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I, Megan Elizabeth Harvey,  
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Approved by:

M. S. J.  
John Steffen (JB)  
Jane Brink  
Charles Morawitz



Work history and career patterns

**Work history and career patterns of recipients of public sector mental health  
services**

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by

Megan E. Harvey

B.A., University of Dayton, 1999

Co-chair: Robert Stutz, Ph.D., University of Cincinnati, Department of Psychology  
Co-chair: Joyce Borkin, Ph.D., University of Cincinnati, School of Social Work

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## Work history and career patterns

### Committee:

Co-chair: Robert Stutz, Ph.D., University of Cincinnati, Department of Psychology

Co-chair: Joyce Borkin, Ph.D., University of Cincinnati, School of Social Work

Member: Christine Hovanitz, Ph.D., University of Cincinnati, Department of Psychology

Member: John J. Steffen, Ph.D., University of Hawaii, Department of Psychology

**Abstract**

The current study assesses the work histories of consumers of mental health services. This information, along with current work status and attitudes about work, is used to create a system to classify the overall employment status of consumers. Ninety-nine consumers were interviewed and data were collected about work histories, work status, attitudes toward work, and three psychosocial factors.

Cluster analysis was used to identify subgroups of consumers based on their work history, work status, and attitudes toward work. Five clustered groups emerged from the analysis; two of which were associated with employed and three of which were associated with unemployment. Each cluster varied on factors related to work but no significant differences were seen found among clusters on the psychosocial factors.

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Work is a valuable enterprise for the sustenance of society. Persons suffering from serious mental illnesses often struggle to gain and maintain employment and only about 10% of this population is currently working (Anthony & Jansen, 1984; Rutman, 1994). As persons with serious mental illness begin the process of recovery, gaining employment is often recognized as valuable to their social reintegration (Pilusuk, 2001). The benefits of employment for a person with severe mental illness are great compared to unemployed persons in the mental health system. Employed consumers of mental health services have a higher quality of life and are less likely to have been assaulted in the past year (Priebe, Warner, Hubschmid, & Eckle, 1998), have greater global well-being and are more satisfied with their employment situation and finances (Mueser et al., 1997), are less likely to be hospitalized than persons not working (Ellison, Danley, Bromberg, & Palmer-Erbs, 1999), and have more social ties and reciprocal relationships (Pilusuk, 2001).

An emphasis in previous research has been on the successful attainment and maintenance of employment (Alverson, Alverson, Drake, & Becker, 1998; Jacobs, Wissusik, Collier, Stackman, & Burkeman, 1992; Mueser, Salyers, & Mueser, 2001). Several factors have been identified that relate to employment outcomes. The factors that have been studied are oriented toward employment programs as well as social and clinical factors. Employment programs, specifically supported employment programs, are consistently identified in the research as a robust factor relating to employment outcomes (Banks, Charleston, Grossi & Mank, 2001; Bond, Drake, Mueser, & Becker, 1997; Quimby, Drake, & Becker, 2001). In employment research, the interest in clinical and social factors, especially social variables, has not been as great as the interest in

employment programs. Because of this, it is important to consider social and clinical variables in future research on employment outcomes.

The social and clinical factors that have been identified as being integral to employment outcomes include social support (Alverson, Alverson, Drake, & Becker, 1998; Hammen, Gitlin, & Altshuler, 2000), recovery attitudes (Cunningham, Wolbert, & Brockmeier, 2000), premorbid status (Mueser et al., 2001), and work history (Jacobs, Wissusik, Collier, Stackman, & Burkeman, 1992; Mueser et al., 2001; Renegold, Sherman, & Fenzel, 1999). Because these social and clinical factors have been identified as being important to employment outcomes, this introduction includes an in-depth review of this research, especially on work history.

Social support is consistently cited in the literature contributing to a consumer's employment status. Participants in a social rehabilitation program that emphasizes the importance of work were employed more often than those not attending the program. They also had multifunctional support networks, many of which consisted of family members (Pilisuk, 2001). Some consumers reported that having role models with employment experience and adult friends with and without similar mental health problems facilitates maintaining employment (Alverson et al., 1998). Others report that having a diverse social network consisting of professionals, family, and friends facilitates getting and keeping a job (Alverson, Becker, & Drake, 1995). Job satisfaction also is correlated with social support (Tan & Hawkins, 1999).

Social support networks are thought to serve multiple purposes including helping with transportation and, in turn, the maintenance of employment (Mowbray, Bybee, & Shriner, 1996). In a study of work adjustment and work functioning, the presence of a

high quality supportive relationship was the strongest unique predictor of work (Hammen et al., 2000). The authors hypothesize that, “perhaps successful workers call on resources such as... relationships to help sustain occupational adjustment” (Hammen et al., 2000, p. 224). Higher levels of social integration corresponded with higher wages despite poor overall functioning, indicating that social interaction with coworkers and other natural supports (unrelated to the person’s mental illness) are important to employment outcomes (Banks et al., 2001). On the other hand, one study failed to find a correlation between social support and employment status (Kirsh, 2000), but this study suffered from having a small sample size.

The above review demonstrates the importance of social support for employment. As mentioned previously in this introduction, it is also important to investigate the role of other social factors, including recovery attitudes and premorbid status as they relate to employment outcomes.

Recovery attitudes, or attitudes concerning a consumer’s own illness, have also been investigated in relation to employment. Recovery can be defined as “the development of new meaning and purpose in one’s life as one grows beyond the catastrophic effects of psychiatric disability” (Anthony, 1993, p. 13). This concept has been explored in relation to employment outcomes for this population. In an ethnographic study comparing consumers at various stages of employment, attitudes about the role of one’s illness appeared to be important (Cunningham et al., 2000). Members of the most successfully employed group spoke about their illness as being “a part of their existence” rather than “the totality of their being”. They also had a clear perspective on their illness, in general, and as it related to their employment. Employed

consumers also viewed work as a part of their normal life as well as a mechanism to help control symptoms. The groups with less success in obtaining and maintaining employment varied in their thinking styles and often had distorted views of their illness (Cunningham et al., 2000). Employed consumers, or those interested in employment, have been found to value and strive for the maintenance of their mental and physical health and hold a positive attitude about their illness, focusing on recovery rather than their illness (Alverson et al., 1998; Alverson et al., 1995). The relation between recovery and employment outcomes also operates at a more system-wide level and those agencies integrating recovery principles into their services can positively affect the employment outcomes of their consumers (Anthony, 2000). The above findings highlight the importance of the concept of recovery, in general, and with respect to employment outcomes.

Premorbid status is another important social variable that is intricately related to employment outcomes. The construct of premorbid status is generally ascertained from information about age at onset of a mental illness, and employment, educational, occupational and marital status prior to developing the illness. Premorbid status has been associated with numerous outcomes (e.g., global functioning, symptomatology, length of institutionalization, prognosis, and work history), thus highlighting its overall importance as well as the important contribution of past work history on employment outcomes (Larsen, Moe, Vibe-Hansen, & Johannessen, 2000; Zigler & Phillips, 1961; Zigler & Levine, 1981).

In a recent longitudinal study, consumers with schizophrenia were assessed to identify the predictors of employment outcomes. Work history was the most robust

predictor of outcomes but premorbid functioning was not a significant predictor.

However, correlates of work history were explored and premorbid functioning accounted for the most variance in work history. Better work histories were related to older ages of initial hospitalization and higher education levels; both are elements of premorbid functioning (Mueser et al., 2001). The number of years of school completed before developing a mental illness has been positively related to employment outcomes as well (Cook & Razzano, 1995; O'Neill & Bertollo, 1998). Premorbid functioning also has been found to predict work functioning for consumers with schizophrenia (Harrow, Westermeyer, Silverstein, Strauss, & Cohler, 1986). Further research is needed that focuses on the relation between employment outcomes and premorbid status.

It is obvious from past research that social support, recovery attitudes, and premorbid status are important factors to consider in future research on employment. Work history is another variable that warrants further investigation. Previous employment history is strongly associated with the ability of a person to obtain and maintain work (Anthony & Jansen, 1984; Mueser et al., 2001). Research in this area is varied in terms of method and the parameters of work history studied. In a small study assessing the efficacy of a job-finding club, Jacobs et al., (1992) uncovered several factors that were correlated with the sample's employment outcomes. For example, a good work history (i.e., the number of months of competitive employment in the past five years) was associated with positive employment outcomes. In other research investigating the perceptions of mental health professionals regarding the variables responsible for employment outcomes, work history, (as defined by periods of unemployment, previous work experience, work habits and length of hospitalization),

was the second most important factor identified (Tsang et al., 2000). Renegold et al., (1999) have defined work history as the number of years of continuous employment (the number of years of employment in one or more jobs with an unemployment period between jobs being less than 6 months) and the number of years since last employed. They found that this variable accounted for the majority of the variance in employment outcomes.

Research has demonstrated that prior work experience, i.e., the number of hours per week at the longest job, number of months working on the longest job, highest occupational level, and occupational level prior to the study, is one of the variables that predicts longitudinal work status (Mueser et al., 2001). Researchers have also investigated the prediction of work status by several domains including work history, community functioning, psychiatric history, and demographic characteristics (Mowbray, Bybee, Harris, & McCrohan, 1995). Work history was measured with an empirical quality of life scale that included the following parameters: last or current job; best and worst jobs; type of job; pay rate; time period since most recent employment; and job duration. Employed consumers had worked at their best and worst job for longer periods of time than the non-working group (Mowbray et al., 1995). The authors recommended developing a standardized work history measure as well as the need to include social support measures for investigations of work status (Mowbray et al., 1995).

With the exception of a few studies (e.g., Lysaker et al., 1993; Srivivasan & Thara, 1997), work history has proven to be a very robust variable. Hence, it is important to continue its incorporation into future research. More in-depth information concerning the definition of work history is needed. Even more striking is the dearth of literature

concentrating on the actual work histories or career patterns of consumers with serious mental illnesses. Setting parameters for measuring work history and using these parameters to gather data, is necessary for the continued use of this variable as a predictor of employment outcomes. Investigating the actual work patterns or histories of consumers rather than using work history as one of many variables in the study of employment outcomes can be useful in gathering more information about employment in this population.

