HOW EMPLOYABLE ARE PEOPLE WITH SERIOUS MENTAL ILLNESS?
CASE MANAGERS' AND UNDERGRADUATES' EXPECTATIONS

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ABSTRACT

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This study examines 107 case managers' and 159 undergraduates' employment-related expectations for adults with serious mental illness. The psychometric properties of Expectations about Employment for People with Serious Mental Illness (EESMI), a new measure of employment expectations, are presented. The EESMI yields three dimensions of employment-related expectations and evidences acceptable reliability and construct validity. Case managers and undergraduates reported similar expectations regarding the demands of a worker role and the motivation of people with serious mental illness to work. Case managers reported higher expectations about the benefits of work for people with mental illness than did undergraduates. Implications for researchers and community mental health practitioners are discussed.

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INTRODUCTION

Approximately 6 million adults in the United States are likely to experience a serious mental illness at some time in their lives (Jans, Stoddard, & Kraus, 2004). Mental illness is one of the leading causes of disability in the United States, and people who experience serious mental illness face unemployment rates far greater than those faced by the general population (Jans, et al., 2004; Sturm, Gresenz, Pacula, & Wells, 1999). However, despite the high rates of unemployment most people with serious mental illness report a desire to work (Macias, DeCarlo, Wang, Frey, & Barreira, 2001; McQuilken, et al., 2003; Mueser, Salyers, & Mueser, 2001), and many researchers have documented the benefits that people with serious mental illness derive from employment (e.g., Bond, et al., 2001). In recent decades, researchers have examined facilitators and barriers to employment for people with serious mental illness. Stigma has emerged as a substantial barrier to employment (Gouvier, Sytsma-Jordan, & Mayville, 2005; Whal, 1999). One way that stigma can be communicated is through interpersonal expectations. However, the extent to which others' expectations could influence employment rates for people with serious mental illness remains relatively unexamined.

The present study considers employment-related expectations as a factor that could impact employment rates for people with serious mental illness. The study presents a newly-developed 23-item measure of employment-related expectations for people with serious mental illness. Psychometric properties of the measure are presented. The responses of 158 undergraduate students and 107 case managers who work with adults with serious mental illness on the measure are compared. Relationships between the measure and organizational characteristics of case managers, such as size of caseload, tenure as a case manager, and number of perceived services available to consumers are examined. A review of relevant literature

regarding the benefits of employment, employment programs, facilitators and barriers to employment, stigma, and professionals' expectations for people with serious mental illness is provided as background for the present study.

LITERATURE REVIEW

Importance of Employment for People with Serious Mental Illness

Serious mental illness is among the most personally and economically costly health problems in the United States. The term “serious mental illness” includes the psychiatric diagnoses of various types of schizophrenia and affective disorders. The prevalence of serious mental illness, sometimes referred to as severe and persistent mental illness, is estimated to affect 2.8% in the adult population of the United States (Jans, Stoddard, & Kraus, 2004). The cost of providing direct care to individuals with serious mental illness is astounding. For example, the direct care costs in 1985 for schizophrenia alone were estimated to be 11.1 billion dollars (Rice & Miller, 1996). Even more striking is the fact that the indirect cost of lost of productivity for people with schizophrenia were estimated to be upwards of 8.1 million dollars in 1985 (Rice & Miller, 1996). Indeed, serious mental illness is one of the leading causes of disability in the United States. People with serious mental illness are 35% of the total individuals receiving Supplemental Security Income (SSI), making people with serious mental illness the largest diagnostic group receiving SSI (The Urban Institute, 2005). And, more than one-quarter of those who receive Social Security Disability Insurance (SSDI) are people who experience a serious mental illness (The Urban Institute, 2005).

Many of the indirect costs associated with serious mental illness, such as entitlement income and lost wages, are due to the high rates of unemployment for people with serious mental illness (Rice & Miller, 1996). Data from four nationally representative surveys suggest that during the years 1989 through 1998, employment rates for people with schizophrenia and related disorders ranged from 22% to 40%, while employment rates for people not experiencing a mental illness ranged from 76% to 84% (Jans, et al., 2004; Sturm, et al., 1999). This translates to

a *conservative* estimate of 3.6 million unemployed people with serious mental illness. This is disturbing, particularly because most people with serious mental illness want to be employed. In fact, recent research indicated that 55-70% of unemployed individuals with serious mental illness report a desire to work (Macias, et al., 2001; McQuilken, et al., 2003; Mueser, et al., 2001). Furthermore, the social role of “worker” is highly valued by people with serious mental illness (Boyer, Hachey, & Mercier, 2001), and the loss of valued social roles, such as that of employee, is considered a significant loss by people with serious mental illness and their families (Stein & Wemmerus, 2001).

People with serious mental illness not only have a desire to work, but also derive a number of benefits from employment. Quantitative research has documented several benefits of employment for people with serious mental illness. For example, Arns and Linney (1993) examined the relationship between vocational status and positive outcomes in a sample of 88 people with serious mental illness. Interestingly, the static variable of employment status was found to be a poor predictor of self-esteem, self-efficacy, and life satisfaction, while a positive change in vocational status over six months was related to increased self-esteem, self-efficacy, and life satisfaction. These authors suggest that such results might be indicative of the way that improvement in employment status across time reflects the positive transition from the social role of patient to the valued social role of worker.

In another study, Bond and his colleagues (2001) examined outcomes experienced by people with serious mental illness engaged in competitive employment compared to those who were unemployed, engaged in minimal work, or employed in sheltered workshops (piece-rate positions that are reserved for people with disabilities). Since many participants were engaged in more than one type of work across the 18-month study, classification of employment status was

determined by participants' total earnings in addition to where participants spent the majority of their time during the study period. No significant differences between the no work group and the minimal work group were found on any outcome measures, thus the two groups were combined for planned comparison tests. Planned comparisons indicated that after 18 months, participants who were engaged in competitive work showed greater satisfaction with vocational services, their finances, and leisure activities than participants who were unemployed or participated in minimal work. Across the time of the study, the competitive work group also reported greater self-esteem and experienced significantly fewer overall symptoms, affective symptoms, and less disorganization as compared to the no work-minimal work group. Furthermore, within-group analyses on the competitive work group revealed significant increases in self-esteem, overall life satisfaction, satisfaction with finances, satisfaction with leisure, and services across the 18 months of the study.

Bond and colleagues' (2001) findings are bolstered by earlier studies. Mueser and colleagues (1997) followed 143 individuals with serious mental illness that were participating in one of two employment programs; all participants were unemployed at baseline. Work status (employed or unemployed) and nonvocational outcome measures were assessed at baseline, 6-, 12-, and 18-month follow-up points. After controlling for baseline nonvocational measures, T-tests indicated that employed participants had significantly fewer overall symptoms, affective symptoms, and symptoms of disordered thought than unemployed participants. Additionally, after controlling for baseline measures, employed participants as compared to unemployed participants reported a better overall level of adjustment, higher self-esteem, and greater satisfaction with vocational services and finances. Furthermore, a study of 36 employed and 36 unemployed individuals with serious mental illness yielded similar results (Priebe, Warner,

Hubschmid, & Eckle, 1998). In this study, employed individuals reported fewer overall symptoms, fewer negative symptoms, greater global well-being, and greater satisfaction with their employment situation, finances, and leisure at home than did as unemployed individuals. Previous studies document similar findings (see Brekke, Levin, Wolkon, Sobel, & Slade, 1993; Blankertz & Robinson, 1996; Van Dongen, 1996). Thus, quantitative research strongly suggests that employment is associated with a number of positive outcomes for people with serious mental illness.

Qualitative studies also suggest the positive benefits of employment for people with serious mental illness. For example, Kennedy-Jones, Cooper, and Fossey (2005) conducted semi-structured interviews with four employed people experiencing serious mental illness about the role of work in their lives. In addition to the financial benefit of work and the alleviation of symptoms, participants spoke of employment as a way to achieve purpose, meaning, and structure in their lives. One participant commented that work provided her with “a place to go,” and a similar theme was observed in other narratives, as work was described as providing the opportunity to gain the respect of others, to increase social interaction with members of the community, and to foster a sense of belonging. The researchers noted that the sense of oneself in a “worker role” appeared to reflect the way that employment can provide a foundation for people with serious mental illness from which they can renegotiate a sense of self and develop a valued social role.

Additional qualitative studies have generated similar results. Scheid and Anderson (1995) interviewed ten employed people with serious mental illness regarding their experiences with work. Results indicated that participants viewed income, daily structure, happiness, a sense of purpose, accomplishment, and pride as benefits of employment. Additionally, participants noted

no “evidence of alienation or feelings of exploitation” regarding work and none of the participants had missed work due to their illness. Honey (2004) conducted interviews and focus groups with 41 people experiencing serious mental illness. Approximately 37% of the participants were unemployed, while the remaining 63% of consumers held some type of employment. Participants in this study identified a number of benefits to employment including increased income, quality of life, self-esteem, a sense of belonging, and the opportunity to contribute to society.

The benefits associated with employment, taken together with the high percentage of individuals desiring work, and low employment rates leads one to question what is preventing individuals with serious mental illness from working. In the past few decades, researchers have sought to answer this question.

Research on Employment for People with Serious Mental Illness

Following the deinstitutionalization of people with serious mental illness in the late 1950s and 1960s, vocational programs were created (Black, 1988). Over the past several decades, various models of employment programs have emerged. Models of employment programs have been extensively studied in relation to consumers’ employment status.

Beginning in the late 1950s and 1960s, vocational programs were located in hospitals, sheltered workshops, and halfway houses (Black, 1988). Hospital programs provided vocational services to inpatients in hospital and community settings (Bond, 1992). Sheltered workshops provided training and subcontract work from industries, usually in segregated facilities (Black & Kase, 1986; Weinberg & Lustig, 1968), and halfway houses provided programs in the context of a community residence (Fairweather, Sanders, Maynard, Cressler, & Bleck, 1969). During the 1970s sheltered workshops remained a popular method of vocational rehabilitation, and

transitional employment programs, which provided prevocational training and temporary paid work in a group setting, emerged in clubhouse settings (Twamley, Jeste, & Lehman, 2003). Bond (1992) notes that the creation of transitional employment in clubhouse settings may reflect the fact that in mental health agencies there was a “deeply felt pessimism about the employment potential for psychiatric patients,” thus employment was not an objective of community mental health centers so it became a goal of consumer-run psychosocial rehabilitation clubhouses (p. 244).

Bond (1992) reviewed vocational outcomes in controlled studies on hospital programs, sheltered workshops, halfway houses, and psychosocial rehabilitation in clubhouse settings. Several vocational outcomes were examined, including competitive employment and paid employment. Competitive employment is defined by being employed in the community with little or no prevocational training. Competitive employment is a particularly important outcome variable because it promotes the community integration of people with serious mental illness. Paid employment is defined by any job for which consumers were paid (e.g., transitional employment, sheltered employment, or competitive employment). When examining paid employment as an outcome variable, participants in the experimental conditions (the employment programs) were more successful in achieving paid employment than the control conditions in two of three hospital programs, one of two halfway house programs, and none of four psychosocial rehabilitation programs. However, participants in the experimental conditions did not achieve competitive employment more than the control conditions in *any* of the nine studies that examined competitive employment as an outcome variable. Such results indicate that these early vocational programs were successful in assisting consumers to obtain paid

employment; yet they did not prepare consumers for community-integrated employment outside the context of the rehabilitation program.

From the mid-1970s through the late 1980s, a number of new models of employment programs were developed. Assertive community treatment (ACT; Stein & Test, 1980), vocational counseling (Kline & Hoisington, 1981), and job club (Azrin & Besalel, 1979) were three popular models. ACT is a more general approach to the management of services for people with serious mental illness, and emphasizes ongoing time-unlimited supports from a team of service providers for a variety of services, including vocational rehabilitation (Bond, 1992). Vocational counseling focused on the discussion of consumers' fears, interests, and needs regarding employment (Kline & Hoisington, 1981), and job clubs were behaviorally based programs that assisted in helping consumers to acquire the skills believed necessary for employment (Azrin & Besalel, 1979). Although these approaches differed on a variety of dimensions, vocational counseling and job clubs were similar in that they focused on lengthy prevocational training, and all three approaches were similar in that they emphasized preparation and support for employment, but did not actually emphasize competitive employment. Bond's (1992) review of research on these program models revealed that in two of three studies that examined paid employment as an outcome variable, consumers in the experimental condition were more successful at obtaining paid employment than consumers in the control group. However, of the four studies that measured competitive employment as an outcome variable, *none* showed the experimental group obtaining competitive employment more than the control group.

Supported employment programs emerged in the 1980s and represented a "paradigm shift in vocational thinking" (Bond, 1992, p. 244). Supported employment programs were designed

with the specific goal of increasing the rate of competitive employment among people with serious mental illness (Bond, 1992; Warner, 2000). Supported employment programs emphasize rapid job placement in community settings, matching consumers' interests to job placement, ongoing and time unlimited vocational support provided at the discretion of the consumer, and collaboration between consumers' mental health treatment team, coworkers, and supervisors (Bond, 1992; Twamley et al., 2003). It is clear that supported employment programs have a largely different emphasis than earlier models of employment programs in that achieving competitive employment, not prevocational preparation or sheltered work is the ultimate goal. Campbell (1988) commented that these differences reflect radical conceptual changes regarding employment for people with serious mental illness as well as those with mental retardation. Specifically, the focus shifted from a problem of individual disabilities to a systems-level problem of unemployment. Additionally, research suggests that supported employment programs may be less costly than other programs, such as rehabilitative day treatment (Clark, Bush, Becker, & Drake, 1996).

