include competitive employment, having multi-disciplinary teams serving consumers, making individualized treatment plans, maintaining positive relationships between case management teams and consumers, maintaining long term services, and addressing consumers' needs where they live and work (Anthony et al., 2000; Frey, 1994). In this sample, respondents listed in order of importance the following statements: (1) one of the treatment plan goals must be treatment compliance, (2) consumers feel that there is a positive helping alliance between themselves and their service providers, (3) each consumer's supportive interventions are individualized, (4) service providers provide avenues to strengthen consumers' work skills and work habits, (5) case managers are able to successfully link consumers to community resources, and (6) consumers' needs are addressed where they live and work. Unlike issues relating to medication management, most important case management best practices were noted in the top tier of this section. It is possible that case management practices are utilized more widely by many providers and thus this sample showed more agreement in relating to CM practices than they did in relating to MM practices.

## Supported Employment Issues

Respondents ranked supported employment (SE) best practices last of the three best practices in this research. SE incorporates three elements: "competitive work, an integrated work setting, and the provision of on-going support" (U. S. Department of Labor, 1993). Supported employment best practices include competitive work,

competitive pay, ongoing support, consumers being involved in all aspects of the work environment, non-stigmatizing support, opportunities for career growth, rapid job searches, and a focus on consumers' strengths and preferences (Bond et al., 2001; Marrone & Gold, 1994). In this sample, respondents listed in order of importance the following statements: (1) consumers are placed on jobs that reflect their preferences, strengths, and work experiences, (2) consumers receive training in how to relate to others appropriately in the workplace, (3) there is active and ongoing collaboration between rehabilitative services and mental health services, (4) consumers receive vocational assessment prior to working, (5) consumers and service providers are very focused on normalization and community integration, and (6) consumers are able to interact with their non-disabled peers in the workforce. Respondents rated one of the core elements of SE (competitive work at competitive wages) lower than the top five statements among these best practices. Respondents also rated 2 other important SE practices (zero exclusion and quick job placement) lower than other statements. It is possible that respondents use only those elements of SE that they are familiar with or that the agency in which they work advocate for use with consumers.

### Limitations of the Study

Human service providers from 6 agencies responded to a survey reflecting best practices in supported employment, case management, and medication management. There are some factors that limit the generalizability to the overall population of persons diagnosed with BP. First, this study was not a true experimental design because a convenience sample of service providers was used. It is currently difficult to get a true



sample of human service providers who solely assist consumers diagnosed with BP mainly due to current policies in place, and because a significant number of those diagnosed with BP also have other diagnoses that impact on their symptomology. Second, it may be possible that some of the statements in this survey may have been confusing or may have contained overlapping ideology. While the survey reflects high reliability, the reflection in the factor analysis of sixteen factors suggests that validity issues will need to be addressed. Third, it may have been difficult for providers to limit their responses solely to the bipolar issues faced by consumers since co-occurring disorders may also be diagnosed. Consumers who have multiple diagnoses that may include BP will present a challenge to researchers but it may be possible that more rigorous statistical methods could be performed to limit extraneous variables. Fourth, providers' length of experience in working with persons diagnosed with BP can affect their ability to determine which variables can be used successfully. Fifth, some providers may or may not have extensive education in all of the 3 best practices that they were responding to in the survey. Thus these limitations may have affected the results of this research. Despite the limitations of the study, findings suggest that medication and case management concepts as well as supported employment concepts are important in helping consumers with bipolar disorder enter and remain in the workforce.

## Conclusion

Researchers continue to call for ongoing research into what enables consumers diagnosed with serious mental illnesses to enter and remain in the workforce. Due to the nature of these illnesses, research needs to be focused in many areas of these illnesses.

This study sought to discover how human services providers utilized medication and case management best practices as well as supported employment best practices to help consumers with bipolar disorder enter and remain in the workforce.