The few studies that have examined either work histories or career patterns will be reviewed below. Botterbusch (2000) investigated career patterns in relation to career development in persons with psychiatric disabilities. The focus of this research was on discovering career patterns based on how appropriate jobs were for the level of education attained. The sample of 48 participants included only those involved with a vocational program and all participants had earned a minimum of a Bachelor's degree. The researchers collected information on various aspects of their lives and careers including work histories for the past six jobs held by the participants. The researchers formulated categories or patterns of career development that varied on how consistent career patterns were with certain levels of education (pre or post-formal) and five categories were uncovered. Notably, one of the five categories was characterized as having no career despite having a college education (Botterbusch, 2000). Because work histories were investigated and implemented in the development of the categories, the research demonstrates the importance of work history and work history variables in the investigation of career development. The research also illustrates that categorization of consumers based on career patterns and employment is possible. The findings highlight

the complexity of the construct of employment as evidenced by the many categories that emerged from the analysis. Because multiple categories existed, it is important to consider other employment categories or patterns that may exist for consumers of mental health care. Other patterns may exist based on work history variables rather than career development variables and different categories may emerge when the inclusion criteria is widened.

Two studies have examined the career patterns, based on work history, of persons with severe mental illness in comparison to the general population. The aims of this research included clarifying the vocational history of persons using vocational rehabilitation programs, exploring current vocational status, and discerning career goals for the future (Baron & Salzer, 2000). In the initial study, work history information was collected including employment length, full or part-time status, and the primary reason for leaving the job. Of the 40 consumers interviewed, more than half had worked over 4 years, the mean length of employment was more than one and a half years, and only a relatively small group was fired due to complications with their mental illness (Baron & Salzer, 2000). The data collected were compared to data from the February 1998 Current Population Survey and the sample seemed to have similar work history trends as did the general population surveyed in 1998. This research is important because it highlights the fact that persons with serious mental illnesses who do enter the workforce are able to sustain work and do not seem to be inhibited by their mental illnesses in the employment process.

The second study expanded its focus to include current work status and ideas about future work opportunities (Baron & Salzer, 2000). A majority of the 38

participants interviewed had contact with the vocational rehabilitation system. The qualitative results indicated that participants had an extensive work history before and after the onset of their illness and the initial onset of mental illness did not significantly disrupt their work productivity. Relationships between co-workers and employees were rated positively, as was self-reported past work performance. Most jobs worked were low-wage, entry-level, no-benefit jobs. Most jobs were part-time because of the receipt of disability or social security benefits, and participants were concerned with the effects of employment on their benefits. Job tenure was substantial with an average of 14 months at one job. The reasons for leaving were varied, but the incidences of firings were low, and in these cases, the role of mental illness was indirect. Most participants left their jobs for reasons related to various manifestations of stress. A small number (15 percent) left a job because of hospitalization for mental illness, only one person was fired because of mental health related concerns, and the majority who left work due to mental illness simply quit going to work or resigned (Baron & Salzer, 2000).

Some of these results, including substantial tenure at one job, and the minor role of mental illness in determining job tenure, are not consistent with the beliefs held by many mental health professionals that mental health consumers are unable to sustain employment. These studies are important because they are the first to detail the work histories of mental health consumers and, in so doing, are facilitating greater understanding of the experiences of employment for this population. In addition these studies highlight the importance of work history research because the findings are evidence that mental illnesses are not debilitating to the process of work and mental health consumers do have extensive work histories to investigate.

Because these studies were the first to investigate the work histories of mental health consumers, additional research needs to be conducted to replicate or expand upon the results. In conducting the current research, it seemed important to include a more heterogeneous sample of consumers of mental health services as opposed to the samples like those used by Salzer and Baron (2000), which included only those involved in a vocational rehabilitation program.

It is important to examine the employment patterns of mental health consumers. Some may have an extensive work history at one or two places of employment while others may have a history sprinkled with multiple short-term jobs. In studying the employment patterns found in consumers' work histories, more information can be obtained about those consumers' who are sporadically employed or are frequently changing jobs and the reasons for doing so, e.g., relationship concerns at work, concerns about their mental illness, dissatisfaction with pay and type of work. Information about consumers' work histories and career patterns, current work status (employed full-time, part-time, or unemployed), and their attitudes about employment may be used to create a typology or a system of placing consumers into employment categories based on in-depth information about employment. This typology could help to delineate separate categories of current work status in relation to past work histories and patterns. This in turn, could create a more complete categorization system than the typical classification system that includes only "employed part-time", "employed full-time", and "unemployed". Each category can be associated with psychosocial variables that past research identified as being important to employment outcomes including social support, recovery attitudes and premorbid status. The information obtained about the psychosocial variables can be

used to generate a broader picture of the categories and the differences on these variables between categories. The detailed typology will help guide the field in developing appropriate employment interventions based on category as well as assess and work toward consumers' employment goals. In gaining knowledge about a mental health consumer's work history, current work status and therefore the category to which they belong, mental health professionals may be better able to assess the feasibility of that consumer's employment goals and what areas the consumer needs to improve upon to reach those goals.

#### Statement of the Research Problem

An emphasis in previous research has been on the successful attainment and maintenance of employment. Several factors associated with employment outcomes have been identified including social support (Alverson et al., 1998; Hammen et al., 2000), recovery attitudes (Cunningham et al., 2000), and premorbid status (Mueser et al., 2001). Past employment appears to be a robust predictor of current work status (Jacobs et al., 1992; Mueser et al., 2001; Renegold et al., 1999). However, work history is not consistently defined and little attention has been paid to the way in which past employment can be best measured. Also, little effort has been given to studying the working patterns of consumers (Baron & Salzer, 2000).

The aim of the current study is the explication of employment categories based upon mental health consumers' work histories, their current work status (e.g. part-time, unemployed, or not seeking work), and their attitudes about work. It was expected that a more complete and generalizable categorization system of employment status would be obtained by gaining in-depth information about the aforementioned employment

variables through individual interviews with consumers of mental health services using both qualitative and quantitative methods of data collection. The qualitative data were coded and analyzed in conjunction with the quantitative data. The primary data analysis was a cluster analysis that was done to uncover employment categories that existed in the sample. Once the categories were evident, psychosocial variables were analyzed to determine if differences existed on these variables between categories. It was expected that such an analysis would benefit attempts to study the relation between employment and favorable psychosocial outcomes. The results of this study could help in setting more reasonable employment goals, in developing a method of identifying and indexing work patterns, and in tailoring appropriate interventions for individuals in each category.

Because this study was exploratory, there were no a priori hypotheses about the categories that emerged in the sample. It was hypothesized that if categories did exist, differences would occur among categories on the psychosocial variables, specifically categories with more favorable employment attributes would also have more favorable psychosocial attributes and those categories with less favorable employment attributes would have less favorable psychosocial attributes.

## Method

### *Participants*

One hundred four adult (104) consumers of mental health services in Hamilton County participated in this study. Two consumers were unable to answer three of six consent form comprehension questions and were excluded. The data from three additional consumers were discarded as a result of the questionable validity of their

responses or because they discontinued participation before the protocol was completed. Although no demographic inclusion criteria were set, the researchers attempted to include a diverse group of consumers. All participants had been qualified as eligible to receive state funded mental health services (i.e., 508 certification, Ohio's set criteria for determination of serious mental disability). Participant's ages ranged from 20 to 69 ( $M = 42.41$ ,  $SD = 10.59$ ) and 58.6 percent of the sample either completed high school or some college. Tables 1, 2 and 3 contain additional demographic data for the sample.

Table 1

*Self-reported Primary Diagnoses*

Diagnosis	<i>N</i>	<i>P</i>
Bipolar	27	25.0
Schizophrenia spectrum	37	34.0
Major depression or MDD with anxiety	19	18.0
Anxiety/GAD	6	6.0
PTSD	3	3.0
OCD	3	3.0
Alcohol dependence/alcoholism	2	2.0
Personality disorders	4	4.0
Don't know/don't want to answer/other	7	6.0
Total	108	

*Note.* Participants were allowed to report more than one diagnosis and so the total number of responses is over the 97 participants who responded to the demographic questionnaire.

Table 2

*Demographic Characteristics of the Sample: Race and Gender*

Demographics	<i>N</i>	<i>P</i>
<b>Gender</b>		
Male	38	38.4
Female	59	59.6
<b>Racial Group</b>		
Caucasian	50	50.4
African American	39	39.4
Asian	1	1.0
Native American	1	1.0
Other/multi-racial	2	2.0
<b>Marital Status</b>		
Single/Never married	55	55.6
Married	10	10.1
Widow/er	2	2.0
Divorced/Separated	31	31.3
Significant other <sup>a</sup>	25	25.3
<b>Living situation</b>		
Own home	49	49.5
Supervised group home	33	33.3
Respite care	1	1.0
Friend's home	1	1.0
Relative's home	8	8.1
homeless	3	3.0

*Note.* Information from 2 participants is not available

<sup>a</sup>This was a separate question to determine if those who were not married had a significant other; 25 replied "Yes".

Table 3

*Endorsement of a Mental Illness and Recovery*

	<i>N</i>	<i>P</i>
<i>Do you consider yourself</i>		
<i>to have a mental illness?</i>		
Yes	80	80.8
No	15	15.2
Sometimes/Don't know	2	2.0
<i>Do you consider yourself</i>		
<i>to be recovering?</i>		
Yes	78	78.8
No	15	15.2
Sometimes	2	2.0

*Note.* Only 97 participants responded to the demographic questionnaire and of those who did respond, not all responded to each question.

#### *Procedure*

Participants were recruited from the five largest mental health agencies operating in Hamilton County. Permission to recruit participants was obtained from administrators at each agency prior to the study. The primary researcher and trained research assistants recruited consumers through the use of signs and personal solicitation (see Appendix A). Signs were posted at mental health agencies and satellite offices known to attract consumers for daily activities such as appointments with mental health professionals or participation in recreational or educational groups. The researchers also attempted to recruit consumers varying in age, gender, ethnicity and other demographic characteristics. The nature of the study was explained and questions about the study were answered.

A time was set for interested consumers to meet individually with a researcher. Meetings took place at a convenient location such as their community mental health agency or their home. The consent form was read to each consumer explaining confidentiality policies and the general goals of the study and after all questions were addressed, each consumer was able to sign the form agreeing to be a participant (see Appendix B). No consumer declined to sign the consent form.