By and large, research on models of employment programs indicated that participation in models of supported employment predicted consumers' employment status. Specifically, consumers who participated in Individual Placement and Support (IPS), a supported employment program that emphasized immediate job placement and had vocational rehabilitation services integrated within the mental health team, gained employment sooner and had higher rates of competitive employment than consumers who participated in Group Skills Training (GST), a psychosocial program that offered preemployment training and vocational rehabilitation services separate from the mental health team (Drake, McHugo, Becker, Anthony, & Clark, 1996). Further, in a review of 17 studies of supported employment, Bond, Drake, Mueser, and Becker

(1997) concluded that employment programs that integrated vocational and mental health services, had goals of competitive employment, and placed an emphasis on direct placement resulted in more hours worked and higher wages than employment programs that did not adhere to these principles.

Recent research has provided further evidence for supported employment. Bond (2004) reviewed 13 studies on supported employment and concluded that the following principles of supported employment demonstrated effectiveness in increasing employment outcomes, and thus should be considered evidence-based practice: services focused on competitive employment, consumers' self-determined eligibility for the program, rapid job search, and integration of vocational and mental health services. Furthermore, in a sample of 1273 consumers with serious mental illness, Cook and colleagues (2005) found that consumers who participated in supported employment programs that adhered to these principles of supported employment, in addition to the principle of providing time unlimited vocational supports at the consumer's discretion, were more likely to be competitively employed, have higher monthly earnings, and work 40 or more hours in any given month than consumers who participated in programs that did not adhere to all five of these principles. Thus, in terms of competitive employment, research demonstrates the superiority of supported employment over earlier models of employment programs.

In summary, the research on employment programs for people with serious mental illness reveals important information. First, it is apparent that the model of employment program plays a large role in consumers' employment status, and this implies that other systems-level variables may also play a role in consumers' employment status. Second, on average, participation in any type of employment program yields higher rates of paid employment nonparticipation in employment programs (Bond, 1992). However, competitive employment, which by definition

leads to greater community integration for people with serious mental illness, appears to be best achieved with supported employment program models. Lastly, these employment programs provided a context in which researchers could explore the unique challenges and barriers to employment that consumers of mental health services face and examine variables that are positively related to consumers obtaining and maintaining employment.

Employment for People with Serious Mental Illness: Predictors and Barriers

In addition to employment program models, other systems-level variables have been found to play a role in consumers' employment status. Pay is a factor that appears to influence participation in employment programs. Bell and colleagues (1996) reported that participants who were paid to participate in work were significantly more likely to maintain participation in employment than participants who were not paid to work. In addition, qualitative research on the benefits of employment from consumers' perspectives indicated that for almost all consumers money was a "sole motivator" or a "secondary benefit" of employment (Honey, 2004). In other qualitative research on consumers' perspectives, almost half of consumers reported that they considered income to be a positive life change associated with employment (McCrohan, Mowbray, Bybee, & Harris, 1994). Thus, increased income is perceived to be a facilitator of employment for people with serious mental illness.

Another income-related systems variable that was researched as a factor affecting employment rates for people with serious mental illness is government issued entitlement income. Research on the relationship between entitlement income and work status has produced mixed results. Bell and colleagues (1993) reported no correlation between the amount of entitlement income participants received and the number of hours participants worked, while Averett, Warner, Little, and Huxley (1999) concluded that entitlement income was a significant

disincentive to work, because those employed consumers received less entitlement income than unemployed consumers. However, both quantitative (McQuilken et al., 2003) and qualitative (Henry & Lucca, 2002; Honey, 2004) research discovered that consumers identify the loss of entitlement income as a barrier to employment. Thus, even if the systems-level variable of entitlement income is not related to hours of employment, it may be consumers' perceptions that their entitlement income will be reduced or eliminated that prevent them from seeking employment or participating in employment programs.

Individual-level variables have also been found to account for some variability in the employment rates of people with serious mental illness. Generally, higher levels of cognitive impairment and negative symptoms are associated with poorer vocational outcomes. Specifically, McGurk, Mueser, Harvey, LaPuglia, and Marder (2003) found that baseline measures of executive functioning and acquisition of new information were directly related to hours worked and wages earned in a two-year period. This study echoed earlier findings that vocational improvements in cooperativeness and quality of work were predicted by global measures of cognitive functioning (Bell & Bryson, 2001). Additionally, Lysaker and Bell (1995) reported that consumers with pronounced negative symptoms obtained lower scores on dimensions of task orientation, social skills, and personal presentation than consumers that did not display pronounced negative symptoms. And, becoming re-employed after a period of unemployment was related to a shorter duration of illness (Tomaras et al., 2000). Yet, other research has produced varied results regarding the relationship between clinical symptoms and employment. For example, Rogers, Anthony, Toole, and Brown (1991) collected information from 275 people with serious mental illness on a quarterly basis. Participants who obtained employment at some point during the study did not differ from participants who remained

unemployed on the clinical variables of total number of lifetime hospitalizations and length of most recent hospitalization, but employed participants had significantly fewer symptoms than unemployed participants at both intake and 12-month follow up. On the other hand, when Rogers and colleagues examined only the 214 participants who remained in the study for 12 months or more, there were no differences in symptomatology at intake between participants who obtained employment and participants who remained unemployed, while symptomatology at 12-month follow up was higher in the unemployed group than in the employed group. So, in general research suggests that clinical symptoms are an individual-level variable that often acts as a barrier to employment for people with serious mental illness. Yet, the relationship between symptoms and employment status is not completely clear.

Prior work history is another individual-level variable that is related to employment outcomes, where better prior work history is associated with better vocational outcomes. In particular, Tomaras and colleagues (2000) found that consumers' re-employment was associated with having maintained a prior job for at least two years. Likewise, Mueser and colleagues (2001) found that work history was a significant predictor of competitive employment both one-year and two-years after initial assessments, where better work history was associated with an older age of onset of schizophrenia, older age at first hospitalization, and higher educational level. Furthermore, McFarlane and colleagues (2000) reported that prior employment was the best predictor of competitive employment at all time points across an 18-month study. Furthermore, in a review of the literature, Marwaha and Johnson (2004) concluded that pre-morbid occupational and social functioning was the strongest predictor of employment status. Thus, research documents the link between the individual-level variable work history and

employment for people with serious mental illness, where better work history is a predictor of employment.

Although research has identified some systems-level and individual-level variables related to consumers' employment status, too many consumers who wish to work are still unemployed. Recent estimates of unemployment rates suggest that between 60% and 80% of people with serious mental illness are without competitive employment (Jans, et al., 2004; Sturm, et al., 1999). These disturbingly high rates of unemployment despite advances in supported employment and other types of vocational training underscore the need for further research on barriers to employment for individuals with serious mental illness.

Stigma as a Barrier to Employment for People with Serious Mental Illness

In recent studies, consumers with serious mental illness have been asked questions like “what prevents you from working?” Consumers often point to the systems-level variable of social stigma as a major barrier to employment. Interviews and focus groups with consumers reveal that consumers are reluctant to seek employment due to past experiences of being teased, socially “ostracized,” and treated differently by coworkers or employers because of their mental illness (Honey, 2004; Peckham & Muller, 2000). Henry and Lucca (2004) conducted interviews and focus groups with 44 consumers, who were either employed, unemployed and looking for work, or unemployed and not looking for work and learned that consumers perceive stigma as a barrier that has multiple levels. Consumers recognized that the media perpetuated negative images of mental illness, but also that stigma was present in interpersonal interactions in which family members, care providers, coworkers, or employees communicated their low expectations for consumers with serious mental illness. Indeed, consumers in Henry & Lucca's study indicated that social stigma is one of the “most daunting and difficult-to-challenge” barriers to

employment (p. 80). Similar results were found in a quantitative survey of 1,301 consumers with serious mental illness and follow-up interviews with 100 consumers when they were asked about barriers to the process of recovery from mental illness; consumers perceived stigma from people in a variety of community settings including churches, places of employment, and mental health facilities to be a barrier (Whal, 1999).

Additionally, Corrigan and colleagues (2003) surveyed consumers with serious mental illness on their experiences of discrimination, and found that of the 949 participants who experienced some form of discrimination, 73% noted that such discrimination was on the basis of psychiatric disability. What's more is that participants reported more discriminatory experiences in employment settings than any other setting, as 51.7% of the of those reporting discrimination on the basis of psychiatric disability named employment as the setting in which discrimination occurred. Such research clearly indicates that consumers perceive stigma from society, especially in employment settings.

Additional research confirms consumers' perceptions of stigma in the arena of employment. In terms of employability, people with serious mental illness are rated poorly by society. For example, Gouvier and colleagues (2005) surveyed 295 undergraduates in business-related majors regarding the employability of people with of a chronic mental illness, a back injury, a developmental disability, and a head injury. People with chronic mental illness and people with closed head injuries were rated significantly less employable than people with developmental disabilities or people with back injuries even though the resumes of each applicant were comparable. Additionally, when participants were asked which applicants they would hire for the position of janitor or telephone operator, the person with a chronic mental illness was the least likely to be hired even for the "low complexity" task of janitor. Similar

results were found when Drehmer and Bordeiri (1985) asked supervisors and mid-level managers to review resumes of three applicants (a person with paraplegia, a person with a history of mental illness, and nondisabled person) for two jobs, as the person with a history of mental illness was the rated the least favorably even though the variables of work history and qualifications were equal across applicants. Thus, people with serious mental illness are believed to be less employable than other disabled groups, a finding that reflects unfavorable public opinions regarding the skills and abilities of people with serious mental illness.

Furthermore, the negative public opinion of people with serious mental illness is not confined to the arena of employment. Indeed, researchers have noted that individuals with a serious mental illness, such as schizophrenia, are judged by the public to possess a variety of disparaging characteristics including laziness (Arboleda-Florez, 2003; Goodyear, 1983), violence, unpredictability (Levey & Howells, 1994), and undependability (Goodyear, 1983).

The extent to which the public possesses negative opinions about mental illness can be measured, and the measurement of these opinions is vital because of the ways that these negative opinions act as barriers in the lives of people with serious mental illness. In a recent review of measures and methods that assess mental illness stigma, Cohen and Struening's (1962) Opinions about Mental Illness Scale (OMI) was lauded for the "poignancy and complexity" of its items and its "breadth of coverage of salient issues" (Link, Yang, Phelan, & Collins, 2004, p. 521). And, the OMI has been extensively used in a variety of populations, such as college students (e.g., Wallach, 2004), case managers (e.g., Murray & Steffen, 1999), medical professionals and the general public (e.g., Cohen & Struening, 1962).

The OMI contains five subscales, two of which have direct implications for employment for people with serious mental illness. Mental Hygiene Ideology scale reflects a positive view of

the abilities of persons experiencing mental illness, and it is recognized that the mentally ill are similar to “normal” people and that “mental illness is an illness like any other” (Cohen & Struening, 1962, p. 354). The Social Restrictiveness scale emphasizes the fact that persons experiencing mental illness should not be trusted and that the social roles they are allowed to occupy should be restricted. It is notable that persons in different occupations tend to score differently on the Mental Hygiene Ideology and Social Restrictiveness factors, with psychologists and social workers endorsing far more positive beliefs regarding the skills and abilities of people with mental illness and far fewer socially restrictive beliefs than many other professionals (Cohen & Struening, 1962; Cohen & Struening, 1963).

Additionally, these two scales have implications for employment for consumers with serious mental illness, as persons endorsing the Social Restrictiveness scale may have lower expectations about the ability of persons with serious mental illness to be employed. On the other hand, persons endorsing the Mental Hygiene Ideology scale may think positively about consumers’ ability to work. However, despite their popularity and utility, none of the OMI scales *explicitly* measure the extent to which one expects that people with serious mental illness are capable of obtaining and maintaining employment.

Views of Professionals and the General Public Regarding People with Serious Mental Illness

Previous research with the OMI suggests that mental health professionals once held more favorable beliefs about people with serious mental illness than the general public (Cohen & Struening, 1962; Cohen & Struening, 1963). However, recent research has suggests that mental health professionals’ beliefs about people with serious mental illness may not differ from those held by the general public. In a study regarding stigmatizing attitudes towards people with mental illness, Van Dorn, Swanson, Elbogen, and Swartz (2005) found that mental health

professionals were as likely as members of the general public to perceive people with serious mental illness as violent and to desire social distance from them. Thus, the mental health professionals were as likely as the general public to endorse negative attitudes regarding people with serious mental illness.

Schwartz (2004) surveyed practicing psychiatric social workers, and first- and third-year undergraduate students in a social work program regarding their attitudes about people with serious mental illness. Schwartz's results indicated that the students and social workers equally endorsed statements about empowerment for people with serious mental illness, statements that people with serious mental illness were similar to oneself in terms of life goals and basic human rights, and equally disagreed with statements about social exclusion. Only one difference between social workers and undergraduates emerged; social workers were less likely than first-year students to endorse statements about sheltering people with serious mental illness. Thus, Schwartz's results indicate that mental health professionals' and undergraduates' attitudes toward people with serious mental illness were similarly favorable in most aspects.

Recent research has suggested that mental health professionals hold views similar to those of the general public and undergraduates regarding people with serious mental illness. However, research findings regarding whether or not these views are favorable or unfavorable are mixed. In addition, no studies have sought to compare professionals' and the public's views regarding the employability of people with serious mental illness.

Professionals' Expectations Regarding Employment for People with Serious Mental Illness

Researchers have identified the ways that negative public opinions act as a barrier to employment for people with serious mental illness. Researchers have also examined the ways in which public opinions about people with serious mental illness compare to those opinions held

by mental health professionals. However, very few studies have systematically examined the way that mental health professionals' expectations play a role in employment for people with serious mental illness. Nevertheless, researchers have noted that mental health professionals may believe that consumers with serious mental illness lack the motivation (e.g., Black, 1988; Mackota & Lamb, 1989; Spaulding & Sullivan, 1992) or the ability (e.g., McFarlane et al., 2000) to work. Specifically, McFarlane and colleagues (2000) noted that in certain models of employment programs "staff [members] tend to assume that many of the mentally ill persons, like some of those with developmental disabilities, will be unable to meet the demands of competitive jobs" (p. 203). Furthermore, Garske and Stewart (1999) suggested that another barrier to employment for people with serious mental illness may be that some rehabilitation professionals believe myths about people with serious mental illness, such as the myth that symptoms must be absent before employment is possible and the myth that encouraging employment will lead to a mental breakdown.