Human service providers responded to a survey containing statements based on best practices in the three areas. Respondents ranked the three areas respectively as medication management (MM), case management (CM), and supported employment (SE). It is surprising that medication management practices were ranked highest by this group of mostly rehabilitation counselors. It was expected that SE and CM practices would be ranked ahead of MM practices since SE and CM practices are focused on enabling consumers to enter the workforce and maintain independence in the community. However, it may be that service providers have realized the importance of consumers with bipolar disorder maintaining symptom and psychological stability in order to remain in the workforce. This can only be accomplished when service providers better understand the illness, and foster a relationship with consumers' individual support systems and outside entities like mental health agencies. There appears to be limited understanding and/or usage on the concepts underpinning each of the three best practices under study. It is possible that other best practices which may therefore be valid and reliable may not be used at particular sites. Many of the human service providers reported needing more training regarding serious mental illness (SMI) and how to respond to consumers' needs. It would seem based on the responses to the survey that counselors and other providers would thus benefit greatly from ongoing training regarding issues surrounding serious mental illness. It is hoped that administrators and staff will continue to seek out this training at conferences and other in-service opportunities.

Most respondents seemed familiar with the best practices but some did note difficulty implementing said practices at various agencies. This seems to be due to the policies in place at various agencies. Respondents' answers may therefore reflect their agency's current policies on these practices. Policies seem to dictate the implementation of best practices and this may hamper the understanding and usage of best practices in the three areas. In-service training and meetings with agency managers could foster a better understanding of best practices and possibly lead to better implementation of these practices. Some agencies are beginning to have more ongoing education in this area while others continue to leave it up to the individual human service provider. This ongoing education needs to address the concepts commonly covered in psychosocial rehabilitation courses. Psychosocial rehabilitation focuses on what is necessary to enable the consumer achieve his or her goals in the community which may include work. The use of assertive community treatment teams would also improve consumers' ability to access the workplace. Agencies would need to commit to ongoing education to enhance service providers' ability to serve consumers with bipolar disorder. The agencies represented in this study have initiated few of the concepts of these best practices.

Agencies may use only some areas of current best practices. Some agencies may have adopted the entire models of best practices, but it seems agencies use only those parts of best practices that help them respond to funding and political pressure. For example, while CM practices have been shown to increase consumer workforce participation, agencies may not have the trained staff necessary to implement all aspects of an effective program based on best practices. While a consumer may be able to receive the correct medication, he or she may not be able to have the ongoing support necessary

to maintain his or her employment. It is interesting to note that treatment compliance was rated the most important best practice for CM. This response is expected if respondents belong to agencies that focus their CM on consumers maintaining medical stability and meeting daily needs. This response both reflects current policy in agencies and understanding and use of best practices. It is therefore possible that respondents only highly rated those statements that addressed issues they used on a regular basis in providing services to consumers with SMI.

Another issue that may have affected this study relates to the type of employment. A majority of service providers in this study served consumers in rural communities. Consumers with bipolar disorder require flexible hours and work environments. If those rural communities mainly provided unskilled work for consumers with bipolar disorder then the length and rate of employment would tend to be low. Respondents may have answered the survey based on their limited interaction with specifically those with bipolar disorder. Several respondents commented that they were either not currently serving consumers with BP but had done so recently, or had a small caseload of consumers with BP and other SMI. The effect of this issue may be reduced by enacting a stronger research design.

This survey examined the relationship between MM, CM, and SE best practices in enabling consumers to enter the workforce. Even though items were removed based on apparent overlap of ideology, it seems, based on the factor analysis, further modifications will need to be done on the survey. Establishing better validity will strengthen the results of this survey and ensure its continued use in future studies. There should be clearer distinctions between statements that reflect the three best practices in order to clearly

establish any existing relationships. There does seem to be some overlap in ideology in the literature concerning the three best practices and this will need to be addressed further to better establish construct validity of the survey. The present form of the survey, however, does not affect the results of this study on what human service providers consider important in helping this population enter and remain in the workforce.