After a consumer gave consent, the researcher administered a comprehension questionnaire containing six true and false questions about the consent form (see Appendix B). Consumers who answered less than three items correct were compensated five dollars for their time and were excused from the study (N=2). For the consumers answering three or more questions correctly, the researcher reviewed any incorrect answers until full comprehension was ensured. At this point, the researcher administered the research protocol by reading the items aloud and recording the participant's answers. The instruments and questionnaires are described below. Copies of all questionnaires were provided to participants to enable them to read along with the researcher if desired. Questionnaires were administered in a counterbalanced order. Consumers were debriefed after completion of the questionnaires and were paid \$10 for their time.

Before data collection began, all research assistants (RAs) were trained to administer the questionnaire battery and were given a standard research protocol to follow to help ensure reliability among those collecting the data (see Appendix C). All RAs collecting data were graduate students in the Clinical Psychology program at the University of Cincinnati. Ongoing support for the RAs was given by the PI to resolve any problems with data collection or with the research protocol. RAs were also

compensated for their time. Undergraduate psychology majors also helped with organizational tasks such as scheduling appointments, filing completed questionnaires into their proper locations, and assisting with data entry. All members of the research team were instructed about the ethics involved in this project, particularly about maintaining participant confidentiality.

### *Instruments*

The primary instrument was a work history form (see Appendix D). This form, constructed for the present study, included seven-point Likert type item subscales assessing employment status, satisfaction with work and school (Lehman, 1988), general ideas about work, the desirability and necessity of work, the least and most appealing aspects of work, barriers to seeking work, and supplementary income status and its effect on the perceived need for employment. A series of open-ended questions were designed to elicit details about every job held over the past ten years, although the focus of this study is the most recent job held prior to the current job (if applicable). These questions asked about the nature of the work, duties held, the time period employed, pay rate, age, relationships with coworkers and superiors, satisfaction with the amount of pay received, and the best and worst aspects of the job. An additional question asked if consumers had been diagnosed with a mental illness at the time of their first job and what impact the diagnosis and illness had on this particular job.

All responses gathered using the work history form and other questions eliciting open-ended responses were coded using a content analysis approach constructed by the primary researcher. The responses to each open-ended question were reviewed and recorded to determine which responses occurred most frequently and which were related

and potentially could be joined into one category within the code for that question. Between six and nine categories were identified and given a numerical code for each question and this information was recorded on a code sheet (see Appendix I). At this point, the primary researcher reread and coded each response based on options listed on the code sheet. The codes were double entered into a database to correct any data entry mistakes. After the data were validated, approximately 50% of the data were double-coded by a graduate student in psychology and the reliability was .88 as measured by the percentage of items that were scored the same by the primary researcher and the graduate student.

Other instruments were used to assess social support, premorbid functioning, and recovery attitudes (See Appendices E, F, and G). The Multidimensional Scale of Perceived Social Support (MSPSS), a measure of a person's perceived social support system was used (Zimet, Dahlem, Zimet, & Farley, 1988). Three domains are considered including family, friends, and significant others. The measure has 12 items, and uses a seven-point Likert scale with responses ranging from very strongly agree to very strongly disagree. An example item is as follows: "I have a special person who is a real source of comfort to me." Scores on this measure range from 1 to 7 with higher scores indicating agreement. The scores on each item are summed and averaged within the appropriate domains to create the domain scores. The internal consistency reliability, as measured by Cronbach's coefficient alpha, for the significant other, family, and friends subscales and the total scale were .91, .87, .85, and .88, respectively, in the original administration of the measure to 136 female and 139 male undergraduate participants. The test-retest reliability coefficients were .72, .85, .75, and .85, respectively, when the measure was

given to 69 participants from the total sample 2-3 months following the initial administration.

The Zigler-Phillips Premorbid Social Competence Scale was used to collect information about premorbid status (Zigler & Phillips, 1961). This is a multi-dimensional scale indexing a person's developmental level or level of maturity at a particular time period. In this study, only the time before the development of a serious mental illness, i.e., the premorbid period, was considered. The variables composing this index include age, education, occupation, employment history, and marital status during the premorbid period. Each variable is divided into three categories scored as a 0 (the lowest category), 1, or 2 (the highest category). For example, age (at the time of onset in this study) is categorized as follows: 24 years and below (score 0), 25-44 years (score 1), and 45 years and above (score 2). (See Appendix E for the Premorbid Scale and the scoring system listed beneath each item). Each consumer was given a mean for their scores to the five questions with a range from 0 to 2, with higher means indicating a higher level of premorbid social functioning prior to the onset of a serious mental illness. Internal reliability data are unavailable for this measure.

The Recovery Attitudes Questionnaire (RAQ) was used to assess participants' attitudes about the concept of recovery from mental illness (Borkin et al., 2000). The measure includes a definition of recovery and provides 16 statements about recovery with items ranging from the role of family to the responsibility that a person with mental illness has in achieving recovery. Participants endorse each item on a five point Likert scale ranging from strongly agree to strongly disagree. An example of an item is, "Hope is an important part of the recovery process." There are two factors within the RAQ;

Factor 1 is “Recovery is possible and needs faith” and Factor 2 is “Recovery is difficult and differs among people”. Two additional items were included for this study specifically addressing the connection between recovery and employment. Scores for the RAQ and the addendum range from 1 to 5 with higher numbers indicating agreement. The scores on each item are summed and averaged within the appropriate factors to create the factor scores for each participant. Internal reliability for the RAQ as measured by Cronbach’s alpha ranges from .644 to .704 and the test-retest reliability is .674.

A brief demographic questionnaire collected data concerning participants’ age, gender, ethnicity, living situation, educational status, marital status, and primary diagnosis (See Appendix H). Participants also were asked if they felt they had a mental illness and if they felt they were recovering.

### Results

Cluster analysis was conducted using selected items from the employment interview. Items selected from the interview for this analysis included Lehman’s Employment Subscale (whether or not the participant is employed), Lehman’s Satisfaction with Work Subscale, Lehman’s Satisfaction with School Subscale, the mean of general questions about employment, the most and least appealing aspects of work, and several aspects about the most recent job held prior to their current job within the last ten years. Aspects about the most recent job, prior to the current job, included in the analysis are: the duties at the job, when the job ended, tenure at the job, age when the job ended, relationship with coworkers, satisfaction with pay, the best and worst aspects of the job, the reasons they left, if their mental illness interfered in the job and if so, how it interfered. (See Appendix J for a list of variables used in the analysis, how each was

scored and why each was included). The groups identified through the cluster analysis will be described using the clustering variables and other variables from the interview not used in the clustering solutions (e.g., RAQ subscales, premorbid scores and social support subscales).

A five-cluster solution was derived using a hierarchical agglomerative method. Specifically, the squared Euclidean distance metric was used to estimate similarity between cases in conjunction with Ward's method of linkage, which is designed to optimize the minimum variance within clusters. This analysis indicated that a five-cluster solution was most appropriate for this sample. For the five-cluster solution, the clusters were more evenly distributed than in the three, four or six cluster options. In the smaller cluster solutions, the bulk of the participants were placed into two clusters, which may have created interpretation problems if one of the smaller cluster solutions were chosen. Data within the two larger clusters may have been lost (i.e., there may have been clusters within the large clusters that would not have been analyzed). The six-cluster solution did not seem appropriate because, as the solution forced an increase in the number of clusters, it appeared that the division of the clusters no longer seemed meaningful. The five-cluster solution had clusters whose members were unemployed, employed, and in school and the number of participants in each cluster was more evenly distributed than any other solution.

A k-means procedure was then performed using quick cluster in SPSS, which allows the researcher to specify the number of clusters to be formed. The computer estimates an initial partition of the raw data and Euclidean distances are calculated between each case and the five cluster centroids. The cases are assigned to the nearest

centroid. New centroids are computed and distances are recalculated forcing some cases to a different cluster. This process is continued until the fifth pass through the data, at which point each case is assigned a permanent cluster. This method does not allow much overlapping of the clusters (Aldenderfer and Blashfield, 1984).

The five clusters are as follows: Cluster 1 (N = 12), characterized as the “Employed, in School, Positive Attitudes about Work” or ESPA Cluster. Cluster 2 (N = 35) is identified as the “Employed, Positive Attitudes about Work” or EPA cluster. Cluster 3 (N = 5) is identified as the “Unemployed, in School, Positive Attitudes about Work” or USPA cluster. Cluster 4 (N = 32) is characterized as the “Unemployed, Mixed Attitudes about Work” or UMA cluster. Finally, Cluster 5 (N = 15) is characterized as the “Unemployed, Negative Attitudes about Work” or UNA cluster. See Table 4 for means and standard deviations for some of the clustering variables (See Appendix J for descriptions of the variables used for clustering including the range of possible scores).

Table 4

*Cluster Characteristics*

Cluster	1 ESPA	2 EPA	3 USPA	4 UMA	5 UNA	Total Sample
N	12	35	5	32	15	99
Employed <sup>a</sup>	100.0	80.0	0.00	6.00	2.00	46.0
Satisfied job <sup>b</sup>	4.95 (0.98)	4.48 (2.19)	0.00 (0.00)	0.23 (0.89)	0.99 (2.04)	2.41 (2.67)
Satisfied school <sup>b</sup>	5.17 (1.27)	0.00 (0.00)	5.67 (0.47)	0.00 (0.00)	0.31 (1.20)	0.96 (2.09)
Mean general work questions <sup>b</sup>	4.30 (0.61)	4.20 (0.73)	4.04 (0.59)	3.86 (0.86)	2.88 (0.89)	3.90 (0.90)

*Note.* For scoring information for these variables, see Appendix J.

<sup>a</sup> Numbers reported are the percentage of cluster members who endorsed being employed.

<sup>b</sup> Numbers reported are the means and standard deviations for these instruments.

There are some notable similarities and differences in the work history responses (responses pertaining to the most recent job held prior to the current job) among the clusters with employed participants. Members of the ESPA Cluster endorsed people as being the worst part of their most recent job despite reporting that they got along “well” or “fine” with coworkers. Members of EPA Cluster also reported getting along “well” or “fine” with their coworkers, but in contrast to members of Cluster ESPA, they endorsed working with people as being the best part of their most recent job prior to their current job. In addition to this response, when asked about the most appealing aspect of working in general, members of this cluster most commonly reported that they liked working with people. Members of Cluster ESPA had a shorter tenure at the most recent job prior to their current job than did members of Cluster EPA who worked at their most recent job prior to their current job for 2 years. Members of both clusters were equally satisfied with their pay and members of both endorsed their mental illness as being one reason, among others, for leaving the job prior to their current job. Members of Cluster ESPA had difficulty with medication side effects while members of Cluster EPA had more difficulty with stress and anxiety.