Consumers have also noted that support from professionals is essential in achieving employment and that when that support is lacking it becomes a barrier to achieving employment. Qualitative research suggests that people with serious mental illness often attributed their success in developing a worker role to support and encouragement from family members, friends, and professionals (Kennedy-Jones et al., 2005). Moreover, Kennedy-Jones et al. (2005) contend that the participants in their study "indicated how health-care professionals, specifically case managers working in the area of mental health, have an important role to play in supporting persons with mental illness to develop and maintain the highly valued role of worker" (p. 124).

Furthermore, Henry and Lucca's (2004) qualitative examination of potential barriers facilitators and barriers to employment for people with serious mental illness revealed that case

managers' values can impede the employment process for people with serious mental illness.

Henry and Lucca's (2004) interviews and focus groups with 44 consumers with serious mental illness and 30 mental health service providers highlighted the fact that the efforts of case managers who adhere to a problem-focused clinical model of mental health may be more concentrated on clinical services such as therapy, instead of prioritizing rehabilitation services like supported employment. However, these researchers also acknowledged that "while consumers most often encountered [patronizing messages] in traditional clinical settings, some felt a lack of real decision-making power even within rehabilitation programs where recovery and wellness models predominate" (p. 178). Thus, in addition to model-based ideologies, individual case managers' expectations about consumers' abilities to gain and maintain employment may play a role in consumers' employment status.

In a first person account, Rogers (1995), a consumer affected by a serious mental illness, recounts his experience with a vocational rehabilitation counselor. The vocational rehabilitation counselor communicated his low opinion of the abilities of people with serious mental illness when he blatantly told Rogers he would never be capable of working. Rogers recalls feelings of despair and hopelessness in reaction to the implication that he would never fulfill the valued social role of employee. Most importantly, Rogers illustrates the way that a service provider's expectations regarding employment can lead to a self-fulfilling prophecy. As he notes, "when people are told they are worthless, they believe it. By the same token, tell people they are valuable members of society- at least potentially so- and that is what they will believe" (p. 6).

Further research also suggests that staff members' expectations, specifically those of case managers, do play a role in consumers' rates of employment. Gowdy, Carlson, and Rapp (2003) examined the practices of staff members in two models of supported employment programs for

consumers with serious mental illness; the two models of supported employment differed in their average rates of competitive employment across two years. Programs with competitive employment rates between 31% and 34% were considered to be high-performing sites, and programs with competitive employment rates of 14.5% to 16.6% were considered to be low-performing sites. This investigation revealed staff practices that were associated with the high-performing sites. Specifically, consumers' desire to work was related to case managers' continual initiation of conversations aimed at "building work interest and confidence in work" from the beginning of the case manager-consumer relationship (p. 238). And, for consumers who were employed, a more personal relationship between consumers and all staff members was related to consumers maintaining employment. In conclusion, Gowdy and colleagues identified an apparent underlying theme in staff practices; they commented that the "The overall impression of the researchers was that the high-performing programs possessed a higher opinion of the abilities, talents, and spirit of their consumers than did the comparison site. Furthermore, this opinion was widely shared throughout the organization, not just with the supported employment staff" (p. 238). Such a conclusion strongly implies that staff members' expectations about consumers' ability to work influenced their practices with consumers, where more positive opinions of consumers' abilities were reflected in practices that may have resulted in higher rates of employment for consumers.

Quantitative research has further confirmed the link between case managers' expectations and consumers' employment status. Based on the theory of interpersonal expectancy effects, that one person's expectations can have effects on another person's behavior (Harris & Rosenthal, 1986), O'Connell and Stein (2001) examined the relationship between case managers' expectations and consumer functioning in a sample of 32 case managers and 97 consumers on

the case managers' caseloads. In order to examine this relationship between case manager expectation and consumer functioning, the Case Manager Expectancy Inventory (CMEI) was created to measure case managers' expectations for consumers' ability to function in a variety of domains. The CMEI consists of three subscales: Community Integration, Personal Agency, and Valued Social Roles. The Community Integration subscale measures case managers' expectations of consumers to exhibit social decorum and be involved in their community. The Personal Agency subscale assesses case managers' expectations of consumers to make decisions and manage their own resources. The Valued Social Roles subscale measures case managers' expectations of consumers to occupy social roles such as employee, student, and parent.

In establishing the validity of the Case Manager Expectancy Inventory (CMEI), O'Connell and Stein (2000) examined case managers' expectations for consumers in a variety of domains in relation to case managers' experience of burnout in a sample of 262 case managers. Results indicated that higher overall expectations for consumers were related to case managers' experience of less emotional exhaustion, less depersonalization, and a greater sense of personal accomplishment. And, the same pattern was observed in the relationships between the valued social role index and the community integration index of the CMEI and the three dimensions of burnout. Additionally, the personal agency index of the CMEI was related to case managers' experience of less depersonalization and greater personal accomplishment.

Employment was one domain of consumer functioning that was examined in relation to case manager expectations. O'Connell and Stein's (2001) results indicated that case managers' expectations for people with schizophrenia were positively correlated with the percentage of employed consumers on their caseload; thus, case managers' higher expectations were related to greater employment rates of consumers on their caseload. Further, consumers who had case

managers with higher expectations of consumers in the valued social roles domain differed from consumers who had case managers with lower expectations on a variety of employment variables. Consumers' employment progress was determined by a retrospective review of consumers' charts; a month of employment progress was defined as a month when consumers took more actions toward becoming employed than they had in the previous month. Across two years, consumers whose case managers had high expectations of consumers gaining access to valued social roles had a greater number of months of employment progress and demonstrated greater overall employment functioning than consumers whose case managers had lower expectations. Such results suggest that case managers' expectations about consumers' ability to participate in valued social roles may be related to case managers' expectations about whether consumers are capable of obtaining and maintaining employment.

Overall, initial investigations using qualitative and quantitative methodologies suggest that case managers play an important role in consumers' employment status. First person accounts and qualitative studies on consumers' perspectives are essential in understanding the process by which professionals' expectations about the abilities of those with serious mental illness are communicated to consumers. Moreover, qualitative investigations and first-person accounts allow consumers to express their reactions to the support, or lack thereof, that they received from professionals regarding a desire to seek employment. Most importantly, these studies highlight the fact that consumers believe professionals, especially case managers, play an essential role in their becoming employed. On the other hand, most qualitative and first-person accounts are limited in that they do not examine in a systematic manner the views of case managers regarding employment for people with serious mental illness. Only one qualitative study (Gowdy et al., 2003) examined the staff practices in conjunction with employment rates,

and though the researchers had not intended to investigate staff attitudes, they identified staff members' expectations about the abilities of people with serious mental illness as an important factor underlying staff practices. Thus, qualitative research and first person accounts strongly suggest, but do not confirm, that professionals' expectations of consumers' ability to work plays a role in the employment status of people with serious mental illness.

The one quantitative study (O'Connell & Stein, 2001) on case managers' expectations and employment for people with serious mental illness also suggests that higher expectations are related to higher rates of employment. However, the O'Connell and Stein (2001) study examined case managers' general expectations for consumers' functioning in a variety of domains and did not exclusively focus on case managers' expectations about consumers' ability to obtain and maintain employment. Thus, it is unclear how similar or different expectations of general functioning are from expectations specifically regarding employment. Moreover, although recent studies have suggested that mental health professionals hold beliefs regarding people with serious mental illness that are similar to those held by undergraduates (Schwartz, 2004) and the general public (Van Dorn et al., 2005), the degree to which case managers' views of employability for people with serious mental illness differs from the general public also remains unexamined.

Summary

In the past few decades, usually in the context of vocational rehabilitation programs, researchers have examined a number of systems-level and individual-level factors that potentially predict the employment status of consumers with serious mental illness. Generally, these studies were conducted with the intention of increasing employment rates for people with serious mental illness. However, recent estimates still indicate that employment rates for people

with serious mental illness are disturbingly low, despite the fact that people with serious mental illness indicate a desire to work and recognize a number of benefits to employment, including access to valued social roles, greater community integration, happiness, income, and fewer symptoms. Consumers have also identified stigma as a substantial barrier to employment. Research on hiring decisions supported consumers' perceptions, as studies have revealed that employers and the general public have a low opinion of the abilities of people with serious mental illness and that people with serious mental illness are often deemed the least employable when compared to people with other types of disabilities.

Although research confirms that the public has a low opinion of the ability of people with serious mental illness to obtain and maintain employment, only recently have researchers begun acknowledge that professionals may also hold low expectations about consumers' employability. Additionally, qualitative studies confirm that consumers believe that encouraging case managers are a necessary source of support for consumers who are employed or wish to become employed. On the other hand, consumers have reported the detrimental effects that case managers' low expectations can have on consumers' desire to become employed. One qualitative study identified case managers' high expectations regarding employment for consumers as a factor that appeared related to consumers' employment rates. Additionally, a quantitative study documented the relationship between case managers' general expectations for consumers and consumers' employment functioning, where case managers' higher expectations were related to consumers being employed. However, no research has systematically examined case managers' expectations of consumers' employability. Furthermore, at this point it is unclear how similar (or different) case managers' expectations of consumers with serious mental illness are from those held by the general population.

THE PRESENT STUDY

The present study examines the psychometric properties of a newly developed self-report instrument to assess expectations about the ability of people with serious mental illness to obtain and maintain employment. The Expectations for the Employability of People with Serious Mental Illness (EESMI) scale is a 24-item measure of expectations regarding employment for people with serious mental illness that taps individual and social systems factors. The present research compares responses on the EESMI using independent samples of case managers and college undergraduates. The present research examines the structural aspects of the instrument and seeks to establish evidence for the construct validity of the measure.

The present study examines the structural aspects of the measure, including the factor structure of the instrument and the internal consistency of items of the measure. The present study examines differences in expectations of employment for people with serious mental illness as a function of demographics for both the case manager and college undergraduate samples. For the sample of case managers, responses on the EESMI are examined as a function of organizational variables such as length of job tenure, size of consumer caseload, service availability and presence of employment programs for consumers. For the sample of college undergraduates, responses on the EESMI are examined as function of level of prior contact with people with serious mental illness and major area of academic study. Construct validity for the EESMI is assessed through its relationships to measures of social desirability and opinions about people with serious mental illness for both samples and with general expectations of consumers' functioning and reports about professional burnout for the sample of case managers.

In both samples, it was expected that responses on the EESMI would be positively correlated with measures of opinions about mental illness and be unrelated to a measure of social

desirability. In the sample of case managers, it was expected that general expectations for consumers with serious mental illness would be positively correlated with responses on the EESMI and that reports of greater occupational burnout would be negatively correlated with responses on the EESMI. Given the lack of previous research on how case managers' expectations for people with serious mental illness compare to those of the general public, no hypotheses were made about responses on the EESMI as a function of being a case manager or college undergraduate.

METHOD

Recruitment of Participants

Participants were undergraduate students enrolled in psychology courses at Bowling Green State University and case managers from community mental health centers who provide services to people with serious mental illness in the states of Illinois, Indiana, Michigan, Ohio, and New York. Undergraduates were recruited via an online posting of research experiments that is maintained by the Department of Psychology at Bowling Green State University. A brief description of the study was available on this online posting board and undergraduates were instructed that they needed to be at least 18 years of age to participate in the study (Appendix A).

In order to recruit case managers, lists of community mental health centers in Illinois, Indiana, and Michigan were obtained on the internet. A list of community mental health centers in Ohio was obtained from a local community mental health center in Wood County, Ohio. Case managers in Connecticut and New York were recruited through personal connections with other researchers, and an email was sent to a national organization for case managers. Phone calls and emails were made to case manager supervisors to describe the study, to answer any questions about the study, and to obtain the case manager supervisors' permission to disseminate the survey to the case managers at their agency. Once permission was obtained, case manager supervisors were asked if they preferred that a brief description of the research and the World Wide Web link be emailed or faxed to them. Case manager supervisors were either emailed or faxed the brief description of the research and the World Wide Web link so that they could disseminate the information to the case managers at their agency (Appendix B). Some case manager supervisors preferred that the researcher email the case managers directly and provided the researcher with case managers' email addresses.

A total of 206 case manager supervisors from different agencies were contacted via phone and email; 83 (40%) case manager supervisors agreed to disseminate the survey link to the case managers at their agency, 6 (3%) case manager supervisors declined their agency's participation. A description of the study and survey links were sent to an additional 14 case manager supervisors whose email addresses were obtained through others at their agencies or via the internet. In total, an email or fax containing the survey link was sent to 98 different agencies; 40% of the invited agencies agreed to participate in the study. The case manager supervisors whose email addresses were obtained through others or the internet represented an additional 7% of the invited agencies; since there was no direct telephone contact with these case managers, it is unclear if these case managers forwarded the survey link to the case managers at their agency, however these agencies potentially participated in the survey because the survey link was emailed to the case manager supervisors. Of the total case managers who participated in the study, most worked in the states of Michigan (30%) or Ohio (23%). See Appendix C for the state-by-state distribution of the number of initial contacts, the number of survey links emailed or faxed to agencies, and the number of case managers who participated.

The World Wide Web link directed all undergraduate and case manager participants to a website that contained a brief description of the study and informed consent information (Appendix D; Appendix E). To access the online questionnaire, individuals indicated that they read the informed consent information and that they agreed to take part in the study. Undergraduates were also asked to indicate that they were at least 18 years of age in order to take part in the study. For their participation in this study, case managers were offered the opportunity to be entered in a raffle. Two case managers were awarded a \$100 prize via the raffle. Undergraduates received partial course credit for their participation in this study.