Some respondents noted poor interaction between mental health agencies and rehabilitation agencies. It is therefore possible that consumers have been working without the ongoing close support of a mental health professional. Consumers may be also working during the acute or remission phases of the illness. An accompanying study on how many hours worked per week and length of time employed would add to the understanding of the relationship between work and symptoms. It is possible that respondents answered the survey based on the fact that consumers were still able to work without the close support of mental health services. If consumers have been also working without the provision of certain core elements of SE and CM, this could possibly explain why some important core statements reflecting MM, CM, and SE received low scores.

#### Further Study

This study added to the empirical data on enabling persons diagnosed with BP enter and remain in the workforce. Further research should be done to replicate the findings of this study. Further research could also address what best practices are presently being used in rural areas that are beneficial to consumers with bipolar disorder. Further research could also identify which concepts of these best practices are being endorsed by agencies. It is suggested that agency leadership in both rehabilitation and

mental health agencies be more attentive to the relationship between the mental health of persons with BP and their ability to enter and remain in the workforce. A better understanding of this relationship could foster better working relationships between mental health and rehabilitation agencies resulting in consumers being more able to remain in the workplace. Research could focus on how this relationship between agency providers enhance the use of these best practices to enable workplace participation by consumers with bipolar disorder.

Research could also focus on how knowledge of best practices could enhance service delivery to consumers. It is assumed that if service providers better understand current best practices they will incorporate them into service delivery. An outcome measures research could focus on consumers ability to work as well as hours worked and length of time worked. More research also needs to be done in addressing rural mental health issues and policies that seem to be hampering the delivery of effective services and it should be researched whether or not program fidelity will better enable counselors' understanding and implementation of best practices.

Research needs to be ongoing in addressing the needs of consumers who live with this long-term and cyclic illness. Their insight into what does and does not work will continue to fuel their entrance into the workforce. The Federal Government and state agencies want to continue to provide effective services to those diagnosed with serious mental illness and this research and this small attempt may have done so.

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## APPENDICES

APPENDIX A  
INFORMATION LETTER

# Auburn University

Auburn University, Alabama 36849-5226

Department of Rehabilitation & Special Education

1228 Haley Center

Telephone: (334) 844-5943

## Information Sheet

### For Research Study Entitled

### Best Practices for helping consumers diagnosed with bipolar disorder and other serious mental illness remain in the workforce

You are invited to participate in a research study examining the use of supportive employment concepts, assertive community treatment and other case management methods, and medication management to enable persons diagnosed with bipolar disorder remain in the workforce. This study is being conducted by William A. Philadelphia under the supervision of Dr. Clarence Brown, Professor in the Department of Rehabilitation and Special Education, Auburn University. I hope to learn more about the current practices that human service providers see as being beneficial. You were selected as a possible participant because you are involved in the treatment and rehabilitation of persons diagnosed with bipolar disorders and other serious mental illnesses. I have been given permission by your agency to contact you and ask for your participation in this project.

If you decide to participate, we will ask you to complete a self-report survey consisting of 66 questions and your demographics. This survey is divided into three sections consisting of Likert style responses to each question. This survey will take approximately 20 minutes to complete. You will have 14 days to complete and return this survey. When you have completed the survey, please place it in the provided stamped envelope and mail. If you wish to receive a summary of the results of this study, please send an email to [philawa@auburn.edu](mailto:philawa@auburn.edu). If you have any questions, you may also contact me at (706) 442-2958 or you may write to me in care of the Department of Rehabilitation & Special Education, 1218 Haley Center, Auburn University, AL 36849.

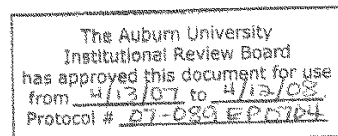
There are no foreseeable risks or discomfort associated with participation in this project.

Participants in this study will be able to better identify those best practices that help consumers diagnosed with bipolar disorder function in the workplace. Participants may also be made aware of other best practices that they have not used previously and make use of those practices. We cannot promise that you will receive any or all of the benefits described.