The unemployed clusters also had differences and similarities. Members of Cluster USPA had not worked since 2000, while members of Cluster UMA had held a job that ended more recently. Members of both clusters held their most recent jobs for a short time, varying between 2 and 5 months. The members of Cluster USPA were between 40-49 years of age while members of all other clusters were between 30-39 during their most recent job. Members of each cluster most commonly reported having a job as being the best part about their most recent employment and members of Cluster

UMA also endorsed the people as being one of the best parts of the job. Physical problems were endorsed as one of the worst parts of the job for members of both clusters and members of Cluster USPA most commonly responded that working with people was the worst part of the job. Members of both clusters commonly reported getting along “well” or “okay” with coworkers. Members of neither cluster answered consistently about why they left and how their mental illness may have interfered with their employment.

The last unemployed cluster, Cluster UNA, is unique because its members had no work history over the last ten years and, not surprisingly, the members of this cluster had negative attitudes toward work. The members of this cluster also reported many aspects of work that were least appealing including interacting with others and not liking work or feeling it was boring. The most appealing aspect of work for members of Cluster UNA was the monetary component. Scores for each cluster of subjects on work history responses (responses pertaining to the most recent job held prior to the current job) are listed in Table 5. Because open-ended questions were coded into dichotomous variables, the most common response (s) are listed for each cluster (see Appendix J for complete coding descriptions).

The psychosocial factors associated with employment in past research were used as cluster validation variables. A multivariate analysis of variance (MANOVA) was conducted using the validation variables to determine if significant differences existed between the clusters on each of the psychosocial factors. Although each cluster scored differently on validating variables (i.e., social support subscales, premorbid status scores, and RAQ subscales), the overall multivariate effect for cluster membership was not

Table 5

*Work History Characteristics by Cluster*

Cluster	1 ESPA <sup>a</sup>	2 EPA <sup>b</sup>	3 USPA <sup>c</sup>	4 UMA <sup>d</sup>	5 UNA <sup>e</sup>
Duties at most recent job	Receptionist/ clerical; food service	Food service	Factory/ construction; food service	Food service; maintenance/ yard work	<b>No other job experience in last 10 years</b>
Job ended..	2001- present	99-2000	99-2000	2001-present	
Worked minimum of ...	6-11 month	2 years	2-5 months	2-5 months	
Age when job ended	thirty -39	thirty -39	forty-49	thirty -39	
Coworkers	good; OK	good; OK	good	OK; good	
Satisfied with pay? <sup>f</sup>	66.6	57.1	40.0	68.8	
Best part of job	money; having job/liking job	people	having job/ liking work	Having job/ liking job; people	
Worst part job	people	job duties/ atmosphere	people; physical probs	physical probs	
Why they left	mental illness; temp work/still there	got new job/looking; mental illness	Multiple answers	other	
Did Mental Illness interfere? <sup>f</sup>	66.6	45.7	60.0	56.3	
Describe how it interfered	side effect of meds	Stress/ overwhelmed	Multiple answers	Other; mood disorder	

*Note.* The most common work history response (s) for the most recent job are listed for each cluster (see Appendix J for complete coding descriptions).

- a. ESPA = Employed, in School, Positive attitudes About Work
- b. EPA = Employed, Positive Attitudes about Work
- c. USPA = Unemployed, in School, Positive Attitudes about Work
- d. UMA = Unemployed, Mixed Attitudes about Work
- e. UNA = Unemployed, Negative Attitudes about Work
- f. Scores listed are the percentage of "Yes" endorsements on these questions.

significant [ $F(28, 318.7) = 1.01, p = .46$ ]. See Table 6 for means and standard deviations of each cluster for each variable. It is notable that Cluster UMA and cluster UNA scored the lowest on RAQ factor 1 (recovery is possible and needs faith) and the RAQ addendum (statements directly linking the importance of recovery on employment and vice versa). These two clusters of unemployed participants also had the lowest scores among all clusters on general attitudes toward work and were not participating in any type of school program, in contrast to Cluster USPA, which is characterized by positive ideas about work and whose members were participating in a school program. Clusters ESPA, EPA and USPA all scored high on RAQ factor 1 and the RAQ addendum indicating favorable attitudes toward recovery and the effects of employment and recovery.

Table 6

*Means and standard deviations for validation variables*

Cluster	1 ESPA	2 EPA	3 USPA	4 UMA	5 UNA	Total Sample
Premorbid status	.72 (.54)	.88 (.51)	1.04 (.43)	.91 (.60)	.73 (.48)	.85 (.54)
Social support family	4.20 (2.10)	4.51 (1.26)	4.30 (2.06)	3.95 (1.82)	4.78 (1.23)	4.33 (1.61)
Social support friends	4.96 (1.34)	4.91 (1.20)	4.85 (1.79)	4.26 (1.58)	4.65 (1.53)	4.66 (1.43)
Social support sig other	5.17 (1.40)	5.29 (1.28)	4.90 (1.51)	4.80 (1.69)	5.38 (1.00)	5.11 (1.41)
RAQ factor1	4.35 (.41)	4.05 (.67)	4.50 (.39)	3.85 (.70)	3.88 (.67)	4.02 (.66)
RAQ factor2	4.75 (.35)	4.43 (.51)	4.73 (.28)	4.41 (.47)	4.44 (.51)	4.48 (.48)
RAQ addendum	4.21 (.72)	4.29 (.75)	4.50 (.50)	3.94 (.88)	3.63 (1.06)	4.08 (.86)

*Note.* For information on how these scores were formulated, please reference Appendix J.

## Discussion

The aim of this exploratory research was to describe the work histories and career patterns of people with serious mental illnesses in order to create a typology of

employment status based on these concepts. A dearth of literature exists about the actual work histories of persons with mental illnesses. Previous research using work history as a variable, have tended to vary the definition of work history. Operationalizing the work history variable and collecting in-depth information about work history was necessary to discover patterns of employment within this population. An aim of this research was to discover, through the use of cluster analysis, what categories of employment existed based on work history, attitudes toward work and current work status. Other psychosocial variables (i.e. recovery attitudes, social support, premorbid social status) were included to help describe the groups or clusters that emerged in the cluster analysis.

The results of this study indicate that 5 employment clusters exist within this sample. The 5 clusters include: Cluster 1 (N = 12), characterized as the “Employed, in School, Positive Attitudes about Work” or ESPA Cluster; Cluster 2 (N = 35), identified as the “Employed, Positive Attitudes about Work” or EPA cluster; Cluster 3 (N = 5), identified as the “Unemployed, in School, Positive Attitudes about Work” or USPA cluster; Cluster 4 (N = 32) identified as the “Unemployed, Mixed Attitudes about Work” or UMA cluster; and Cluster 5 (N = 15), characterized as the “Unemployed, Negative Attitudes about Work” or UNA cluster. No significant differences were evident between clusters on the psychosocial variables.

The existence of five clusters in this sample and the complexities of the work histories of the participants of this study demonstrate that more detailed information about work history must be considered in future research. A number of findings in this research are noteworthy. It appears that there may be multiple categories within the group of unemployed consumers. Specifically, it seems that some consumers have no real

desire to work and do not find any value in the pursuit of employment. The second interesting finding, evident in the unemployed clusters, is that meaningful activity is beneficial to consumers. In this sample, members of Cluster USPA were not working but they were participating in school. Their attitudes about employment were more positive than the members of other unemployed clusters as were their attitudes about recovery from mental illness.

It also appears that there are important differences within the employed clusters. In Cluster ESPA, the members tended to have more difficulty with interpersonal relationships than did members of Cluster EPA. Members of Cluster ESPA also had shorter job tenure at their most recent job (previous to their current job) than did those in Cluster EPA. These results, specifically, the differences on employment variables between clusters, imply that the concept of employment is a multifaceted construct and that work history is an integral part of the construct.

It is necessary to consider this research in the context of other research that focused on work histories in this population. To date, there has been little research on the role of work history patterns in employment outcomes for mental health consumers. It is important to fill in this gap because, in knowing work history patterns, it may be possible to discern what affect they have on employment outcomes. Baron and Salzer (2000) completed the most recent and important study on this topic. The researchers demonstrated (through the collection of complete, in-depth work history data) that consumers have held many jobs successfully, and have had substantial job tenure, but consumers have made little economic progress in the long-term. This may reflect a pattern of entry-level, low wage jobs of people with mental illness (Baron and Salzer,

2000). However, the Baron and Salzer (2000) research was based solely on consumers who were participating in supported employment programs with a focus on comparing this sample to the population at large, and the researchers also collected mainly qualitative information about work history.

The present study attempted to expand upon the findings of Baron and Salzer (2000) by including in the sample any consumer of mental health services (i.e., not just those involved with supported employment programs). Also, the current study collected quantitative and qualitative data; the later was coded in order to conduct quantitative analyses. Unfortunately, due to this coding process, and the subsequent loss of minute detail, the present findings are not directly comparable to those from Baron and Salzer (2000).

Keeping in mind these differences in sample, there are some notable similarities in the results of the current study and those reported by Baron and Salzer (2000). Both studies indicate that job tenure is substantial for a large number of consumers. In the Baron and Salzer research, job tenure averaged 14 months on one job (2000). In the current study, average job tenure differed by cluster and within the clusters whose members had employment in the last ten years: 40% held jobs for at least 2 years at their most recent job previous to their current job, 14% worked for 6-11 months at their most recent job previous to their current job, and 43% held jobs for a shorter tenure ranging from 2-5 months at their most recent job previous to their current job. Both studies also found that the majority of consumers rated relations between co-workers and employees positively. And in both studies, most of the jobs worked were low-wage, entry-level, unskilled or semiskilled jobs.

It is also worthwhile to compare this research to that of Botterbusch (2000). These two studies differ in focus, aim, and sample but one important similarity is notable. Some consumers of mental health services do not perceive work as a realistic goal. In the categories created in both studies, one cluster consisted of a group of consumers with no career or work history. In the Botterbusch (2000) study, members of this group had completed college but had no career beyond working in unskilled or semiskilled jobs. In the present study, people in Cluster UNA had no reported employment in the past ten years and they tended to express negative feelings toward work in general. Although members of the Botterbusch (2000) cluster had some work experience, they differed greatly from the remainder of the sample who had worked in jobs appropriate for their level of education. Similarly, people in Cluster UNA differed widely from members of the other clusters, because members of Cluster UNA made no real attempt to work within the past ten years. More research is needed concerning these groups of individuals to determine why they seem to have no affinity toward work and what, if any, employment interventions are needed to improve their employment status.