Participant Characteristics

A total of 107 case managers and 159 college undergraduates participated in the study. College undergraduate participants had a mean age of 18.9 ($SD = .9$). Most undergraduates were female (66%), Caucasian (89%), college freshman (79%) who reported having never been married (97%). Undergraduates most commonly reported their majors were in the fields of education and basic and applied health and sciences. Table 1 contains a summary of the demographic information for undergraduates.

The mean age of case managers was 36.9 ($SD = 10.9$). Most case managers were female (78%), Caucasian (93%), and married (53%). Most case managers reported that a Bachelor's degree was the highest degree they earned (74%), and the majority of case managers reported their highest degrees to be in the areas of psychology (27%) or social work (26%). There were no significant differences in the amount of education case managers received as a function of the state in which they worked. A majority of case managers (65%) reported earning between \$20,000 and \$35,000 annually. There were significant differences in salary as a function of the state in which case managers worked ($X^2(4) = 38.32, p = .00$). All (100%) of the case managers who worked in Michigan reported earning \$35,000 or more annually, while 28% to 44% of the case managers from all other states reported earning \$35,000 or more annually. Case managers reported working as a case manager for a mean of 6 years and 8 months ($SD = 6$ years) (in months: $M = 81.6$ months; $SD = 71.8$ months). The number of months case managers reported working as a case manager differed as a function of state in which the case managers worked ($F(4, 106) = 4.72, p < .01$). Least significant difference post hoc tests indicated that case managers who worked in Michigan reported having worked as a case manager for significantly longer

(more months) than case managers working in all other states. Table 2 summarizes the demographic characteristics for case managers.

Case Manager Agency-Related Setting Characteristics

Case managers reported a mean of 41.36 ($SD = 45.82$) people with serious mental illness on their caseload. There were no significant differences in the number of people with serious mental illness on case managers' caseloads as a function of the state in which the case manager worked. Per case managers' report, the mean number of services provided by the agencies was 11.74 ($SD = 3.09$). A one-way analysis of variance (ANOVA) showed that the number of services provided by agencies significantly differed as a function of the state in which case managers worked ($F(4, 106) = 3.49, p = .01$). Least significant difference post hoc tests revealed that case managers working in Indiana reported that their agencies provided significantly more services than case managers working in Michigan and Illinois and that case managers working in Ohio reported that their agencies provided more significantly more services than case managers working in Michigan.

Case managers reported that a mean of 21.3 ($SD = 22.7$) percent of the consumers on their caseload had attempted competitive employment, that a mean of 7.5 ($SD = 8.7$) percent of consumers on their caseload were currently competitively employed, and that a mean of 29.1 ($SD = 22.9$) percent of consumers on their caseload were seen as being capable of competitive employment. A one-way ANOVA showed that the percent of consumers on caseload who attempted competitive employment differed as a function of the state in which case managers worked ($F(4, 103) = 2.74, p = .05$). Least significant post hoc tests indicated that case managers in Michigan ($M = 29.2$) and Ohio ($M = 25.3$) reported that a higher percentage of the consumers on their caseloads had attempted competitive employment as compared to the percentage of

consumers reported by case managers in Illinois ($M = 10.1$) to have attempted competitive employment. There were no significant differences as a function of state on the reported percentage of consumers on caseloads that were currently competitively employed. There were no significant differences as a function of state on the reported percentage of consumers that were capable of competitive employment. Table 3 contains the setting characteristics for case managers.

Undergraduates' Level of Contact with People with Serious Mental Illness

The extent to which undergraduates have had contact with people with serious mental illness was assessed by the level of contact report (Holmes, Corrigan, Williams, Canar, & Kubiak, 1999; Appendix F). The level of contact report is a 12-item measure which requires respondents to endorse the items that depict experiences that they have had with a person with serious mental illness at some point in their lifetime. For example, one item states “I have worked with a person with a severe mental illness at my place of employment.” In this study, the phrase “severe mental illness” was replaced with “serious mental illness” for consistency with the phrasing of measures in the present study. Each respondent received a level of contact index score that reflected the highest ranked item that the respondent endorsed. A score of 12 indicates “most” intimate contact with a person with serious mental illness, and a score of 1 indicates “least” intimate contact; the level of contact report was designed to be used as a continuous measure. In the present study, undergraduates reported having a moderate level of contact with people with serious mental illness ($M = 7.4$, $SD = 2.5$).

Measures

Expectations about Employment for People with Serious Mental Illness. The newly developed Expectations about Employment for People with Serious Mental Illness Scale

(EESMI) was used to assess the extent to which case managers and undergraduates expect that people with serious mental illness are able to obtain and maintain employment (Appendix G).

The EESMI is a 24-item measure that requires respondents to indicate the extent of their agreement on a 4-point scale ranging from 1 (*Not at all*) to 4 (*A lot*) for each item. Higher scores on this scale are indicative of more favorable expectations regarding consumers' ability to obtain and maintain employment.

Item generation for the EESMI was guided by quantitative and qualitative research on consumers' reports of factors related to employment and by research that documents variables related to employment for consumers. Items reflected expectations related to aspects of employment for people with serious mental illness, such as coping, capacity to work, support and acceptance, and motivation. Coping items reflected the theme that employment can aid people with serious mental illness in managing their symptoms. Capacity to work items reflected the concept that people with serious mental illness have the ability to obtain and maintain employment. The theme of support and acceptance items was that people, including co-workers, employers, and the general public, support people with serious mental illness in their quest for employment. Motivation items centered on the theme that the desire of people with mental illness to work and their willingness to take steps to obtain and maintain employment.

A pool of 45 items was generated. An expert in the field of clinical-community psychology examined the items. Redundant items were eliminated, and items were balanced across dimensions. Two graduate students in clinical psychology reviewed the remaining 24 items and made suggestions regarding how to clarify items.

Convergent Validity

Opinions about Mental Illness. The Mental Hygiene Ideology subscale (Factor C) and the Social Restrictiveness subscale (Factor D) of Cohen and Struening's (1962) Opinions about Mental Illness (OMI) scale was used to measure participants stigmatizing beliefs about people with serious mental illness (Appendix H). The Mental Hygiene Ideology subscale and the Social Restrictiveness subscale each contain 9 items. Respondents were asked to indicate their level of agreement with each item on a 6-point scale ranging from 1 (*Strongly Disagree*) to 6 (*Strongly Agree*).

The Mental Hygiene Ideology subscale reflects a positive view of the skills and abilities of people with mental illness and a belief that people with mental illness are more similar to than different from "normal" people; higher scores on this subscale indicate more favorable opinions about people with mental illness. The Social Restrictiveness subscale measured the extent to which participants believe in the social restriction of the mentally ill for the protection of society and the family institution; higher scores on this subscale indicate less favorable opinions about people with mental illness.

Internal reliability coefficients have ranged from ($\alpha = .29$ to $\alpha = .45$) for the Mental Hygiene Ideology factor and ($\alpha = .71$ to $\alpha = .78$) for the Social Restrictiveness factor (Murray & Steffen, 1999; Struening & Cohen, 1963). For case managers in this study, the internal reliability coefficients (as measured by Cronbach's alpha) for the Mental Hygiene Ideology subscale and Social Restrictiveness subscale were $\alpha = .55$ and $\alpha = .69$, respectively. In the undergraduate sample of this study, the internal reliability coefficients were $\alpha = .52$ and $\alpha = .73$ for Mental Hygiene Ideology and Social Restrictiveness, respectively.

An item contained in the Mental Hygiene Ideology subscale is similar to an item on the EESMI, thus in order to avoid artificially high correlations between responses on the EESMI and this measure the mean score of the Mental Hygiene Ideology subscale of the OMI was computed without the item “Most people with serious mental illness are willing to work.” Without this item, the internal reliability coefficients were $\alpha = .49$ and $\alpha = .44$ for the case manager and undergraduate samples, respectively.

Case Manager Expectations of Consumers. Case managers’ expectations for persons with serious mental illness was evaluated using The Case Manager Expectancy Inventory (CMEI) (O’Connell, & Stein, 2000; Appendix I). The CMEI is a 50-item measure that required respondents to rate the extent to which they expect each item to hold true for consumers with schizophrenia; for the present study, “schizophrenia” was replaced with “serious mental illness” to be consistent with the population specified on the EESMI. Responses were given on a Likert-type scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The CMEI consists of three subscales: Community Integration, Personal Agency, and Valued Social Roles. The Community Integration subscale contains 18 items that measure case managers’ expectations of consumers to exhibit social decorum and be involved in their community. The Personal Agency subscale contains 13 items that measure case managers’ expectations of consumers to make decisions and manage their own resources. The Valued Social Roles subscale contains 14 items that assess case managers’ expectations of consumers to occupy social roles such as employee, student, and parent. Higher scores on the CMEI and all subscales indicate higher expectations for consumers.

In O’Connell and Stein’s (2000) sample of 262 case managers, the internal reliability coefficient for the overall CMEI mean score was exceptional ($\alpha = .97$). The internal reliability coefficients for the subscales ranged from $\alpha = .92$ to $\alpha = .95$. O’Connell and Stein’s result indicate

adequate convergent and discriminate validity for the CMEI. In the present sample of case managers, the internal reliability coefficient for CMEI was $\alpha = .98$, and the internal reliability coefficients for the subscales ranged from $\alpha = .93$ to $\alpha = .97$.

Due to item similarity with the EESMI, the mean score of the Valued Social Roles Index of the CMEI was computed without the item “I expect that clients with a serious mental illness have the ability to work successfully while experiencing psychotic symptoms.” Without this item, the internal reliability for the Valued Social Roles Index was still exceptional ($\alpha = .93$).

Case Manager Experience of Professional Burnout. The extent to which case managers experience professional burnout was measured by the Maslach Burnout Inventory (MBI; Maslach & Jackson, 1981; Appendix J). Burnout is defined as feelings of “emotional exhaustion and cynicism,” a “dehumanized perception of others,” and a dissatisfaction with one’s accomplishments at work (Maslach & Jackson, 1981). The MBI is a 22-item measure that captures three factors of burnout: Emotional Exhaustion, Personal Accomplishment, and Depersonalization. Respondents were asked to indicate how often they experience the feeling identified in each item with respect to their job. Responses were given on an 8-point scale ranging from 0 (*Never*) to 7 (*Everyday*); higher scores on the Emotional Exhaustion and Depersonalization subscales indicate feeling more burned out while higher scores on the Personal Accomplishment subscale indicate less feelings of burnout. There were 79 case managers in the present study that responded to this measure.

The Emotional Exhaustion factor contains nine items and reflects feelings of fatigue and being “emotionally overextended” due to work. The internal reliability estimate for the Emotional Exhaustion subscale in a sample of 420 people in helping professions was adequate (α

=.89; Maslach & Jackson, 1981). In the present sample of 79 case managers, the internal reliability coefficient for the Emotional Exhaustion subscale was $\alpha = .92$.

The Personal Accomplishment subscale contains 8 items and measures one's feelings of success on the job. In the Maslach and Jackson's (1981) sample the internal reliability coefficient was acceptable ($\alpha = .74$). In this sample of 79 case managers, the internal reliability estimate for the Personal Accomplishment subscale was $\alpha = .88$.

The Depersonalization subscale contains 5 items and measures the extent of an "unfeeling and impersonal" state of mind toward the recipients of one's services. In the current sample of 79 case managers, the internal reliability estimate was $\alpha = .80$ for the Depersonalization subscale.

Discriminate Validity

Social Desirability. A short version of the Marlowe-Crowne Social Desirability Scale developed by Strahan and Gerbaski (1972) was used to assess the extent to which the participants provided socially desirable responses (Appendix K). Fischer and Fick (1993) examined eight short forms of social desirability scales in comparison to the original Marlowe-Crowne scale (Crowne & Marlowe, 1960) and concluded that Strahan and Gerbaski's first of two 10-item scales was superior to other short form scales. Items were taken from the original Marlowe-Crowne scale and reflect culturally approved behaviors that have a low probability of occurring. Respondents were required to indicate whether each statement is true or false about them. Higher scores indicate more socially desirable responses.

In four samples of college students, Kuder-Richardson 20 (K-R 20) reliability coefficients ranged from .59 to .70 (Strahan & Gerbaski, 1972), indicating adequate internal reliability. Additionally, in a sample of 390 college students the first Strahan and Gerbaski (1972) short form scale was highly correlated ($r = .96$) with the original Marlowe-Crowne scale

(Fischer & Fick, 1993). In this study, Cronbach's alpha internal reliability coefficients were $\alpha = .59$ and $\alpha = .53$ for undergraduates and case managers, respectively. The means, standard deviations, and internal reliability coefficients for all measures can be found in Table 4.

PRELIMINARY ANALYSES

Expectations for Employability of People with Serious Mental Illness

Case managers' responses on EESMI items were used to conduct the exploratory analyses to determine the factor structure of the EESMI. This decision was made for two reasons: 1) in light of previous research that suggests case managers' expectations about the employability of the consumers with whom they work plays an important role in the consumers obtaining and maintaining employment and 2) toward the end of developing a measure that can aid in measuring case managers' expectations.

In order to determine if the current sample size of case managers ($n = 107$) was adequate for a principal components factor analysis with 24 items, the Kaiser-Meyer-Olkin (KMO) test of sampling adequacy was used. Child (2006) stated that the sample size was adequate if the KMO is "around .5 or better." In the present study $KMO = .75$, indicating an adequate sample size.