Your name and identifying data is not being requested or used, however, if any such information is obtained in connection with this study it will remain anonymous and confidential. Only the primary researcher will have access to any identifying data. Information collected through your participation may be used to fulfill an educational

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A LAND-GRANT UNIVERSITY



# Auburn University

Auburn University, Alabama 36849-5226

Department of Rehabilitation & Special Education

1228 Haley Center

Telephone: (334) 844-5943

requirement (Doctoral degree), published in a professional journal, and/or presented at a professional meeting. If so, none of your identifiable information will be included.

Your decision whether or not to participate will not jeopardize your future relations with Auburn University, the Department of Rehabilitation and Special Education, or your agency.

For more information regarding your rights as a research participant you may contact the Auburn University Office of Human Subjects Research or the Institutional Review Board by phone (334) 844-5966 or email at [hsubjec@auburn.edu](mailto:hsubjec@auburn.edu) or [IRBChair@auburn.edu](mailto:IRBChair@auburn.edu).

HAVING READ THE INFORMATION PROVIDED, YOU MUST DECIDE WHETHER TO PARTICIPATE IN THIS RESEARCH PROJECT. IF YOU DECIDE TO PARTICIPATE, THE DATA YOU PROVIDE WILL SERVE AS YOUR AGREEMENT TO DO SO. THIS LETTER IS YOURS TO KEEP.

\_\_\_\_\_  
Investigator's signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Print Name

\_\_\_\_\_  
Print Name

Page 2 of 2

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The Auburn University  
Institutional Review Board  
has approved this document for use  
from 4/13/07 to 4/12/08  
Protocol # 07-089 EP 0704

APPENDIX B

SURVEY

# **Best Practices Related to Maintaining Employment for Consumers Diagnosed with Bipolar Disorder**

## **A Survey of Human Service Providers**

Best practices are those activities/behaviors research has shown to be effective in assisting those with bipolar disorder enter and remain in the workforce. These practices include medical intervention, utilizing assertive community treatment and other active case management models, and utilizing supported employment concepts. As a practitioner you are asked to respond to how you view and use these best practice concepts in assisting your consumers diagnosed with bipolar disorder to remain employed.

Please complete the following items by circling the appropriate letter or darkening the appropriate circle. Please complete all items. Remember that all information collected in this survey is completely anonymous and confidential.

## Respondent Demographics

Respondent Age: \_\_\_\_\_

Gender:

- a. Male
- b. Female

Ethnicity:

- a. American Indian
- b. Asian
- c. African American, not of Hispanic origin
- d. Hispanic
- e. Middle Eastern
- f. Pacific Islander
- g. Caucasian
- h. Other

Certifications/Licenses (circle all that apply):

- a. Certified Rehabilitation Counselor
- b. Licensed Professional Counselor
- c. LMSW
- d. Licensed Nurse
- e. Other licensed or certified professional: \_\_\_\_\_

Position:

- a. Supported employment specialist
- b. Mental health professional
- c. Case manager
- d. Job coach/Job development specialist
- e. Rehabilitation counselor

Highest educational level completed:

- a. Less than Bachelors degree
- b. Bachelors degree
- c. Masters degree
- d. PhD/EdD

How many years have you been providing professional services to persons diagnosed with a serious mental illness?: \_\_\_\_\_



## **Survey of Best Practices**

In the following three sections you are asked to respond to statements exploring your use of Best Practices in the areas of supported employment, medical issues, and case management. Each statement in Section One is accompanied by a 5-point Likert type scale containing responses ranging from Strongly Disagree to Strongly Agree. Each statement in Section Two is accompanied by a 5-point Likert scale containing responses ranging from Very Ineffective to Very Effective. Section Three then asks you to indicate the degree to which you use each practice. Please fill in the circle on each Likert scale that best describes your response to each statement.