Significantly, the results of the present study add to this body of research by widening the sample to include in the pool any consumer rather than only consumers participating in employment programs. Previous research detailed work history and career patterns qualitatively (Baron and Salzer, 2000). While the current study also collected qualitative information about work history and career patterns, the qualitative information was coded so as to allow quantitative analysis. As a result, concise, measurable categories of employment were created based on the initial qualitative information about work history, employment patterns and current employment status.

This is significant because employment research, in general, has incorporated work history as an integral factor of employment but definitions of work history have varied widely and work history data have not been collected in a way that would permit us to determine how work history affects employment outcomes. It is hoped that the work history measures developed in the present study will be refined and emerge as a standardized tool for measuring and coding work history data. While replication and a more concise measure of work history are needed, this study is presented as a stepping-stone to that end.

Although this research contributed to the body of research on employment patterns, it is important to consider that this was an exploratory study, and has certain limitations. The sample was a convenience sample, and the data collected were self-report data. The method of analysis also has limitations. Cluster analysis is theoretically a structure-seeking procedure but is also in effect a structure-imposing procedure, meaning that groups or categories will be created even if it is not theoretically or practically suggested. Cluster analysis also has many different methods (e.g., Hierarchical Agglomerative or Iterative Partitioning methods). These different types of methods may produce different results from the same set of data, the methods are thought to be relatively simple algorithms used to create clusters, and each method has its own strengths and weaknesses.

The initial method chosen in this study (Hierarchical Agglomerative), was thought to be the most compatible with the nature of the desired classification, the variables used and the similarity measured used to estimate distance between cases (squared Euclidean distance with the Ward's method of linkage). This method of

analysis and linkage is thought to create equal size clusters but does tend to create overlapping clusters. In order to ensure that meaningful categories were created, and to minimize the overlap between clusters, an additional analysis was run using a different clustering method (Iterative Partitioning). This method produced clusters with less overlap than the previous method and the method allowed for more than one pass through the data, unlike the previous method, which can compensate for a poor partition of the initial data in the Hierarchical method. The drawback to the Iterative Partitioning method is that it is also a heuristic and is not based in a large body of statistical reasoning. Using both methods, the goal was to minimize the effects of each method's inherent limitations and the additional technique of attempting to validate the cluster solution was also employed to combat some of these limitations.

In attempting to validate the cluster solution, limitations became evident, and it is hard to assert with confidence that the clusters created from this sample are applicable to the total population of mental health consumers. This is obvious when the poor validation is considered. Only two validation variables, specifically, RAQ Factor 1 ("recovery is possible and requires faith") and the RAQ addendum (statements linking employment and recovery), differed significantly between clusters and the level of significance was at an alpha level of .10, a relatively weak standard of significance. The validation variables were chosen on a theoretical basis and research on each variable pointed to its importance for employment. Because the validation variables, chosen from a theoretical framework, were not significant, there is a possibility that the clusters created may have poor generalizability and may not be stable over time. This poses problems for external validity. Despite these findings, it is interesting to note that in

additional analyses, significant correlations were found between employment status, attitudes about employment and the two factors of the RAQ and the RAQ addendum (which are measures of recovery). No significant correlations were found between these aspects of employment and social support and premorbid status, suggesting that rather than the clusters having poor external validity, it is possible that these psychosocial variables are not as important for employment outcomes as previously suspected.

Although these limitations exist, multiple implications flow from this study. The current research has implications for employment research as well as mental health practices. The emergence of five clusters in this sample and the complexities of the work histories of the participants of this study demonstrate that more detailed information about work history must be collected and considered. The use of in depth work histories may uncover new phenomena. For example, in this study, social factors, (i.e., premorbid status and social support), were not significantly related to employment status, work history or the clusters created through the cluster analysis. It is possible that these factors are not as essential for employment outcomes as previous research suggested (e.g., Hammen et al., 2000; Mueser et al., 2001). It is necessary to ask how in-depth work history data may affect this and all areas of employment research. As previously mentioned, the creation of a concise form used to collect work history data will facilitate research in this area.

The concept of categorizing consumers into clusters based on employment status, ideas about employment and work history demonstrate that the way in which employment is currently conceptualized is insufficient. Too often, consumers are placed in one of two categories: employed vs. unemployed. The five clusters emerging from the

present data exemplify how complex the construct of employment is as well as the complex nature of consumers of mental health services. The clusters developed describe different employment patterns and experiences within the two larger categories of employment and unemployment. For example, three clusters of unemployed consumers were evident in this sample, each with different characteristics.

If the results of this study are replicated, interventions within the mental health field are warranted. For example, mental health professionals can utilize employment clusters to help conceptualize the consumers with whom they are working and to help assess the consumers' employment goals. For example, if a professional can identify a consumer as being a member of Cluster ESPA, they will know that this consumer may have some difficulty holding down a job for a substantial period of time and they may have trouble working with others. Using this information, the professional may help this consumer wisely choose a job in which their strengths will be utilized and their weaknesses will not interfere as much as they might in another setting. The professional can utilize information about a consumer's cluster membership and refer that person to an appropriate service. For example, in the case of Cluster ESPA, the professional may want to refer a client to group treatment that will enhance social skills. The knowledge gained by assessing each client and determining in which cluster they belong, may clarify what interventions will be most effective for their client.

Although limitations exist in this research, much information is gained from the focus and findings of this research, and implications about the direction of future research are evident. To expand upon this research, it is recommended that the work history form used in this study be consolidated in such a way that both researchers and mental health

professionals can easily use the form to efficiently collect information about work history. It is also necessary to collect information about the complete work histories of a larger sample of consumers of mental health services to determine the patterns that exist over a larger period of time than that considered in this study. Continued employment research with work history as the focus, is a necessary and important endeavor in future research. Specifically, investigating various categories that exist based on work history, work status and other employment variables, is worthwhile as so many practical implications are inherent in the results. The use of clusters in the field represents a practical way of conceptualizing clients, and interventions can be tailored to clients based on cluster membership in order to effectively and efficiently assist them in reaching their employment goals, if applicable.

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**Appendix A**

\*\*\*\*\*

Members of the UC Recovery Research Team are conducting a questionnaire study on employment and other aspects of people's lives.

*If you are a consumer of mental health services, you can:*

**GET PAID \$10 for**  
**1 hour of your time.**

A member of the Research Team will be available to answer your questions.

**You may call the researchers to learn more about the research project at 556-0895.**  
**If you decide you are interested, you may set up an interview.**

\*\*\*\*\*

## Appendix B

**Career Patterns Research Project  
University of Cincinnati  
Department of Psychology—  
Megan Harvey 556-0895**

**Informed Consent Form**

Before agreeing to participate in this study, it is important that the following explanation of the proposed procedures be read and understood. It describes the purpose, procedures, risks, and benefits of the study. It also describes the right to withdraw from the study at any time. It is important to understand that no guarantee or assurance can be made as to the results.

The goal of this study is to examine mental health consumers' work patterns and work histories and, in so doing, develop a comprehensive system of categorizing current work status. You are one of about 100 consumers participating in the study. The study will take you between 30 and 60 minutes. You will be asked to answer questions about your work history, your current work status and ideas about work. You will also be asked to answer questions about other topics such as social support and recovery from mental illness. The interviewer will record your responses. You will be paid \$10 for your participation. You can stop being a part of this study at any time.

What you tell the interviewer will be data for this study. Your answers will be used only for research and all answers are confidential. All questionnaires will be kept in a locked file cabinet. Code numbers will be used to identify them. Any information obtained linking you to your questionnaire, such as this consent form, will be stored separately. The cumulative results of this study will be published, but not names or personal information will be made public. Only the researcher and trained research assistants will have access to this information. This information will remain confidential unless you give written permission for its disclosure or if required by law. Questionnaires will be destroyed when the study is complete.

It is your choice whether to take part in this study. You have the right to say no. You have the right to stop **AT ANY TIME** without penalty. Likewise, the researcher may cancel this study at any time as well. You have the right to ask questions. Your taking part or not taking part in this study will make no difference to the treatment you are now getting at your agency.

Your participation in this study is not expected to make you feel uncomfortable. If any questions do make you feel discomfort, you do not have to answer them. If you find yourself upset by any of the questions, please let the interviewer know. The interviewer will stop the questioning and talk with you about how you feel. If you so desire, the interviewer will help you contact your case manager. However, you do not have to do

that if you do not want to. If you wish to stop participating, you may do so and you will be paid \$5 for your help in this study. There may be specific future benefits, which will result from your participation, including improved interventions for consumers trying to reach their employment goals. .

If you wish to voice a concern about the research, you may direct your questions to University of Cincinnati, West Campus Human Subjects Committee, Research and Advanced Studies, 773 Edwards One – ML 0627, Cincinnati, OH 45221-0627 or phone (513) 556-2875. If you have specific questions about the study you may contact Dr. John Steffen, faculty advisor, University of Cincinnati, Department of Psychology, ML – 376, Cincinnati, OH 45221-0376, or phone (513) 556-5571.

I, the undersigned, have read the above and understand the conditions outlined for participation in the described study. I hereby give consent to my voluntary participation in “Work history and career patterns of recipients of public sector mental health services.”

Name please print) \_\_\_\_\_  
Last First Middle Initial

\_\_\_\_\_  
Signature of Participant/Legal Representative

\_\_\_\_\_  
Date

\_\_\_\_\_  
Signature of Principal Investigator

\_\_\_\_\_  
Date

## Appendix B

## Consent Comprehension Form

Name of Participant: \_\_\_\_\_

Date: \_\_\_\_\_

**Directions:** Circle the best answer (true or false) for each question.

1. Once I start participating in this study, I cannot withdraw.

True      **False**

2. Records of this research are confidential and can only be disclosed with your written permission or if required by law.

**True**      False

3. It will take approximately 30-60 minutes to participate in this study.

**True**      False

4. I must answer all questions even if they make me uncomfortable.

True      **False**

5. If I stop participating before the study is finished, I will be paid \$5 for my time.

**True**      False

6. During this study, I will answer questions about my employment history, my current employment status, and some opinions I have about employment as well as other topics such as social support and recovery from serious mental illness.

**True**      False

\*This questionnaire will be administered after the consent form has been signed in order to ensure comprehension of consenting to participate.