Case managers' item scores on the EESMI were entered into a principal components factor analysis. A three-factor solution was selected using Kaiser Normalization criteria and was subjected to varimax rotation. All item-factor loadings below .4 were suppressed which resulted in one item being eliminated from the analysis. The three components accounted for 44% of the total variance in the case manager sample. An overall EESMI mean score was obtained by reverse scoring negatively worded items and obtaining the mean of all 23 items. Higher scores indicated higher expectations for the employability of people with serious mental illness. Table 5 contains the items and the factor loading of each item onto the components. In the case manager sample, the internal reliability coefficient (as measured by Cronbach's alpha) for this total score was .84.

The first factor, *Benefits of Employment*, consisted of 11 items and reflected the expectations that people with serious mental illness are capable of working and that employment has a number of benefits for people with serious mental illness, including helping them to cope with symptoms of their illness and feel like part of their community. This factor accounted for 25% of the total variance in the case manager sample. Higher scores on this factor were indicative of more positive expectations about the ability of people with serious mental illness to be employed and the advantages associated with employment for people with serious mental illness. The internal reliability coefficient for this factor in the case manager sample was $\alpha = .88$.

The second factor, *Demands of the Worker Role*, consisted of 7 items and reflected the expectations that people with serious mental illness are able to fit with the social role of employee in that employers will hire them, coworkers will socialize with them, and people with serious mental illness are able to do their share of work. This factor accounted for 12% of the variance in the case manager sample. Higher scores on this factor were indicative of more favorable expectations for people with serious mental illness to be appropriate for the valued social role of employee. In the case manager sample, the internal reliability coefficient for this factor was $\alpha = .74$.

The third factor, *Motivation to Work*, consisted of 5 items and reflected the expectations that people with serious mental illness have a desire to work and that they are motivated to pursue and maintain employment. This factor accounted for 8% of the total variance in case manager sample. Higher scores suggested higher expectations about the motivation of people with serious mental illness to obtain and maintain employment. The internal reliability coefficient for this factor in the case manager sample was $\alpha = .63$.

In the undergraduate sample, the internal consistency estimate for the EESMI total score was $\alpha = .82$. For the EESMI factors, the internal consistency estimates were $\alpha = .85$ for the first factor Benefits of Work, $\alpha = .66$ for the second factor Demands of the Worker Role, and $\alpha = .59$ for the third factor Motivation to Work.

RESULTS

Employment Expectations as Related to Case Manager Setting Characteristics

Bivariate Pearson correlations were used to assess the extent to which case managers' responses on the EESMI were related to setting characteristics. The setting characteristics include length of job tenure, number of consumers with serious mental illness on caseload, perceived number of services available to consumers, percent of consumers on caseload having attempted competitive employment, percent of consumers on caseload currently in competitive employment, and perceived percent of consumers on caseload that have the capacity to be in competitive employment. Results of these analyses can be found in Table 6.

There was a significant moderate correlation between perceived percentage of employable consumers on caseload and overall EESMI mean score ($r = .31, p < .01$). This relationship reveals that case managers' perceptions of a more employable caseload were related to higher expectations regarding the employability of people with serious mental illness. Similarly, there was a significant moderate correlation between the perceived percentage of consumers on caseload capable of being competitively employed and the Benefits of Work subscale ($r = .36, p < .01$). Thus, case managers' perceptions of a more employable caseload were related to higher expectations of benefits of employment for people with serious mental illness. There were no significant correlations between the case managers' perceptions of the employability of their caseload and the Demands of the Worker Role and Motivation to Work subscales.

There was a significant correlation between the overall EESMI mean score and the percent of consumers on caseload who have attempted competitive employment ($r = .20, p < .05$). This relationship indicates that higher expectations for the employability of people with

serious mental illness were related to a higher percentage consumers attempting competitive employment. There were no significant relationships between the percentage of consumers reported to have attempted employment and the Benefits of Work and Demands of the Worker Role subscales; however, there was a significant correlation between the Motivation to Work subscale and the percentage of consumers on caseload who had attempted competitive employment ($r = .24, p < .05$). This relationship reveals that higher expectations regarding the motivations of consumers to work were related to a higher percentage of consumers who attempted competitive employment.

Length of time as a case manager was not significantly related to the overall EESMI mean score, but there was a significant correlation between the Benefits of Work subscale and the length of time as a case manager ($r = .20, p < .05$). This relationship indicates that working more months as a case manager was related to higher expectations regarding the benefits of work for people with serious mental illness. There were no significant relationships between tenure as a case manager and the Demands of the Worker Role and Motivation to Work subscales.

It was hypothesized that case managers' expectations could differ as a function of whether the agencies in which they worked offered employment programs to consumers. To assess whether responses on the EESMI differed as a function of whether or not agencies offered employment programs to consumers, a multivariate analysis of variance (MANOVA) was performed. The independent variable was the case managers' report of the presence of an employment program, and the dependent variables were the subscales of the EESMI, the Benefits of Work, Demands of the Worker Role, and Motivation to Work. There was no significant main effect for the presence of employment programs on any of the EESMI subscales ($F(3, 100) = .80, p = .50, \text{partial } \eta^2 = .02$).

Employment Expectations as Related to Undergraduate Setting Characteristics.

A bivariate Pearson correlation was used to assess presence of a relationship between undergraduates' level of contact with people with serious mental illness and undergraduates' responses on the EESMI. There were no significant relationships between level of contact and responses on the EESMI. Results for this analysis can be found in Table 7. A MANOVA was used to assess the extent to which responses on the EESMI differed as a function of undergraduates' major. The independent variable was the undergraduates' major field of study. The four most common majors, education, basic and applied health and sciences, business and related fields, and basic and applied social sciences were the four levels of the independent variable. The dependent variables were the subscales of the EESMI, Benefits of Work, Demands of the Worker Role, and Motivation to Work. There were no significant differences on the responses of the EESMI as a function of undergraduates' major area of study.

Employment Expectations as a Function of Being a Case Manager or Undergraduate.

A MANOVA was used to determine if responses on EESMI subscales differed between case managers and undergraduates. For the MANOVA, the independent variable was group membership, either case manager or undergraduate. The dependent variables were the EESMI subscales, Benefits of Work, Demands of the Worker Role, Motivation to Work. Results revealed that there was a significant main effect for group membership on EESMI responses ($F(3, 261) = 4.88, p < .01$, partial $\eta^2 = .05$). Univariate analysis of variance (ANOVA) results for the three EESMI subscales indicated that there were no significant differences between undergraduates' and case managers' expectations for the Demands of the Worker Role subscale and the Motivation to Work subscale. However, there was a significant main effect for group membership on the Benefits of Work subscale ($F(1, 263) = 8.28, p < .01$, partial $\eta^2 = .03$). Case

managers held significantly higher ($M = 1.8$) expectations regarding the benefits of work for people with serious mental illness than did undergraduates ($M = 1.7$).

Convergent and Discriminate Validity for the EESMI in the Case Manager Sample.

In order to assess the convergent and discriminate validity for the EESMI, a series of Pearson bivariate correlations were conducted to determine the relationship between scores on the EESMI and scores on the other measures. Results indicated that there were significant correlations between scores on the EESMI and scores on the OMI, CMEI, MBI, and social desirability (see Table 8 for the correlation matrix of these variables).

Convergent validity for the EESMI mean scores was indicated by significant correlations ($p < .01$) with the Social Restrictiveness subscale of the OMI ($r = -.43$), Mental Hygiene Ideology subscale of the OMI ($r = .28$), CMEI total score ($r = .32$), Personal Agency Index of the CMEI ($r = .33$), Valued Social Roles Index of the CMEI ($r = .31$), Community Integration Index of the CMEI ($r = .27$). The overall EESMI mean score was significantly correlated at the $p < .05$ with the Depersonalization subscale of the MBI ($r = -.26$), further suggesting evidence of convergent validity. There was no significant correlation between the EESMI mean score and a measure of social desirability, suggesting discriminate validity.

Scores on the Benefits of Work subscale were significantly ($p < .05$) correlated with the Mental Hygiene Ideology subscale of the OMI ($r = .24$), CMEI total score ($r = .22$), Personal Agency Index of the CMEI ($r = .24$), and Valued Social Roles Index of the CMEI ($r = .21$), indicating convergent validity. Evidence of discriminate validity was established due to the lack of a correlation between the Benefits of Work subscale and a measure of social desirability.

Scores on the Demands of the Worker Role subscale were significantly ($p < .01$) correlated with the Social Restrictiveness subscale of the OMI ($r = -.43$), CMEI total score ($r =$

29), Valued Social Roles Index of the CMEI ($r = .30$), Personal Agency Index of the CMEI ($r = .29$), Community Integration Index of the CMEI ($r = .26$), Depersonalization subscale of the MBI ($r = -.34$), suggesting convergent validity. A lack of discriminate validity was indicated for the Demands of the Worker Role subscale due to its significant relationship with a measure of social desirability ($r = .27, p < .01$).

Convergent validity for the Motivation to Work subscale was also indicated by significant ($p < .01$) correlations with the Social Restrictiveness ($r = -.46$) and Mental Hygiene Ideology ($r = .31$) subscales of the OMI. Scores on the Motivation to Work subscale were significantly correlated at the $p < .05$ level with the Emotional Exhaustion subscale of the MBI ($r = -.25$), further indicating convergent validity. The Motivation to Work subscale was not significantly related to social desirability, suggesting discriminate validity.

Convergent and Discriminate Validity for the EESMI in the Undergraduate Sample

To further assess the convergent and discriminate validity of the EESMI, a series of bivariate Pearson correlations were conducted to determine the relationships between responses on the EESMI and scores on measures of opinions about mental illness and social desirability in the undergraduate sample. Table 7 displays the correlation matrix of these variables.

Evidence for convergent validity of the EESMI was further established by significant correlations between the EESMI and measures of opinions about mental illness in the undergraduate sample. The overall EESMI mean score was significantly correlated with the Social Restrictiveness subscale of the OMI ($r = -.50, p < .01$), and the Mental Hygiene Ideology Subscale of the OMI ($r = .17, p < .05$). Similarly, the Benefits of Work subscale was significantly correlated with the Social Restrictiveness subscale of the OMI ($r = -.42, p < .01$), and the Mental Hygiene Ideology Subscale of the OMI ($r = .17, p < .05$). The Motivation to

Work subscale was also significantly correlated with the Social Restrictiveness subscale of the OMI ($r = -.38, p < .01$), and the Mental Hygiene Ideology Subscale of the OMI ($r = .21, p < .01$). The Demands of the Worker Role subscale was significantly correlated with the Social Restrictiveness subscale of the OMI ($r = -.30, p < .01$), but was not significantly related to the Mental Hygiene Ideology subscale of the OMI. Discriminate validity was indicated by the lack of significant correlations between the EESMI and a measure of social desirability.

DISCUSSION

The present study examines the psychometric properties of newly developed measure, the Expectations for the Employability of People with Serious Mental Illness (EESMI), designed to tap expectations about the employability of consumers with serious mental illness. The EESMI was developed in light of research that shows people with serious mental illness experience stigma as a barrier to employment (Corrigan et al., 2003; Whal, 1999) and studies suggest case managers' expectations are related to consumers' employment functioning (Gowdy et al., 2003; O'Connell & Stein, 2001). The empirical analysis of the structure of the EESMI for case managers suggests that factors reflect individual and situational expectations regarding the employability of people with serious mental illness. The relationships between the EESMI subscales and measures of opinions about mental illness, case managers' general expectations, and case manager burnout suggest convergent validity for the EESMI. A lack of relationships between the EESMI and a measure of social desirability, with one exception, suggest discriminate validity for the EESMI. Case managers and undergraduates reported similar employment-related expectations, but case managers appeared to have a greater appreciation of the benefits of work for people with serious mental illness.

Psychometric Properties of the EESMI

A first goal of the present study was to examine the psychometric properties of the EESMI. The results of principal components factor analyses suggest that the EESMI taps three aspects of employment-related expectations for people with serious mental illness: Benefits of Work, Demands of the Worker Role, and Motivation to Work. This factor structure was derived from the case manager sample and was used in further analyses for the case manager and undergraduate samples. The results suggest that the factors derived from the factor analysis had

adequate estimates of internal consistency in both the case manager and undergraduate samples. The results also suggest small to moderate intercorrelations among the EESMI subscales, indicating that the subscales tap unrelated individual and structural aspects of employment-related expectations for people with serious mental illness.

In terms of convergent validity, the EESMI and most of its subscales were negatively related to the Social Restrictiveness subscale of a measure of Opinions about Mental Illness (OMI) in the undergraduate and case manager samples. These results indicate that those who endorse higher expectations regarding the employability of people with serious mental illness were more likely to hold less restrictive opinions regarding the social liberties of people with serious mental illness. However, the Benefits of Work subscale was related to this Social Restrictiveness measure in the undergraduate sample, but was unrelated to this measure of convergent validity in the case manager sample. It is possible that the significant negative relationship between social restrictiveness and benefits of work in the undergraduate sample is reflective a tendency to perceive unfavorable opinions (social restrictiveness) and favorable expectations (benefits of work) as necessarily antithetical to one another. On the other hand, case managers' expectations about the benefits of work were unrelated to their opinions about social restrictiveness for people with serious mental illness. Since case managers have ongoing contact with people with serious mental illness, they arguably have been afforded the opportunity to witness the benefits of work experienced by consumers who function at varying levels. Case managers may have personal opinions regarding the extent to which people with serious mental illness "should" or "should not" be socially restricted on the basis of their level of functioning. However, regardless of their personal opinions about social restrictiveness, case managers are aware that consumers at various levels of functioning can derive a number of benefits from work.

Thus, case managers' may have a more nuanced appreciation for the benefits of work experienced by people with serious mental illness than do undergraduates.