## Survey Section I

For statements 1 – 29 please use the scale provided to indicate how much you agree or disagree with each statement.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**It has been my experience that consumers diagnosed with bipolar and other serious mental illnesses have been more successful in maintaining employment when:**

1. one of the treatment plan goals includes treatment compliance.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

2. their mental illness diagnosis has not changed in at least one year and is considered stable.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

3. they feel that they have opportunities to advance in their careers or get better jobs.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

4. they feel that support does not have to be stigmatizing (job coaches at work, providers having contact with employers).

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

5. they and service providers are very focused on normalization and community integration.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6. they are able to describe the importance of taking prescribed medications.

Strongly Disagree	Disagree	Undecided	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**It has been my experience that consumers diagnosed with bipolar and other serious mental illnesses have been more successful in maintaining employment when:**

7. one of the treatment plan goals includes competitive employment.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

8. consumers have ongoing family support.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

9. zero or minimal exclusion policies are emphasized.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

10. the multi-disciplinary team is cross trained in each other's area of expertise.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

11. they are involved in some form of psychotherapy to maintain being able to function at home and in the work environment.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

12. each consumer's supportive interventions are individualized.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

13. consumers are able to interact with their non-disabled peers in the workforce.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

14. consumers are able to remain focused and attend (cognition) on the job.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

15. one of the treatment plan goals includes the prevention of rehospitalization.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

**It has been my experience that consumers diagnosed with bipolar and other serious mental illnesses have been more successful in maintaining employment when:**

16. consumers experiencing cognitive (focusing and attending) impairment receive supportive vocational services.

Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Undecided <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>
--------------------------------------------	-----------------------------------	------------------------------------	--------------------------------	-----------------------------------------

17. they receive ongoing cognitive assessments.

Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Undecided <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>
--------------------------------------------	-----------------------------------	------------------------------------	--------------------------------	-----------------------------------------

18. consumers and their families are involved in the treatment plan.

Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Undecided <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>
--------------------------------------------	-----------------------------------	------------------------------------	--------------------------------	-----------------------------------------

19. consumers see the value of working.

Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Undecided <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>
--------------------------------------------	-----------------------------------	------------------------------------	--------------------------------	-----------------------------------------

20. they have a sense of self-determination.

Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Undecided <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>
--------------------------------------------	-----------------------------------	------------------------------------	--------------------------------	-----------------------------------------

21. they feel that there is a positive helping alliance between themselves and their service providers.

Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Undecided <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>
--------------------------------------------	-----------------------------------	------------------------------------	--------------------------------	-----------------------------------------

22. consumers feel that they are a vital part of a community.

Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Undecided <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>
--------------------------------------------	-----------------------------------	------------------------------------	--------------------------------	-----------------------------------------

23. consumers' multi-disciplinary team consists of members from psychiatry, nursing, vocational specialists, psychology, and substance abuse.

Strongly Disagree <input type="radio"/>	Disagree <input type="radio"/>	Undecided <input type="radio"/>	Agree <input type="radio"/>	Strongly Agree <input type="radio"/>
--------------------------------------------	-----------------------------------	------------------------------------	--------------------------------	-----------------------------------------

**It has been my experience that consumers diagnosed with bipolar and other serious mental illnesses have been more successful in maintaining employment when:**

24. consumers are involved in competitive work at competitive wages in the workforce.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

25. consumers are able to reduce hospital admissions.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

26. consumers are **actively** involved in case management services.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

27. one of the treatment plan goals includes being able to respond quickly to changes in the consumer's symptoms (relapse prevention).

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

28. there is a clear emphasis on competitive employment rather than prevocational experiences.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

29. consumers feel that they have opportunities to advance in their careers or get better jobs.

Strongly Disagree ○	Disagree ○	Undecided ○	Agree ○	Strongly Agree ○
------------------------	---------------	----------------	------------	---------------------

## Survey Section II

For statements 30 – 63 please use the scale provided to indicate how effective or ineffective you view each action.