\*If three or more questions are answered incorrectly, the person will be paid \$5 for their time and will be excused from the study. If the person answers at least three items correct, all incorrect items will be reviewed with the person. The researcher will explain each incorrect answer until the person fully understands the question. Upon full comprehension the study will proceed.

Appendix C  
**Research Protocol**

1. **Introduction**
  - Give the participant a brief introduction to the study
  - This is a study about employment and mental illness
  - We will be asking questions about the client's current employment, employment history, and general feelings about work as well as what their life was like before being diagnosed with a mental illness, social support, and recovery issues.
  
2. **Informed Consent**
  - Give participant copy of Informed Consent and tell them you are going to read it aloud as they follow along. Be sure to tell them that you will be asking some questions about the informed consent at the end to make sure they understood it, so they should listen carefully.
  - After you have read the entire Informed Consent, have the client print and sign their name and you should sign it where indicated.
  - Tell the client they can keep their copy of the Informed Consent for their own records and point out the contact phone number they can use should they have questions in the future.
  
3. **Consent Form Comprehension Questionnaire**
  - Read the directions and questions to the participant, marking their answer on the form.
  - The participant must get at least 3 questions correct to continue with the study.
  - If the participant gets fewer than 3 questions correct, please advise them they are not eligible for this study, pay them \$5, have them sign a receipt, and dismiss them.
  - If the participant gets all the questions correct, proceed to the next step.
  - If the participant gets between 3 and 5 questions correct, go over the questions they missed and explain the correct answers until the participant appears to understand. Once the participant understands, proceed to the next step.
  - If the participant still does not understand after explanation, please advise them they are not eligible for the study, pay them \$5, have them sign a receipt, and dismiss them.
  
4. **Measures**
  - The three parts of the employment portion of the questionnaire will be administered first as this is the focus of the study.
  - The remaining measures will be given to the client in random order. I will randomize the measures before they are put into the folder. So, simply proceed to give the measures in the order they appear in the folder.

- For all of the measures, you will read the instructions to the client and then read each of the items aloud. You will mark down the client's responses on the form. This controls for reading differences.
- Please encourage the client to answer ALL of the questions.
- Portions of the Lehman Scale, and the General questions about work form, as well as the entirety of the Recovery Attitudes Questionnaire and the Multidimensional Scale of Perceived Social Support are in Likert scale format. For those measures, a scale is provided to remind the client of the option choices. These scales are located in your binder and should be shown to the client as you read each measure.
  
- **The Lehman Quality of Life interview (employment and school)**
  - Deals with current work status and school status.
  - Read each question aloud along with the various answer choices and record the answers.
  - Follow the directions regarding skipping questions etc.
  - For question 17, use the Terrible-Delighted scale included in your folder and let the participant see this scale to answer the question.
  
- **General questions about work**
  - Show Likert scale (marked "general and RAQ" in bottom right corner)
  - Ranges from strongly Agree to strongly disagree for questions 1-5.
  - For the open-ended questions, write down the highlights of the person's answers. Try and capture the main point of their answer.
  - For question 4, read the question and the answers.
  
- **Work History Form**
  - Read the instructions aloud to the participant.
  - Record the important points of the person's answers.
  - Only take their work history for the last 10 years.
  - Be sure and complete the last portion of this form dealing with their first job even if they have not worked any jobs in the last 10 years.
  - If they have more jobs than you have space on your form, use the extra forms in the back of the participant folder.
  
- **Multidimensional Scale of Perceived Social Support (MSPSS)**
  - Show Likert scale (marked MSPSS on bottom right corner)
  - Ranges from "Very Strongly Disagree" to "Very Strongly Agree"
  
- **Zigler-Phillips Social Competence Scale**
  - Follow directions in bold for each question.
  - Read each question aloud and record appropriate answer.

- **Recovery Attitudes Questionnaire (RAQ)**
  - Show Likert scale (marked general and RAQ)
  - Ranges from strongly agree to strongly disagree
  - Read questions aloud and let participant see the scale provided.

**5. Demographic Questionnaire**

- Read all questions on the Demographic Questionnaire aloud to the client and fill out the form for them. This is to control for reading differences.

**6. Participant List**

- After you are done with all of the above measures, ask the client if he or she wishes to be contacted for similar studies in the future. If so, read the Participant List form aloud to them and have them sign and provide the contact information requested.

**7. Compensation**

- After completion of the study, give the client \$10 as compensation for their participation. The money is in the white envelope clipped to the outside of the file folder.

- Be sure to have the client sign a **receipt** for the money as this is what determines

my grant reimbursement. The receipt is also in the white envelope clipped to the outside of the file folder. The pertinent information to be filled out is as follows:

- **Date:** Enter the appropriate date
- **Received From:** Employment Study
- **\$10.00**
- **For:** Research Participation
- **Cash**
- **By:** Have client sign on this line

- If the client requests a receipt, give him/her the pink copy. Put the white and yellow copies back in the envelope and attach them back to the file folder.

**8. Thank You**

Thank the client for his or her participation and then they may leave.

Appendix D  
**Work History Form**

**Introduction:**

Over the next hour or so, I am going to ask you some questions about your work experiences. We will be talking about your past experiences with work including your first job. We will also be discussing your current work experience. There will be opportunities for you to tell me your opinions about certain aspects of work as well.

After we are finished discussing work, we will complete a few surveys focusing on other topics. We will discuss your life before you were diagnosed with a mental illness, your current social support system, and your ideas about recovery from mental illness.

Do you have any questions before we get started? OK, if you are ready, let's begin.

The following questions focus on your current experiences with work. **(Administer the Lehman's scale.)**

1. During a usual week, what do you do most of the time?

Work at a job for pay (Go to Q. 3)	1
Go to a structured day program	2
Go to school	3
Do volunteer work	4
Keep house	5
Nothing much (e.g. drink coffee, smoke cigarettes, watch TV)	6
Something else (Specify Below)	7
_____	
Missing	9

2. Are you currently working in a job for pay?

No (Go to Q. 11)	0
Yes	1
Missing	9

3. I'd like to know about the job you have now. What kind of business or industry do you work in? **(IF MORE THAN ONE JOB, USE THE JOB AT WHICH THE PERSON EARNS THE HIGHER WEEKLY SALARY)**

(Describe below)

**A. What kind of work do you do?**

\_\_\_\_\_

**B. What are your most important activities or duties?**

\_\_\_\_\_

4. How long have you been working at this job (also specify if it is continuous or intermittent)?

# of months..... \_\_\_\_\_

Less than one month \_\_\_\_\_ 995

Less than one week \_\_\_\_\_ 996

Missing \_\_\_\_\_ 999

5. Is this job in a sheltered workshop?

No \_\_\_\_\_ 0

Yes \_\_\_\_\_ 1

Missing \_\_\_\_\_ 9

6. Do you have a special supervisor or a job coach

No \_\_\_\_\_ 0

Yes \_\_\_\_\_ 1

Missing \_\_\_\_\_ 9

7. Is this a job you can keep as long as you wish?

No \_\_\_\_\_ 0

Yes (Go to Q. 9) \_\_\_\_\_ 1

Missing \_\_\_\_\_ 9

8. Is this a job that ends after a certain period of time when you are expected to find another job at another place of work?

No \_\_\_\_\_ 0

Yes \_\_\_\_\_ 1

Missing \_\_\_\_\_ 9

9. How many hours a week do you usually work?

# of hours (SPECIFY)..... \_\_\_\_\_

Missing \_\_\_\_\_ 999

10. How much do you earn per hour/week at this job? (CHOOSE ONE)

\$ per hour..... \_\_\_\_\_

\$ per week..... \_\_\_\_\_

**(SKIP TO Q. 17)**

11. Have you ever worked in the past year?

No \_\_\_\_\_ 0  
 Yes \_\_\_\_\_ 1  
 Missing \_\_\_\_\_ 9

12. How long has it been since you had a job for pay?

# of years..... \_\_\_\_\_  
 Less than a year \_\_\_\_\_ 01  
 Missing \_\_\_\_\_ 99

13. What do you think is the main reason that you don't have a steady job right now?

Psychiatric reasons \_\_\_\_\_ 1  
 Physical problems \_\_\_\_\_ 2  
 Laid off \_\_\_\_\_ 3  
 Looking/can't find a job \_\_\_\_\_ 4  
 Other reason \_\_\_\_\_ 5  
 Missing \_\_\_\_\_ 9

14. Are you looking for work right now?

No (GO TO Q 18) \_\_\_\_\_ 0  
 Yes, full-time \_\_\_\_\_ 1  
 Yes, part-time \_\_\_\_\_ 2  
 Yes, casual \_\_\_\_\_ 3  
 Missing (GO TO Q 18) \_\_\_\_\_ 9

15. How long have you been looking?

< 1 month	_____	0
1-3 months	_____	1
4-6 months	_____	2
7-11 months	_____	3
1-5 years	_____	4
6-10 years	_____	5
>10 years	_____	6
Missing (GO TO Q 18)	_____	9

16. During the past year have you either:

A. Filled out an application for a job?

No	_____	0
Yes	_____	1
Missing	_____	9

B. Interviewed for a job?

No	_____	0
Yes	_____	1
Missing	_____	9

(SKIP TO Q 18)

17. JOB SATISFACTION (SKIP IF UNEMPLOYED):

Use the following scale:

- 1) Terrible
- 2) Unhappy
- 3) Mostly Dissatisfied
- 4) Mixed (about equally satisfied and dissatisfied)
- 5) Mostly Satisfied
- 6) Pleased
- 7) Delighted

How do you feel about:

Your job?.....

The people you work with?.....

What it is like where you work (the physical surroundings)...

The number of hours you work?.....

The amount you get paid?.....