In further support of convergent validity, the EESMI and most of its subscales were positively related to the Mental Hygiene Ideology subscale of the OMI in both samples. However, it is interesting that the Demands of the Worker Role subscale was unrelated to the Mental Hygiene Ideology subscale in both samples. These findings may suggest that the Benefits of Work and Motivation to Work subscales are mostly tapping expectations about the internal abilities and motivations of individuals with serious mental illness to work. Similarly, the Mental Hygiene Ideology subscale taps opinions related to the internal capacity of people with serious mental illness. In contrast, the Demands of the Worker Role subscale could be tapping expectations about how situational or systems-level factors, such as employers' and coworkers' reactions, in addition to individual-level factors play a role in the employability of people with serious mental illness.

In the case manager sample, the EESMI and the Benefits of Work and Demands of the Worker Role subscales, exhibited positive relationships with the indices of the Case Manager Expectancy Inventory (CMEI), indicating convergent validity. Although one of these relationships did not reach statistical significance (the relationship between Benefits of Work and Community Integration Index), the relationship was in the positive direction and it appears that a larger sample size may have yielded statistical significance. Collectively, these results suggest that higher general expectations for people with serious mental illness are related to higher employment-related expectations for people with serious mental illness. However, there were no relationships between the Motivation to Work subscale and any indices of the CMEI. Perhaps this finding highlights the difference between expectations regarding the internal motivation of

people with serious mental illness to obtain and maintain employment and expectations that people with serious mental illness can demonstrate specific skills or become integrated into the greater community. This finding suggests that expectations regarding internal motivations of people with serious mental illness may be different than expectations regarding their overt behavior.

In the case manager sample, the EESMI and its subscales exhibited unique relationships with the convergent validity measure, the Maslach Burnout Inventory (MBI). The Benefits of Work subscale was unrelated to the MBI dimensions of depersonalization, emotional exhaustion, and personal accomplishment; these results imply that appreciating the benefits of work for people with serious mental illness may be distinctly different from case managers' reported experiences of occupational burnout or occupational achievement. The Demands of the Worker Role and Motivation to Work subscales exhibited similar patterns with the MBI dimensions, as both were negatively related depersonalization and emotional exhaustion; although all of these relationships were not statistically significant, they exhibit a pattern that suggests case managers' who felt less burned out held higher employment-related expectations for people with serious mental illness. Notably, the sample size of case managers who responded to the MBI subscales was small and a larger sample size may have yielded statistical significance.

In terms of discriminate validity, the EESMI and its subscales were unrelated to a measure of social desirability in both samples, with the exception of the Demands of the Worker Role subscale in the case manager sample. It is possible that this relationship is due to the fact that all of the items on the Demands of the Worker Role subscale are negatively worded. Case managers who were concerned about appearing in a favorable light may have been less likely to endorse items that were negatively worded. On the other hand, given that no other EESMI

subscales in either the case manager or undergraduate sample are related to this measure of social desirability, further research is necessary to better understand if the Demands of the Worker Role subscale is meaningfully related to social desirability or if this relationship is due to an idiosyncrasy in the current case manager sample.

Undergraduates' and Case Managers' Expectations

A second goal of the present study was to compare case managers' and undergraduates' employment-related expectations for people with serious mental illness. Results indicated that case managers and undergraduates did not differ in their expectations on the Demands of the Worker Role and Motivation to Work subscales, but did differ on the Benefits of Work subscale.

These findings suggest that undergraduates and case managers have similar expectations about the suitability of people with serious mental illness for the role of employee. The mean scores of the Demands of the Worker Role subscale showed that on average case managers and undergraduates agreed with the scale items between "a little" and "a medium amount." These results suggest that neither case managers nor undergraduates have especially high expectations or especially low expectations regarding the likelihood of people with serious mental illness to fit in a work environment and meet the demands of employment. In terms of the undergraduate sample, these findings are in contrast those of Gouvier, Sytsma-Jordan, and Mayville (2005) who found that undergraduates held rather low opinions of the ability of people with serious mental illness to perform even "low complexity" jobs as compared the opinions they held about the abilities of people with other types of disabilities.

Case managers' and undergraduates' expectations regarding the motivations of people with serious mental illness to obtain and maintain employment were also similar. The mean scores of the Motivation to Work subscale showed that, on average case, managers and

undergraduates agreed with the measure items between “a medium amount” and “a lot.” These findings indicate similar expectations among case managers and undergraduates regarding the desire that people with serious mental illness have to become employed. These findings are notable because even though undergraduates presumably have less experience working with people who have serious mental illness, they appear to be as conscious as case managers of the extent to which people with serious mental illness are motivated to get and keep a job.

The findings that case managers and undergraduates did not differ in their employment-related expectations on the subscales of Demands of the Worker Role and Motivation to Work are interesting in the context of past research that has suggested that mental health professionals have more favorable general opinions about people with serious mental illness than do other occupational groups and the general population (Cohen & Struening, 1963). However, these findings are consistent with more recent research that has found the beliefs of mental health professionals regarding people with serious mental illness to be similar to those of undergraduate students (Schwartz, 2004) and the general public (Van Dorn et al., 2005).

On the Benefits of Work subscale case managers held higher expectations than undergraduates. It is possible that case managers held higher expectations than undergraduates regarding the benefits of work for people with serious mental illness because their ongoing and direct experiences with consumers has afforded them the opportunity to witness the ways in which employment results in positive outcomes for people with serious mental illness. This suggestion is also supported by the finding of a significant correlation between the Benefits of Work subscale and the length of time as a case manager, as case managers who have more experience working with consumers may be more aware of the important effects of employment for people with serious mental illness.

The EESMI and Case Managers' Setting Characteristics

A third goal of the present study was to better understand how employment-related expectations are related to setting characteristics. The results indicated that case managers' expectations were related to their reports of the percent of consumers on their caseload that had attempted competitive employment and the percent of consumers on their caseload that were capable of competitive employment. Specifically, expectations regarding the Benefits of Work were significantly positively related to the reported percent of the case managers' caseload that was capable of competitive employment. Also, there was a positive significant relationship between case managers' expectations regarding Motivation to Work and the reported percentage of consumers on case managers' caseloads that had attempted competitive employment. Though the cross-sectional nature of the present study does not allow inferences about causation, this finding appears to indicate that case managers' expectations are related to their perceptions of how employable their consumers are and their reports of how many consumers had attempted employment. These findings are consistent with past research that found case managers' higher expectations for the functioning of people with serious mental illness were related to greater employment rates of consumers on their caseload (O'Connell & Stein, 2001), and further points to case managers' expectations as a factor that may influence the ability of people with serious mental illness to become employed.

Limitations

The present study contributes to the current literature by providing a measure that assesses different aspects of case managers' employment-related expectations for people with serious mental illness. Results of the study suggest that case managers and college

undergraduates reported similar expectations regarding the employability of adults with serious mental illness. The research findings are intriguing, but limited in a number of aspects.

One limitation of the present study is the lack of ethnic diversity of the case manager and undergraduate samples. Given that the majority of participants in the study were Caucasian, it is difficult to generalize the results to case managers or undergraduates who are people of color. Future research using the EESMI is needed with more ethnically representative case manager and young adult samples to better understand how employment-related expectations may differ based on these characteristics.

The use of undergraduates to represent the general public may be another limitation of the present study. Given their educational aspirations, undergraduate students may hold employment-related expectations for people with serious mental illness that are different from the expectations that are held by others in the general population. Future research using the EESMI is needed to better understand the employment-related expectations that other segments of the general public hold for people with serious mental illness.

The size of the case manager sample is another limitation of the present study. A larger sample of case managers would allow for greater substantiation of the convergent and discriminate validity of the EESMI. A larger sample size would also help to elucidate if the differential patterns observed between the subscales of the EESMI and measures of convergent and discriminate validity are consistent. Additionally, a larger sample would help to determine if the relationship between the Demands of the Worker Role subscale and a measure of social desirability is consistent or unique to the present case manager sample.

Although significant relationships between case managers' expectations and case manager perceptions of the employability of their caseload were found, it is not possible to

determine causality from the cross-sectional nature of this study. Future research could examine case managers' expectations at the beginning of their careers to establish if case managers' higher expectations regarding employability are predictive of better rates of employment for people with serious mental illness. Additionally, the present study relied on case managers' reports of the percent of consumers on their caseload that had attempted employment or were currently employed. These reports are likely estimates and may not accurately reflect the percent of consumers that have attempted employment or are currently employed. In order to establish the accuracy of case manager reports, future research would do well to examine the records of consumers' employment status.

Despite its limitations, the present study is a first step toward a fuller understanding the role that expectations play in people with serious mental illness becoming employed. The present study suggests that case managers and undergraduates have similar employment-related expectations in several aspects, but that case managers may have a deeper appreciation of the benefits of work for people with serious mental illness. The study further suggests case managers' employment-related expectations may be related to the rate of consumers that attempt and achieve employment. Perhaps most importantly, this study presents a measure with adequate validity that can assess multiple aspects of case managers' employment-related expectations that will be useful in future research.

Implications of Findings for Research and Practice

The results of this study suggest that case managers and undergraduates have relatively similar employment-related expectations for people with serious mental illness. Further investigations could examine how these employment-related expectations manifest themselves in case managers' and undergraduates' interactions with people with serious mental illness.

In terms of undergraduates and the general public, it would be important to know if their employment-related expectations manifest themselves in stigmatizing ways that could discourage people with serious mental illness from seeking employment. Although in this study the employment-related expectations of undergraduates towards people with serious mental illness appeared relatively neutral, past research has consistently indicated that when presented with hypothetical scenarios, undergraduates and the general public report they would be unlikely to hire people with serious mental illness (Drehmer & Bordeiri, 1985; Gouvier, Sytsma-Jordan, & Mayville, 2005). Future research could seek to better understand how employment-related expectations play a role in such hiring decisions. Such research could lead to greater understanding of how to increase rates of employment for people with serious mental illness by way of addressing employment-related expectations held by the general public.

In terms of case managers, it would be important to better understand how employment-related expectations operate in the relationship between consumers and case managers. Previous research has strongly indicated that case managers' expectations are related to employment rates for people with serious mental illness (Gowdy et al., 2003; O'Connell & Stein, 2001). Additionally, previous qualitative research and first person accounts indicate that consumers report that case managers' support is an essential ingredient in their gaining and maintaining employment (Henry & Lucca, 2004; Kennedy-Jones et al., 2005; Rogers, 1995). Case managers' employment-related expectations for consumers may play a role in the extent to which case managers are supportive of consumers who are interested in obtaining employment. Future studies using the EESMI could examine the extent to which case managers' employment-related expectations are related to consumers' perceptions of the supportiveness of their case managers. In addition, future research could examine the degree to which consumers who have case

managers with higher employment-related expectations are more likely to report a greater desire for employment, more likely to feel that they are capable of employment, more likely to attempt employment, and more likely to become employed than consumers who have case managers with lower employment-related expectations.

Additionally, results of the present study suggest that case managers' employment-related expectations for people who experience serious mental illness are multifaceted. Future investigations should consider whether different facets of employment-related expectations, such as benefits of work, demands of the worker role, and motivation to work, could differentially affect consumers. For example, perhaps consumers who have case managers who hold higher expectations regarding the benefits of work are more likely to be employed because case managers with higher expectations regarding the benefits of work are more likely to encourage consumers to attempt employment. Similarly, perhaps consumers experience case managers who hold higher expectations regarding the motivation to work as more supportive because the case managers appreciate consumers' desire to work. On the other hand, maybe consumers who have case managers who hold neutral or lower expectations regarding the demands of the worker role experience their case managers as more sympathetic because the case managers fully appreciate the situational factors, such as stigma, that act as barriers to employment. Future research is needed to understand how these unique aspects of case managers' employment-related expectations could differentially impact consumers.

In addition to the ways that expectations may play a role in the interpersonal relationship between consumers and case managers, case managers' employment-related expectations may affect consumers' employment statuses as a result of the duties case managers perform. Case managers are often responsible for assisting consumers in goal setting and planning and for

referring consumers to the various services and programs (such as supported employment programs) available in the community mental health system (Anthony, 2000). Case managers' employment-related expectations may shape case managers' decisions regarding whether or not to refer consumers to supported employment services. Future research using the EESMI could examine the extent to which case managers' who hold higher expectations are more likely to refer consumers to supported employment services than case managers who hold lower expectations. Learning more about how case managers' employment-related expectations impact consumers' employment status could lead to programs within the community mental health system that address case managers' expectations as a factor that has the ability to increase rates of employment for people with serious mental illness.

Previous research has suggested that case managers' expectations may reflect model-based ideologies (Henry & Lucca, 2004). Future researchers may also want to examine the degree to which case managers working under different models of case management have different levels of employment-related expectations. For example, case managers who work under rehabilitation and recovery models may have higher expectations for consumers than case managers who adhere to more traditional clinical models. The objective of rehabilitation and recovery-based models is to aid people with serious mental illness in reaching their personal goals for becoming more productive members of society regardless of symptoms they may experience. On the other hand, symptom elimination is the primary goal of traditional clinical models. Thus, perhaps case managers whose focus is on helping consumers to lead more productive and fulfilling lives may have higher employment-related expectations than case managers whose focus is on symptom reduction. Future research would do well to examine the

extent to which case managers' employment-related expectations are reflected as a function of these models and whether consumers' employment statuses are affected as a result.

Overall, the findings of the present study can be used in further research to aid in the greater understanding of the role that multifaceted employment-related expectations can play in facilitating or impeding employment for people with serious mental illness. Ultimately, this knowledge will be useful in gaining insights regarding how to increase employment rates for people with serious mental illness. In turn, increased employment rates are likely to improve the quality of life for many people who experience serious mental illness.

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APPENDIX A. POSTING TO RECRUIT UNDERGRADUATES

Hello, my name is Kristen Abraham. I am a graduate student in Clinical Psychology. Presently, I am in the process of completing my master's thesis. My research project involves better understanding case managers' and undergraduate students' opinions. More specifically, I am interested in knowing how case managers' opinions regarding people with serious mental illness compare to undergraduates' opinions regarding people with serious mental illness.