Very Ineffective	Ineffective	Undecided	Effective	Very Effective
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**It has been my experience that consumers diagnosed with bipolar and other serious mental illnesses have been more successful in maintaining employment when:**

30. consumers and their families are given psychoeducation related to living with a person/s diagnosed with serious mental illness/bipolar disorder.

Very Ineffective	Ineffective	Undecided	Effective	Very Effective
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

31. they are quickly placed on the job and trained by the employer or work specialist rather than trained then placed.

Very Ineffective	Ineffective	Undecided	Effective	Very Effective
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

32. any co-occurring drug and alcohol abuse is actively addressed.

Very Ineffective	Ineffective	Undecided	Effective	Very Effective
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

33. consumers requested needs are addressed promptly by their case management team enabling them to function for longer periods in the community.

Very Ineffective	Ineffective	Undecided	Effective	Very Effective
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

34. consumers are contacted at least once per week.

Very Ineffective	Ineffective	Undecided	Effective	Very Effective
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

35. case managers establish close bonds with consumers.

Very Ineffective	Ineffective	Undecided	Effective	Very Effective
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

**It has been my experience that consumers diagnosed with bipolar and other serious mental illnesses have been more successful in maintaining employment when:**

36. consumers and service providers regularly discuss and monitor symptoms.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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37. consumers are strongly encouraged and monitored in taking all prescribed medications.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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38. service providers maintain close contact with the consumer and the employer.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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39. consumers and service providers seek immediate psychiatric and psychological intervention when symptoms decrease daily functioning.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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40. consumers are provided long term case management services to maintain employment.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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41. consumers receive training in how to relate to others appropriately in the workplace.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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42. any co-occurring mental illnesses are actively addressed.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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43. consumers' needs are addressed by the multi-disciplinary team rather than being referred out to other providers.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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**It has been my experience that consumers diagnosed with bipolar and other serious mental illnesses have been more successful in maintaining employment when:**

44. case managers are able to successfully link consumers to community resources.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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45. service providers actively advocate for accommodations with employers on behalf of their consumers.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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46. service providers provide avenues to strengthen consumers' work skills and work habits.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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47. service providers meet daily to review the status of each consumer.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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48. service providers meet at least once a week to review the status of each consumer.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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49. employers and work peers are trained to provide support to the consumer in the work environment.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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50. case managers provide services to 20 consumers or less.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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51. consumers receive vocational assessment prior to working.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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**It has been my experience that consumers diagnosed with bipolar and other serious mental illnesses have been more successful in maintaining employment when:**

52. consumers receive treatment planning and counseling.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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53. consumers receive vocational skills training.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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54. consumers are placed on jobs that reflect their preferences, strengths, and work experiences.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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55. consumers are provided a menu of professional services from which to choose.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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56. strategies are provided to address non-work areas (housing, family issues, etc.) of consumers' lives.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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57. consumers and service providers seek immediate psychiatric and psychological intervention when symptoms decrease work ability.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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58. consumer follow along supports are maintained indefinitely.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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59. consumers are assigned job coaches that can work alongside them on the job.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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**It has been my experience that consumers diagnosed with bipolar and other serious mental illnesses have been more successful in maintaining employment when:**

60. a multi-disciplinary team services the needs of each consumer.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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61. employers and consumers are encouraged and do use natural supports (help from peers and others) in the work environment.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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62. consumers' needs are addressed where they live and work.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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63. there is active and ongoing collaboration between rehabilitative services and mental health services.

Very Ineffective ○	Ineffective ○	Undecided ○	Effective ○	Very Effective ○
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### SURVEY SECTION III

For the following practices shown to help consumers diagnosed with BP remain in the workplace, indicate the degree to which you use each practice.

1. Case management

Never ○	Rarely ○	Sometimes ○	Frequently ○	Almost Always ○
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2. Supported employment

Never ○	Rarely ○	Sometimes ○	Frequently ○	Almost Always ○
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3. Medication management

Never ○	Rarely ○	Sometimes ○	Frequently ○	Almost Always ○
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**End of Survey**  
**Thank you**