The next few questions are about your current experiences in school:

18. Have you been a student during the past year?

No (GO TO NEXT SECTION ) \_\_\_\_\_ 0

Yes \_\_\_\_\_ 1

Missing (GO TO NEXT SECTION) \_\_\_\_\_ 9

19. At what level was the schooling?

High school (grades 9-12, including GED) \_\_\_\_\_ 1

Adult Education \_\_\_\_\_ 2

College (Undergraduate) \_\_\_\_\_ 3

Graduate School \_\_\_\_\_ 4

Vocational/technical school \_\_\_\_\_ 5

Job training \_\_\_\_\_ 6

Other (Specify Below) \_\_\_\_\_ 7

20. Did you carry a full-time load of studies?

No \_\_\_\_\_ 0

Yes \_\_\_\_\_ 1

Missing \_\_\_\_\_ 9

21. Are you attending now?

No \_\_\_\_\_ 0

Yes \_\_\_\_\_ 1

Missing \_\_\_\_\_ 9

22. Using the Delighted-Terrible scale again, how do you feel about:

**Being a student.....**

**Your school?.....**

**The other students at your school?.....**

- 1) Terrible
- 2) Unhappy
- 3) Mostly Dissatisfied
- 4) Mixed (about equally satisfied and dissatisfied)
- 5) Mostly Satisfied
- 6) Pleased
- 7) Delighted

**General questions about work**

**Now I would like to get your opinions about some general ideas about work not specific to a certain time in your life:**

1. All things considered, having a job right now helps me or would help me to feel better about myself

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree

2. I feel that having a job is desirable.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree

3. All things considered, I do not feel that I need a job right now to get by

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree

4. Financially, it is necessary for me to have a job right now.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree

5. Having a job helps me or would help me live my life more comfortably.

Strongly Agree      Agree      Neutral      Disagree      Strongly Disagree

**Open-ended questions:**

1. When you think about work, what is the least appealing thing about it for you?

---



---

2. When you think about work, what is the most appealing thing about it for you?

---



---

3. If you are not currently looking for work, what keeps you from looking for work?

---



---

4. Do you receive some type of benefit such as SSI or SSDI as your primary source of income?

Yes No

4A. If yes, are you afraid that you will lose your benefits if you would get a job or increase your hours at your current job?

Yes No

Work History Form

Let's go over your history of work, starting with the **most recent** job you had or the **job previous to your current job**. Please tell me as much about these questions as you can remember. Are you ready?

Type of business or industry (**general info**) \_\_\_\_\_

\_\_\_\_\_

What were your duties? \_\_\_\_\_

\_\_\_\_\_

Around when did you work there? (**Get Dates or Approximations**)

\_\_\_\_\_

How old were you when you worked there?

\_\_\_\_\_

For about how long did you work there? (**Specify years, months or days**)

\_\_\_\_\_

If you can recall, how did you get along with your coworkers and your boss?

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Were you satisfied with the amount of pay you received at that job? Yes No DK

What was the best part about that job?\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

What was the worst part about that job? \_\_\_\_\_

\_\_\_\_\_

Why did you leave? \_\_\_\_\_

---

---

Did your mental illness interfere with your job (i.e. work ability, work relationships etc)

If yes, please describe \_\_\_\_\_

---

---

How about the job before that (If they have not had anymore jobs, just write N/A in the first line)?

Type of business or industry \_\_\_\_\_

What were your duties? \_\_\_\_\_

Around when did you work there? (**Get Dates or Approximations**)

How old were you when you worked there?

For about how long did you work there? (**Specify years, months or days**)

If you can recall, how did you get along with your coworkers and your boss?

---

---

---

Were you satisfied with the amount of pay you received at that job? Yes No DK

What was the best part about that job? \_\_\_\_\_

---

---

---

What was the worst part about that job? \_\_\_\_\_

Why did you leave? \_\_\_\_\_

---

---

Did your mental illness interfere with your job (i.e. work ability, work relationships etc)

If yes, please describe \_\_\_\_\_

---

---

**Repeat until all data is collected (extra forms provided)**

**Let's talk about the first job you held.**

Type of business or industry \_\_\_\_\_

What were your duties? \_\_\_\_\_

Around when did you work there? **(Get Dates or Approximations)**

How old were you when you worked there?

For about how long did you work there? **(Specify years, months or days)**

If you can recall, how did you get along with your coworkers and your boss?

---

---

---

---

Were you satisfied with the amount of pay you received at that job? Yes No DK

What was the best part about that job?

---

---

What was the worst part about that job? \_\_\_\_\_

---

---

Why did you leave? \_\_\_\_\_

---

---

Did your mental illness interfere with your job (i.e. work ability, work relationships etc)

If yes, please describe \_\_\_\_\_

---

---

**Were you diagnosed with a mental illness before you had your first job?**

**Yes No DK**

If yes, did your mental illness interfere with your job (i.e. work ability, work relationships)

Yes No DK

If yes, please describe:

---

---

---

Appendix E  
Zigler-Phillips Social Competence Scale

1. What was your age when you were diagnosed with a mental illness for the first time? **(Record actual age but do not circle a category)** \_\_\_\_\_
- 0) 18 Years or below
  - 1) 19-24 years old
  - 2) 25-44 years old,
  - 3) 45 years and above

Scores

- 0) 24 years or below;
- 1) 25-44 years old,
- 2) 45 years and above

2. How much school had you completed before you were diagnosed with a mental illness? **(Record actual answer but do not circle a category)**

- \_\_\_\_\_
- 0) None or some grades, including ungraded or special classes
  - 1) Finished eighth grade,
  - 2) Some high school,
  - 3) Finished high school
  - 4) Completed some college but did not graduate
  - 5) Graduated college
  - 6) Post-graduate work

Scores

- 0) None or some grades, including ungraded or special classes
- 1) Finished eighth grade, some high school, or finished high school
- 2) 1 year of college or more

3. What was your martial status prior to and/or at the time of your first break?  
**(Record actual answer but do not circle a category.)**  
**(If they report "single", ask if they had ever been married prior to the time of the break. If they report "married", ask if this is their only continuous marriage.)**

- \_\_\_\_\_
- 0) Single
  - 1) Separated, divorced, remarried, or widowed
  - 2) Single continuous marriage

Scores

- 0) Single
- 1) Separated, divorced, remarried, or widowed
- 2) Single continuous marriage

4. What was your occupation at the time you were diagnosed with a mental illness?  
**(Record response but do not circle any option listed below)**

---

---

- 0) Unskilled or semiskilled
- 1) Skilled and service
- 2) Clerical and sales or professional and managerial

Scores

- 0) Unskilled or semiskilled
- 1) Skilled and service
- 2) Clerical and sales or professional and managerial

5. Thinking about the time before you were diagnosed with a mental illness, what would best describe your work experience?

- 0) I never had a job
- 1) I worked summer jobs or had temporary jobs
- 2) I worked part-time
- 3) I worked full-time (over 30 hours per week)

Scores

- 0) Usually unemployed
- 1) Seasonal. Fluctuation, frequent shifts, or part-time employment
- 2) Regularly employed

Appendix F  
**Multidimensional Scale of Perceived Social Support**

We are interested in your opinions about the amount of support you receive from people in your life. **Please read each of the following statements and using the scale given circle the rating that most closely matches your opinion.**

1. There is a special person who is around when I am in need.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

2. There is a special person with whom I can share my joys and sorrows.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

3. My family really tries to help me.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

4. I get the emotional help and support I need from my family.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

5. I have a special person who is a real source of comfort to me.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

6. My friends really try to help me.

1	2	3	4	5	6	7

very strongly disagree    strongly disagree    disagree    neutral    agree    strongly agree    very strongly agree

7. I can count on my friends when things go wrong.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

8. I can talk about my problems with my family.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

9. I have friends with whom I can share my joys and sorrows.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

10. There is a special person in my life who cares about my feelings.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

11. My family is willing to help me make decisions.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

12. I can talk about my problems with my friends.

1	2	3	4	5	6	7
very strongly disagree	strongly disagree	disagree	neutral	agree	strongly agree	very strongly agree

Appendix G  
**RECOVERY ATTITUDES QUESTIONNAIRE (RAQ-16)**

Recovery is a process and experience that we all share. People face the challenge of recovery when they experience the crises of life, such as the death of a loved one, divorce, physical disabilities, and serious mental illnesses. Successful recovery does not change the fact that the experience has occurred, that the effects are still present, and that one's life has changed forever. Rather, successful recovery means that the person has changed, and that the meaning of these events to the person has also changed. They are no longer the primary focus of the person's life (Anthony, 1993).

We are interested in measuring your beliefs about the concept of recovery from mental illnesses. Please read each of the following statements and using the scale below mark the rating that most closely matches your opinion.

	SA	A	N	D	SD
	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
1. People who are in recovery need the support of others. . . . .	SA	A	N	D	SD
2. Recovering from mental illness is possible no matter what you think may cause it. . . . .	SA	A	N	D	SD
3. A good understanding of one's mental illness helps in recovery.	SA	A	N	D	SD
4. To recover requires faith. . . . .	SA	A	N	D	SD
5. Recovery can occur even if symptoms of mental illness are present. . . . .	SA	A	N	D	SD
6. People in recovery sometimes have set backs. . . . .	SA	A	N	D	SD
7. People differ in the way they recover from a mental illness. . . . .	SA	A	N	D	SD
8. Recovering from mental illness can occur without help from mental health professionals. . . . .	SA	A	N	D	SD
9. All people with serious mental illnesses can strive for recovery. . . . .	SA	A	N	D	SD
10. People who recover from mental illness were not really mentally ill in the first place. . . . .	SA	A	N	D	SD
11. The recovery process requires hope. . . . .	SA	A	N	D	SD
12. Recovery does not mean going back to the way things used to be. . . . .	SA	A	N	D	SD
13. Stigma associated with mental illness can slow down the recovery process. . . . .	SA	A	N	D	SD
14. Recovering from the consequences of mental illness is sometimes more difficult than recovering from the illness itself. . . . .	SA	A	N	D	SD
15. The family may need to recover from the impact of a loved one's mental illness. . . . .	SA	A	N	D	SD
16. To recover requires courage. . . . .	SA	A	N	D	SD

Appendix H  
**Demographic Questionnaire**  
All questions are optional.