You are invited to participate in this research study. Participation in this study involves completing an online questionnaire at a computer of your convenience. I estimate that it will take you no longer than about 30 minutes to complete this survey. The anticipated risks to you as a result of participation in this study are no greater than those normally encountered in daily life. For your participation in this study, you will receive 1 hour of credit toward your Introductory Psychology course.

Please click on the following link to participate:

<http://psych.bgsu.edu/undergradversion.htm>

APPENDIX B. SAMPLE EMAIL SENT TO CASE MANAGER SUPERVISORS

Dear [Case Manager Supervisor],

I enjoyed speaking with you on the phone today. Thank you for your interest in my research and your willingness to disseminate my questionnaire to the case managers at your agency. Specifically, I am interested in surveying case managers who work with people experiencing serious mental illness. Below is the information that can be disseminated to the case managers at your agency. Feel free to contact me if you have any additional questions.

Thank you for your participation,

Kristen Abraham
Graduate Student, Clinical Psychology
Bowling Green, OH 43403
(419) 372-4597
kabraha@bgnet.bgsu.edu

Hello, my name is Kristen Abraham. I am a graduate student in Clinical Psychology at Bowling Green State University in Ohio, and I work under the supervision of Dr. Catherine Stein. I am in the process of completing my master's thesis. This research project involves better understanding case managers' and undergraduate students' opinions regarding people with serious mental illness. You are invited to participate in this research study.

Participation in this study involves completing an online questionnaire at a computer of your convenience. I estimate that it will take you approximately 15-25 minutes to complete this survey. The anticipated risks to you as a result of participation in this study are no greater than those normally encountered in daily life.

For your participation in this study, you have the choice of being entered in a raffle to win one of two \$100 cash prizes.

If you have questions regarding this research or to request a summary of the results, please contact me, Kristen Abraham, at kabraha@bgnet.bgsu.edu.
Please click on the link below to complete the questionnaire:

<http://psych.bgsu.edu/casemanagerversion.htm>

Kristen Abraham
Graduate Student, Clinical Psychology
Bowling Green State University
Bowling Green, OH 43403
kabraha@bgnet.bgsu.edu

APPENDIX C. CASE MANAGER RECRUITMENT AND PARTICIPATION BY STATE

State or Organization	Number (%) of Initial Contacts	Number (%) of Survey Links Sent	Number (%) of Case Manager Participants
Connecticut	1 (.5%)	1 (1.0%)	0
Illinois	42 (20.3%)	21 (21.4%)	23 (21.5%)
Indiana	36 (17.4%)	22 (22.4%)	18 (16.8%)
Michigan	60 (29%)	27 (27.6%)	32 (29.9%)
New York	3 (1.4%)	3 (3.1%)	9 (8.4%)
Ohio	64 (30.9%)	24 (24.5%)	25 (23.4%)
National Association of Case Managers	1 (.5%)	0	-
Total	207	98	107

APPENDIX D. INFORMED CONSENT FORM FOR CASE MANAGERS

Hello, my name is Kristen Abraham. I am a graduate student in Clinical Psychology at Bowling Green State University in Ohio. Presently, I am in the process of completing my master's thesis. My research project involves better understanding case managers' and undergraduate students' opinions regarding people with serious mental illness.

You are invited to participate in this research study. Participation in this study involves completing an online questionnaire at a computer of your convenience. I estimate that it will take you no longer than 15-25 minutes to complete this survey. The anticipated risks to you as a result of participation in this study are no greater than those normally encountered in daily life. For your participation in this study, you have the choice of being entered in a raffle to win one of two \$100 cash prizes.

The information you provide during this study will be kept confidential. Only the researcher and her advisor will have access to the data. No person at your agency will have access to your responses. Your identifying information will be stored in a database separate from your responses on the survey. Both databases will be stored on a secure server in Bowling Green State University's Department of Psychology building. All data will be removed from the server within one year and will subsequently be erased from the server. All identifying information will be destroyed once the raffle has taken place. Since the internet is not 100% secure in terms of privacy, please remember to not leave the partially completed survey open or unattended if completing it on a public computer, and to clear the browser page history and cache when finished with the survey. You should also be aware that some employers use tracking software to monitor and record keystrokes, mouse clicks, and web sites visited which could impact the confidentiality of your responses. Therefore, you may wish to complete the survey on your home computer or a public computer.

Your participation in this study is completely voluntary. You are free to withdraw consent and to discontinue participation in the study at any time without penalty or explanation. Your decision to participate or not to participate will have no impact on your or your agency's relationship with Bowling Green State University. If you have any questions or comments about this study, you can contact Kristen Abraham (419) 372-4597 (kabraham@bgnet.bgsu.edu) or Catherine Stein, PhD, my project advisor (419) 372-2278. If you have further questions or concerns regarding the conduct of the study or your rights as a research participant, you may contact the Chair of the Human Subjects Review Board, Bowling Green State University at (419) 372-7716 (hsrb@bgnet.bgsu.edu).

Please click on one of the following button if you wish to participate in this study. If you do not want to participate in this study, click on the "x" in the upper right corner to close the window.

- I have read all of the above information and I am consenting to participate in this study.

APPENDIX E. INFORMED CONSENT FORM FOR UNDERGRADUATES

Hello, my name is Kristen Abraham. I am a graduate student in Clinical Psychology. Presently, I am in the process of completing my master's thesis. My research project involves better understanding case managers' and undergraduate students' opinions. More specifically, I am interested in knowing how case managers' opinions regarding people with serious mental illness compare to undergraduates' opinions regarding people with serious mental illness.

You are invited to participate in this research study. You must be 18 years of age or older to participate in this study. Participation in this study involves completing an online questionnaire at a computer of your convenience. I estimate that it will take you no longer than about 30 minutes to complete this survey. The anticipated risks to you as a result of participation in this study are no greater than those normally encountered in daily life. For your participation in this study, you will receive 1 hour of credit toward your Introductory Psychology course.

The information you provide during this study will be kept confidential. Only the researcher and her advisor will have access to the data. Your instructor and/or teaching assistant will not have access to your responses. Your identifying information will be stored in a database separate from your responses on the survey. Both databases will be stored on a secure server in the Department of Psychology building. All data will be removed from the server within one year and will subsequently be erased from the server. All identifying information will be destroyed once credit has been awarded to participants. Since the internet is not 100% secure in terms of privacy, please remember to not leave the partially completed survey open or unattended if completing it on a public computer, and to clear the browser page history and cache when finished with the survey.

Your participation in this study is completely voluntary. You are free to withdraw consent and to discontinue participation in the study at any time without penalty or explanation. Your decision to participate in this study or not will have no impact on your grades, class standing, or relationship to Bowling Green State University any way. If you have any questions or comments about this study, you can contact Kristen Abraham (419) 372-2301 (kabraha@bgnet.bgsu.edu) or Catherine Stein, PhD, my project advisor (419) 372-2278. If you have further questions or concerns regarding the conduct of the study or your rights as a research participant, you may contact the Chair of the Human Subjects Review Board, Bowling Green State University at (419) 372-7716 (hsrb@bgnet.bgsu.edu).

Please click on one of the following button if you wish to participate in this study. If you do not want to participate in this study, click on the "x" in the upper right corner to close the window.

- ☐ I have read all of the above information and I am consenting to participate in this study.

APPENDIX F. THE LEVEL OF CONTACT REPORT

(Holmes et al., 1999)

Please read each of the following statements carefully. After you have read all of the statements below, place a check by EVERY statement that represents your experience with persons with a serious mental illness.

A person with serious mental illness is defined as someone who experiences a high level of emotional distress, disorganization of their thoughts and/or emotions, and has experienced these difficulties chronically and persistently in their life. Those with serious mental illness may or may not use mental health services due to their difficulties.

1. I have watched a movie or television show in which a character depicted a person with serious mental illness. ____ (3)
2. I have or have had a job that involves providing services/treatment for persons with serious mental illness. ____ (8)
3. I have observed, in passing, a person I believe may have had a serious mental illness. ____ (2)
4. I have observed persons with a serious mental illness on a frequent basis. ____ (5)
5. I have a serious mental illness. ____ (12)
6. I have worked with a person who had a serious mental illness at my place of employment. ____ (6)
7. I have never observed a person that I was aware had a serious mental illness. ____ (1)
8. My job includes providing services to persons with serious mental illness. ____ (7)
9. A friend of the family has a serious mental illness. ____ (9)
10. I have a relative who has a serious mental illness. ____ (10)
11. I have watched a documentary on television about serious mental illness. ____ (4)
12. I live with a person who has a serious mental illness. ____ (11)

Note: Expert rankings of each item are in parentheses.

APPENDIX G. EXPECTATIONS ABOUT EMPLOYMENT FOR PEOPLE WITH SERIOUS MENTAL ILLNESS (EESMI)

Generally, people have different expectations regarding employment for people with serious mental illness; we are interested in learning what you think about this topic. Please carefully read each of the following statements, and indicate your agreement for each statement on the following scale:

Not at all	A little	A medium amount	A lot
0	1	2	3

1. Most people with serious mental illness want to work.
2. Most people with serious mental illness have the ability to hold down a job.
3. Employment can help most people with serious mental illness forget about their troubles for a while.
4. Most people with serious mental illness can't work because it would make their symptoms worse.*
5. Usually, no one wants to hire most people with serious mental illness.*
6. Having a job is important for most people with serious mental illness because it makes them feel better about themselves.
7. Most people with serious mental illness want to work so that they can have more opportunities for a better life.
8. Mental health professionals are supportive of most people with serious mental illness seeking employment.
9. Even most people with serious mental illness who still experience symptoms can handle having a job.
10. Most people with serious mental illness have social difficulties that make it too hard for them to be good employees.*
11. Most people with serious mental illness get enough money from the government so they don't need to work.*
12. Most people with serious mental illness just can't do a fair share of the work.*
13. Most co-workers wouldn't socialize with people who have serious mental illness.*
14. Most people with serious mental illness could concentrate enough to hold down a job.
15. Employment would lead to more social contacts for most people with serious mental illness.
16. If employed, most people with serious mental illness could get along with coworkers.
17. Employment would help most people with serious mental illness cope with their mental illness.

18. Having a job would help most people with serious mental illness lessen their symptoms.
19. When people with serious mental illness have a job, they feel more involved in their community.
20. Most people with serious mental illness lack the family support necessary to keep a job.*
21. Employment can only lead to personal unhappiness for most people with serious mental illness.*
22. Most employers think that hiring most people with serious mental illness involves too much responsibility.*
23. Most people with serious mental illness aren't motivated to look for a job.*
24. Most people with serious mental illness are too lazy to hold down a job.*

*Items to be reverse scored

APPENDIX H. OPINIONS ABOUT MENTAL ILLNESS SCALE (OMI) FACTORS C & D

(Cohen & Struening, 1962)

The statements that follow are opinions or ideas about mental illness and mental patients. By mental illness, we mean the kinds of illness which bring patients to mental hospitals, and by mental patients we mean mental hospital patients. There are many differences of opinion about this subject. In other words, many people agree with each of the following statements while many people disagree with each of the statements. We would like to know what you think about these statements. Please rate your agreement with these statements on the following scale:

- 1 strongly disagree
- 2 disagree
- 3 not sure but probably disagree
- 4 not sure but probably agree
- 5 agree
- 6 strongly agree

1. All patients in mental hospitals should be prevented from having children by a painless operation.
2. The small children of patients in mental hospitals should not be allowed to visit them.
3. Mental illness is an illness like any other.
4. Most mental patients are willing to work.
5. Many people who have never been patients in a mental hospital are more mentally ill than many hospitalized patients.
6. More tax money should be spent in the care and treatment of people with serious mental illness.
7. A woman would be foolish to marry a man who has had a serious mental illness, even though he seems fully recovered.
8. Our mental hospitals seem more like prisons than like places where mentally ill people can be cared for.
9. People who have been patients in a mental hospital will never be their old selves again.
10. If our hospitals had enough well trained doctors, nurses, and aides, many of the patients would get well enough to live outside the hospital.
11. The law should allow a woman to divorce her husband as soon as he has been confined in a mental hospital with serious mental illness.
12. Although patients discharged from mental hospitals may seem alright, they should not be allowed to marry.
13. Many mental patients are capable of skilled labor, even though in some ways they are very disturbed mentally.

- 14. Many mental patients would remain in the hospital until they were well, even if the doors were unlocked.
- 15. Anyone who is in a hospital for a mental illness should not be allowed to vote.
- 16. Most women who were once patients in a mental hospital could be trusted as baby sitters.
- 17. Most patients in mental hospitals don't care how they look.

Mental Hygiene Ideology (Factor C) items: 3, 4, 5, 6, 8, 10, 13, 14, 16

Social Restrictiveness (Factor D) items: 1, 2, 7, 9, 11, 12, 15, 16*, 17

*Item reverse scored for inclusion in Factor

APPENDIX I. CASE MANAGER EXPECTANCY INVENTORY

(CMEI; O'Connell & Stein, 2000)

Case managers who work with people with serious mental illness often differ in their expectations about what consumers can do. We understand that the consumers with whom you work may vary in their current abilities. We are interested in learning about what you expect consumers with serious mental illness in general to be capable of doing. Please read the following statements and rate the degree to which you think each statement is true for clients with serious mental illness.