1. How old are you? \_\_\_\_\_
2. What is your race/ethnic background?
  - \_\_\_ Caucasian/white
  - \_\_\_ African American/Black
  - \_\_\_ Asian
  - \_\_\_ Pacific Islander
  - \_\_\_ Hispanic, Latin American
  - \_\_\_ Native American
  - \_\_\_ Other
3. What is your marital status?
  - \_\_\_ Single/Never married
  - \_\_\_ Married
  - \_\_\_ Widow/widower
  - \_\_\_ Divorced/separated
4. Do you have a significant other to whom you are not legally married?
  - \_\_\_ Yes
  - \_\_\_ No
5. What is your current living situation?
  - \_\_\_ In own house/apartment
  - \_\_\_ Supervised Group home
  - \_\_\_ Rest home/nursing facility
  - \_\_\_ Respite care
  - \_\_\_ Friend's home
  - \_\_\_ Relative's home
  - \_\_\_ Crisis housing
  - \_\_\_ Homeless
  - \_\_\_ Other
6. What was the last school grade you completed?
  - \_\_\_ Less than 5<sup>th</sup> grade
  - \_\_\_ 6<sup>th</sup> grade    \_\_\_ 7<sup>th</sup> grade
  - \_\_\_ 8<sup>th</sup> grade    \_\_\_ 9<sup>th</sup> grade
  - \_\_\_ 10<sup>th</sup> grade    \_\_\_ 11<sup>th</sup> grade
  - \_\_\_ high school diploma/GED
  - \_\_\_ some college
  - \_\_\_ college degree
  - \_\_\_ grad work    \_\_\_ grad degree
  - \_\_\_ technical school
7. What is your primary psychiatric diagnosis?  
 \_\_\_\_\_
8. Do you consider yourself to have a mental illness?
  - \_\_\_ Yes        \_\_\_ No
9. Do you consider yourself to be recovering?
  - \_\_\_ Yes        \_\_\_ No
10. Note gender, as observed.
  - \_\_\_ F        \_\_\_ M

Appendix I  
Code for thesis data:

For true/false; yes/no categories: 1=true/yes 2=false/no

**Most appealing**

1. Money/getting paid or compensated/payday
2. Having something to do/working/being active/staying busy/getting out of the house
3. Being productive/returning to mainstream/doing something positive/sense of accomplishment/sense of self-worth or self-esteem/being useful/feeling needed
4. Feeling appreciated/doing a good job/getting complimented at work
5. Being with people/meeting new people/interacting with others/helping others
6. other

**Least appealing**

1. Getting up/getting ready for work/getting to work (transportation)
2. Pay/ time at work/schedule/waiting to get off/balancing time at work and home/going to work everyday
3. Interactions with people (customers, coworkers, boss)
4. Mental illness issues/concentration problems
5. Duties at work/boredom/not challenging or fun/atmosphere/surroundings/physical problems
6. Stress/not doing job well/getting fired
7. Nothing
8. Other

**Why you are not looking**

1. Have a job/currently looking
2. Financial concerns/insurance reasons/"disability"/pay issues
3. .Mental Illness/symptoms/medication side effects
4. Physical health
5. Doubtful of abilities/concerns about preparedness/fear of rejection/fear of success/fear of change/lack of self confidence
6. Don't need to work/don't want to work/don't work/doubtful of job market
7. transportation/housing/business issues

**History type:**

1. Food service/restaurant
2. Factory work/temporary agency or work Maintenance/cleaning/janitorial work/labor/construction
3. Hospital/medical office work/nursing home
4. Consumer-run agencies (consumer network; recovery initiative, bridges, CRI, hube, QCM, CORE)

5. Sales work/ retail stores (Kroger, bookstores)/ clerical companies or work
6. Other

**Duties:**

- 1 = Packaging/assembly/factory line work/construction
- 2 = Food service (food prep, cleaning/busing tables)/food delivery/grocery/ cleaning restaurant/ serving; dishwasher; delivery
- 3 = Janitorial/cleaning/maintenance / yard work
- 4 = Care of others (talk-lines, nurse's aid, hand's on care)/ education/ security/ life guard
- 5 = Cashier/sales; customer service
- 6 = Receptionist/clerical
- 7 = Other

**When (job ended in....)**

- 1 = 2001-02 to present
- 2 = 1999-2000
- 3 = 97-98
- 4 = 95-96
- 5 = 92-94
- 6 = can't determine/ don't know/ before 92

**Length (worked a minimum of.....) round down**

1. 1-14days
2. 15 days –2months; few/couple months
3. 3-5 months; several months
4. 6-11 months
5. 1 year
6. 2 years
7. 3-5 years
8. greater than 5 years
9. on and off/summers

**Age (when job ended or age as listed)**

1. 18 and under
2. 19-29
3. 30-39
4. 40-49
5. 50-59
6. 60 and up
7. no ideas/ can't determine

**Coworkers (how well they got along with coworkers and boss)**

1. Great; wonderful; excellent
2. Good/pretty good/very well/very good
3. OK; alright; fine; fair; decent; "got along", so-so
4. Problems with boss; problems with boss but not coworkers
5. Not good; problems with boss and coworkers
6. Problems with coworker(s)
7. Other
- 8.

**Best (best part of job)**

1. Money/pay
2. Food; free food and snacks
3. Being own boss; working at own pace; working alone
4. Having a job; liking the work; challenging; interesting; having responsibility; liking the atmosphere; energetic work
5. Interacting with people; helping people; liking coworkers
6. The schedule; the weekend/time-off; getting overtime; getting breaks
7. Helping with symptoms; learning about self
8. Other

**Worst (worst part of job)**

1. Going to work; working; boring work; bad hours; no breaks
2. Dissatisfied with job duties; poor atmosphere (heat etc); dirty/messy work (cleaning bathrooms, pipes etc); hard work
3. Physical problems; exhaustion; physical labor; threat of physical harm to self or others
4. Fast-paced; over-demanding; stressful
5. Problems with people at work (boss, co-workers, customers)
6. Pay/waiting for pay
7. Nothing/none
8. Other

**Leave (why they left)**

1. Temporary work; still working there; job complete
2. Mental illness (anxiety, concentration, depression, medications etc)
3. Fired; asked to leave; laid off; business went bankrupt
4. Physical/medical problems; didn't feel good
5. Money was bad; quit; didn't like job; interpersonal probs at work; tired of it; couldn't do it
6. Got new job; looking for new job
7. Other

**Describe (how mental illness interfered)**

1. Side effect so medications; medications
2. Anxiety; stress; being overwhelmed
3. Mood disorder (depression, bipolar)
4. Concentration problems; trouble focusing
5. Hospitalization
6. Thought disorder (paranoia, hearing voices, schizophrenia; reality problems; delusional)
7. Other

## Appendix J

## Variables Included in the Cluster Analysis

## Variables:

Note: Each variable included in the analysis was scored for each individual. The software computed the means of each variable within a cluster when the analysis was performed

## 1. Lehman employment subscale

- ❖ Question 2 from the work history form (See Appendix D)
- ❖ Scoring: 1 = currently employed  
0 = currently unemployed
- ❖ Reason included: gives information about current employment status

## 2. Lehman's satisfaction with work subscale

- ❖ Question 17 from the work history form (see Appendix D)
- ❖ Scoring: the mean score (ranging from 1 to 7) from the five items within the question.
  - 7 = delighted with all aspects of the job
  - 1 = feeling terrible about all aspects of the job
- ❖ Reason included: this subjective scale is from Lehman's full Quality of Life Interview and is an indicator of overall satisfaction with a job for those who are employed

## 3. Lehman's satisfaction with school subscale

- ❖ Question 22 from the work history form (see Appendix D)
- ❖ Scoring: the mean score (ranging from 1 to 7) from the three items within the question.
  - 7 = delighted with all aspects of the job
  - 1 = feeling terrible about all aspects of the job
- ❖ Reason included: this subjective scale is from Lehman's full Quality of Life Interview and is an indicator of participation in school and the overall satisfaction with school for those who are participating in this activity.

## 4. The mean of the general questions about employment

- ❖ Questions 1-5 from the "General questions about work" section of the work history form (see Appendix D)
- ❖ Scoring: the mean score (ranging from 1-5) from the five questions.
  - Mean of 5 indicates positive endorsement of ideas about work in general

- Mean of 1 indicates negative endorsement of ideas about work
- For questions 1,2,4,5, “strongly disagree” is scored as a five and “strongly disagree” is scored as a one.
- For question 3, the responses are scored in the opposite manner
- ❖ Reason included: the mean indicates a participant’s attitudes about the general concept of work

#### 5. The most and least appealing aspects of working in general

- ❖ Open-ended questions 1 and 2 from the “general questions about work” section of the work history form (see Appendix D)
- ❖ Scoring:
  - Each open-ended response was coded using the coding system detailed in Appendix I;
  - Each coding option for these variables was considered its own variable and each coding option variable was dummy coded with the score of 1 indicating endorsement of that coding option and a score of 0 indicated no endorsement of that coding option.
  - All of these new coding option variables were included in the analysis. For each coding option variable, a mean was computed within each cluster. These means ranged from 0 to 1 with the 0 indicating that no member of that cluster endorsed that coding option and 1 indicated that each member of that cluster endorsed that coding option.
  - When the results of the analysis were described, the coding option variables with the highest means were listed as that cluster’s most popular response(s) to the question.
  - This method of scoring and describing applies to all open-ended variables including the variables describing the job held prior to the participant’s current job (the job detailed in the work history form)
- ❖ Reason included: indicates aspects of work in general that are or are not appealing. These variables are important as they may indicate reasons why a participant may or may not be working

#### 6. Aspects about the most recent job held prior to their current job (includes the duties at the job, when the job ended, tenure at the job, age with the job ended, relationship with coworkers, the best and worst aspects of the job, the reasons they left, how mental illness interfered with the job)

- ❖ These open-ended questions are included in the portion of the work history form (see Appendix D) that details aspects of the most recent job held prior to a participant’s current job.
- ❖ Scoring:
  - Each open-ended response was coded using the coding system detailed in Appendix I;
  - Each coding option for these variables was considered its own variable and each coding option variable was dummy coded with the score of 1

indicating endorsement of that coding option and a score of 0 indicated no endorsement of that coding option.

- All of these new coding option variables were included in the analysis. For each coding option variable, a mean was computed within each cluster. These means ranged from 0 to 1 with the 0 indicating that no member of that cluster endorsed that coding option and 1 indicated that each member of that cluster endorsed that coding option.
- When the results of the analysis were described, the coding option variables with the highest means were listed as that cluster's most popular response(s) to the question.
- ❖ Reason included: these variables provide information about many aspects of the job under consideration. The final analysis showed differences between clusters on these variables indicating that each variable is an important aspect of the construct of work history.

7. Aspects about the most recent job held prior to their current job (includes satisfaction with pay and the endorsement of the interference of mental illness in the job)

- ❖ These questions are included in the portion of the work history form (see Appendix D) that details aspects of the most recent job held prior to a participant's current job.
- ❖ Scoring: Participants were forced to choose between two options:
  - 1 = yes (endorsing satisfaction; endorsing mental illness interference)
  - 2 = no (denying pay satisfaction; denying mental illness interference)