1	2	3	4	5
Strongly Disagree		Neutral		Strongly Agree

I expect that clients with serious mental illness have the ability to:

1. focus on the task at hand
2. have intimate relationships
3. live independently
4. be tolerant of beliefs which differ from their own
5. make good decisions for themselves
6. be accepted by people in the community who are not mentally ill
7. supervise other people
8. maintain personal hygiene and dress appropriately
9. learn new material or skills
10. carry on a conversation appropriately
11. shop and prepare their own meals
12. initiate a conversation with strangers
13. manage time effectively
14. know how much to self-disclose to others
15. handle rejection
16. help other people
17. recognize when they are decompensating
18. work or learn in an unstructured environment
19. independently secure necessary support services
20. protect themselves from harm
21. identify and take appropriate risks
22. be a community leader
23. accept criticism
24. manage their own money
25. effectively communicate their needs
26. provide support and guidance to others
27. take classes at a university
28. set their own personal goals
29. know when to seek help from others
30. understand and follow simple directions

31. take medication regularly without supervision
32. stand up for themselves in an assertive manner
33. work successfully while experiencing psychotic symptoms
34. have a career
35. provide for their family
36. get to places in the community without then help of others
37. abide by rules
38. see other people's point of view
39. know how to handle difficult situations or crises
40. know what to do in their spare time
41. work in an unsupervised environment
42. be sensitive to the needs of others
43. be trusted to take care of children
44. ask someone out on a date
45. distinguish voices from reality
46. become involved in church or community activities
47. express anger or discontent appropriately
48. maintain personal relationships with people who are not mentally ill
49. be a pleasant and courteous neighbor
50. demonstrate self-control

Community Integration Index items: 3, 8, 9, 10, 16, 28, 29, 30, 36, 37, 42, 44, 45, 46, 47, 48, 49, 50

Personal Agency Index items: 4, 5, 6, 13, 14, 15, 17, 20, 21, 23, 32, 39, 45

Valued Social Roles Index items: 1, 2, 7, 18, 22, 26, 27, 33, 34, 35, 41, 43

APPENDIX J. MASLACH BURNOUT INVENTORY

(MBI; Maslach & Jackson, 1981)

The following statements deal with how you may or may not feel about your work as a case manager. For each, please indicate how often you feel this way.

- 0 Never
- 1 A few times a year
- 2 Monthly
- 3 A few times a month
- 4 Every week
- 5 A few times a week
- 6 Everyday

1. I feel burned out from my work.
2. I feel like I'm at the end of my rope.
3. I feel I'm working too hard on my job.
4. I feel used up at the end of the workday.
5. I feel emotionally drained from my work.
6. Working with people directly puts too much of a stress on me.
7. I feel frustrated at my job.
8. Working with people all day is really a strain for me.
9. I feel fatigued when I get up in the morning and have to face another day on the job.
10. I worry that this job is hardening me emotionally.
11. I feel I treat some consumers as if they were impersonal objects.
12. I've become more callous toward people since I took this job.
13. I feel consumers blame me for some of their problems.
14. I don't really care what happens to some consumers.
15. I have accomplished many worthwhile things in my job.
16. I feel very energetic.
17. I can easily understand how my consumers feel about things.
18. I feel exhilarated after working closely with my consumers.
19. In my work, I deal with emotional problems very calmly.
20. I deal very effectively with the problems of my consumers.
21. I feel I'm positively influencing other people's lives through my work.
22. I can easily create a relaxed atmosphere with my consumers.

Emotional Exhaustion factor items: 1, 2, 3, 4, 5, 6, 7, 8, 9

Depersonalization factor items: 10, 11, 12, 13, 14

Personal Accomplishment factor items: 15, 16, 17, 18, 19, 20, 21, 22

APPENDIX K. MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE

Short Form (Strahan & Gerbaski, 1972)

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide whether the statement is true or false as it pertains to you personally.

1. I like to gossip at times.
2. There have been occasions when I took advantage of someone.
3. I'm always willing to admit it when I make a mistake.
4. I always try to practice what I preach.
5. I sometimes try to get even rather than forgive and forget.
6. At times I have really insisted on having things my own way.
7. There have been occasions when I felt like smashing things.
8. I never resent being asked to return a favor.
9. I have never been irked when people expressed ideas very different from my own.
10. I have never deliberately said something to hurt someone's feelings.

Items that equal 1 point if answered true: 3, 4, 8, 9, 10

Items that equal 1 point if answered false: 1, 2, 5, 6, 7

Table 1. Undergraduate Participants' Demographic Data

Variable	n	%	Mean (SD)	Variable	n	%
Age			18.9 (.9)	<u>Marital Status</u>		
<u>Gender</u>				Never Married	154	96.9
Male	53	33.5		Living with Partner	3	1.9
Female	105	66.5		Married	2	1.3
<u>Ethnicity</u>				<u>Major</u>		
Caucasian	141	88.7		Education	64	40.3
African American	7	4.4		Health and Sciences- Basic and Applied	33	20.8
Hispanic	5	3.1		Business and related fields	21	13.2
Other	6	3.7		Social Sciences- Basic and Applied	13	8.2
<u>Year in College</u>				Arts, Architecture, and Design	5	3.1
Freshman	125	78.6		Undecided	12	7.5
Sophomore	31	19.5		Other	11	6.9
Junior	3	1.9				

Table 2. Case Managers' Demographic Data

Variable	n	%	Mean (SD)	Variable	n	%
Age			36.9 (10.9)	<u>Salary</u>		
Months as a case manager			81.6 (71.8)	\$15,000 to \$19,000	2	1.9
<u>Gender</u>				\$20,000 to \$24,000	23	21.5
Male	24	22.5		\$25,000 to \$29,000	23	21.5
Female	83	77.6		\$30,000 to \$34,000	24	22.4
<u>Ethnicity</u>				\$35,000 to \$39,000	9	8.4
Caucasian	100	93.5		\$40,000 to \$44,000	17	15.9
African American	5	4.7		\$45,000 to \$49,000	5	4.7
Other	3	1.3		\$50,000 or more	4	3.7
<u>Educational Level</u>				<u>Major in Highest area of Study</u>		
Some College	5	4.7		Psychology	29	27.4
Associate's Degree	5	4.7		Social Work	28	26.4
Bachelor's Degree	79	73.8		Sociology	9	8.5
Master's Degree	18	16.8		Education	7	6.6
<u>Marital Status</u>				Human, Child, Family Development/ Studies	6	5.7
Never Married	31	29		Counseling	5	4.7
Living with Partner	1	.9		Nursing	5	4.7
Married	57	53.3		Recreation, Music Therapy	4	3.8
Divorced or Separated	18	16.9		Criminal Justice	2	1.9
				Business	1	.9
				Other	10	9.4

Table 3. Case Managers' Agency Related Setting Characteristics

Setting Characteristic	n	%	Mean (SD)
Number of consumers with SMI ^a on caseload			41.4 (45.8)
Perceived number of services available			11.7 (3.1)
Percent of consumers attempted CE ^b			21.3 (22.7)
Percent of consumers currently in CE			7.5 (8.7)
Percent of consumers capable of CE			29.1 (22.9)
Agency Offers Employment Programs:			
Yes	71	66.4	
No	33	30.8	
Don't Know	3	2.8	

^a Serious Mental Illness^b Competitive Employment

Table 4. Means, Standard Deviations, and Internal Reliability Coefficients for Study Measures

Measure	Case Managers			Undergraduates		
	Mean	SD	Alpha	Mean	SD	Alpha
Expectations for Employment of People with Serious Mental Illness (EESMI)	1.8	.4	.84	1.8	.3	.82
Benefits of Work	1.8	.5	.88	1.7	.5	.85
Demands of the Worker Role	1.7	.5	.74	1.7	.4	.66
Motivation to Work	2.1	.5	.63	2.1	.4	.59
<u>Convergent Validity</u>						
Social Restrictiveness (Opinions about Mental Illness)	2.1	.6	.69	2.6	.7	.73
Mental Hygiene Ideology (Opinions about Mental Illness) ^a	3.8	.7	.49	3.4	.5	.44
Community Integration Index (Case Manager Expectancy Inventory)	3.8	.7	.97	---	---	---
Valued Social Roles Index (Case Manager Expectancy Inventory) ^a	3.5	.7	.93	---	---	---
Personal Agency Index (Case Manager Expectancy Inventory)	3.4	.8	.95	---	---	---
Emotional Exhaustion (Maslach Burnout Inventory) ^b	2.1	1.3	.92	---	---	---
Depersonalization (Maslach Burnout Inventory) ^b	1.1	1.2	.80	---	---	---
Personal Accomplishment (Maslach Burnout Inventory) ^b	4.4	1.0	.88	---	---	---
<u>Discriminate Validity</u>						
Social Desirability Total Score	5.5	2.0	.53	4.4	2.1	.59

^a Scores were computed without work-related item

^b Case manager sample size n = 79

Table 5. Factor loadings for Expectations for the Employment of People with Serious Mental Illness Items in the Case Manager Sample

Item	I	II	III
	$\alpha = .88$	$\alpha = .74$	$\alpha = .63$
<i>Factor I: Benefits of Work</i>			
Employment would help most people with serious mental illness cope with their illness	.80		
Most people with serious mental illness have the ability to hold down a job	.72		
Even most people with serious mental illness who still experience symptoms could handle having a job	.72		
If employed, most people with serious mental illness could get along with coworkers	.71		
Employment can help most people with serious mental illness forget about their troubles for a while	.71		
When people with serious mental illness have a job they feel more involved in their community	.66		
Having a job would help most people with serious mental illness lessen their symptoms	.66		
Most people with serious mental illness could concentrate enough to hold down a job	.65		
Having a job is important for people with serious mental illness because it makes them feel better about themselves	.59		
Employment would lead to more social contacts for people with serious mental illness	.54		
Most people with serious mental illness can't work because it would make their symptoms worse	-.50		
<i>Factor II: Demands of the Worker Role</i>			
Most people with serious mental illness just can't do a fair share of the work		-.70	
Usually, no one wants to hire people with serious mental illness		-.69	
Most people with serious mental illness have social difficulties that would make it too hard for them to be good employees		-.69	
Most coworkers wouldn't socialize with people who have serious mental illness		-.57	
Most employers think that hiring most people with serious mental illness involves too much responsibility		-.55	
Employment can only lead to personal unhappiness for people with serious mental illness		-.52	
Most people with serious mental illness lack the family support necessary to keep a job		-.40	

Factor III: Motivation to Work

Most people with serious mental illness want to work so they can have more opportunities for a better life	.75
Most people with serious mental illness want to work	.66
Most people with serious mental illness get enough money from the government so they don't need to work	-.57
Most people with serious mental illness aren't motivated to look for a job	-.51
Most people with serious mental illness are too lazy to hold down a job	-.41

Table 6. Correlation Matrix of EESMI and Setting Characteristics for Case Manager Sample

	1	2	3	4	5	6	7	8	9	10
1. EESMI mean score	-----									
2. Benefits of Work (EESMI)	.84**	-----								
3. Demands of the Worker Role (EESMI)	.69**	.30**	-----							
4. Motivation to Work (EESMI)	.54**	.21*	.24*	-----						
5. Months as a Case Manager (Job Tenure)	.15	.20*	-.08	.15	-----					
6. Number of consumers with SMI ^a on caseload	-.01	.01	-.02	.01	.06	-----				
7. Perceived number of services available	.11	.12	.03	.07	.03	.00	-----			
8. Percent of consumers attempted CE ^b	.20*	.17	.06	.24*	.06	.23*	-.19	-----		
9. Percent of consumers currently in CE	.11	.06	.13	.08	-.05	.52**	-.14	.65**	-----	
10. Percent of consumers capable of CE	.31**	.36**	.10	.12	-.07	.20*	-.14	.40**	.40**	-----

* $p < 0.05$; ** $p < .01$

^a Serious Mental Illness

^b Competitive Employment

Table 7. Correlation Matrix of Measures and Setting Characteristics for Undergraduate Sample

	1	2	3	4	5	6	7	8
1. EESMI mean score	-----							
2. Benefits of Work (EESMI)	.86**	-----						
3. Demands of the Worker Role (EESMI)	.62**	.20*	-----					
4. Motivation to Work (EESMI)	.74**	.50**	.36**	-----				
5. Level of Contact	-.12	-.06	-.09	-.15	-----			
6. Mental Hygiene Ideology (OMI)	.17*	.17*	.02	.21**	.13	-----		
7. Social Restrictiveness (OMI)	-.50**	-.42**	-.30**	-.38**	.03	-.17*	-----	
8. Social Desirability	.08	.04	.11	.04	.05	.10	-.07	-----

* $p < 0.05$; ** $p < .01$

Table 8. Correlation Matrix of Measures for Case Manager Sample

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. EESMI mean score	-----													
2. Benefits of Work (EESMI)	.84**	-----												
3. Demands of the Worker Role (EESMI)	.69**	.30**	-----											
4. Motivation to Work (EESMI)	.54**	.21*	.24*	-----										
5. Mental Hygiene Ideology (OMI)	.28**	.24*	.08	.31**	-----									
6. Social Restrictiveness (OMI)	-.43**	-.17	-.43**	-.46**	-.25*	-----								
7. CMEI mean total score	.32**	.22*	.29**	.16	.21*	-.45**	-----							
8. Community Integration Index (CMEI)	.27**	.19	.26**	.13	.18	-.46**	.97**	-----						
9. Valued Social Roles Index (CMEI)	.31**	.21*	.30**	.14	.24*	-.47**	.93**	.87**	-----					
10. Personal Agency Index (CMEI)	.33**	.24*	.29**	.17	.18	-.37**	.94**	.86**	.82**	-----				
11. Depersonalization (MBI) ^a	-.26*	-.06	-.34**	-.22	-.10	.46**	-.34**	-.30**	-.32**	-.35**	-----			
12. Emotional Exhaustion (MBI) ^a	-.16	-.02	-.20	-.25*	-.10	.38**	-.26*	-.21	-.31**	-.26*	.69**	-----		
13. Personal Accomplishment (MBI) ^a	.15	.09	.17	.12	.12	-.20	.14	.08	.20	.14	-.35**	-.23*	-----	
14. Social Desirability	.10	-.04	.27**	.05	-.12	-.12	-.07	-.03	-.09	-.08	-.24*	-.07	.28*	-----

* $p < 0.05$; ** $p < .01$ ^a Case manager sample size $n = 79$