An Analysis on Occupational Attainment Process for People with Psychiatric Disabilities

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Abstract
The purpose of this research was to investigate the occupational attainment process of a sample of psychiatrically disabled individuals who have been active members of the labor force for most of their adult lives. For the purposes, this study examines a rarely studied cohort of persons with psychiatric disability in the labor market. Specifically, this study examined whether the status attainment process, namely family of origin's influence and early educational attainment, decays less for those with mental health problems than for those without disabilities? The major finding of this study is the status attainment process is proceeding in a similar way between person with psychiatric disabilities and person without psychiatric disabilities. The results of the study dispute some biases and prejudices with regard to people with psychiatric disabilities. Specifically, the results show that many people with substantial psychiatric problem in the labor force have the similar process with regards to their occupational attainment process and social mobility process.

Keywords: Occupational Attainment Process, Psychiatric Disabilities, Vocational Rehabilitation

1. Introduction
A significant proportion of the workforce (up to 20%) is reported to experience disabilities, most notably, emotional problems\textsuperscript{12}. These emotional problems are often attributed to work-related stress and working conditions that exacerbate pre-existing vulnerabilities or diagnoses\textsuperscript{28}.

Workers with work-related stress illness and/or pre-existing psychiatric diagnoses are rarely if ever included in disability research, and it is unclear to what extent they are counted in census data that records the number of persons with disabilities participating in the labor force. Therefore, there is convincing evidence to believe that the work capacities of people with disabilities may be considerably misjudged. The unintended outcome of under-estimated people with disabilities in the workforce is to promote the belief in society that most individuals with disabilities do not work or are considerably work capacity impaired\textsuperscript{29}.

The perception that most individuals with disabilities are not capable of working contributes to employer and workplace discrimination and makes it difficult for individuals with disabilities, in particular emotional disabilities, to seek employment, disclose their illness to employers, and seek help within the workplace\textsuperscript{19,20}. A larger sampling of individuals with psychiatric disability in the labor force could help change existing undesirable perceptions about the occupational attainment and capabilities of persons with psychiatric disabilities.

Unlike previous study, this research investigates social mobility process of psychiatrically disabled adults who have been vigorous members of the labor force\textsuperscript{3}. The peoples selected for this research consists of persons experiencing a recent job separation that led them to join in the State Unemployment Service's One-Stop Career Center. A larger sampling of individuals with psychiatric disability in the labor force would help change existing...
undesirable perceptions about social mobility of people with psychiatric disabilities.

2. Review of Theoretical Literature

2.1 Status Attainment Theory
The theoretical and practical work for understanding and evaluating the status attainment process was embodied in the influential research reported by Blau and Duncan
16. They suggested a seminal model of the occupational status attainment of American male adults. It consists of two antecedent structural variables, father’s education and father’s occupation; two intervening variables, the individuals’ education and first job; and the dependent variable, the individuals’ occupational level. For a national sample, their model accounted for 26% of the variance in an individual’s education, 33% of the variance in first job, and 43% of the variance in recent occupational status. The most essential finding from that study is that occupational attainment is most fully affected by educational attainment, and the major effects of SES and ability on occupational attainment are mediated through educational attainment
16.

The most influential work on the status attainment process, which explains the degree of intergenerational stability of social position, has been accomplished by the “Wisconsin model”
25,26. Beginning with a principal demographic model of intergenerational mobility taken from the Blau and Duncan work, the Wisconsin model adds social-psychological variables to help explicate the relationships among SES of origin, ability, and educational attainment
16. Currently, this model provides a guideline for researchers to study how variables such as intelligence, teacher influences, and mother’s and father’s occupational choices can predict individuals’ career choice. Consequently, by analyzing the variables of family status and individuals’ cognitive variables, researchers can anticipate the person’s eventual occupational attainment
27.

2.2 Occupational Status Attainment of People with Disabilities
A ten-year follow-up study was conducted by Clark and Hirst
4 to investigate the status attainment among a sample of 39 individuals with physical disabilities. The authors found that competitive employment rates of people with physical disabilities are much less than the rates of people without disabilities. Although they still want to work, most of them have been never hired after leaving school. Thus, the majority of people with physical disabilities had not achieved their teenage occupational aspirations. The authors clearly indicate that “disability can affect the timing and sequence of transitions to adult status”
4. Due to lack of life chances during the transition years, persons with physical disabilities might miss the opportunity of achieving suitable educational and occupational goals.

To investigate long-term career attainments of deaf and hard of hearing college graduates, Schroedel and Geyer
24 collected data from 47 institutions, including 2-year and 4-year colleges and technical institutes. Despite the fact that this population had relatively high rates of unemployment and experienced difficulties such as communication stress, social isolation, unsupportive supervisions, and lack of job accommodations in work place
23, most respondents in this study seemed pleased with their careers and 45% of the respondents reported receiving a promotion during the preceding 4 years. Results imply that individuals with deaf and hard of hearing demonstrate success in their chosen career over time. Finally, the authors suggest that these higher occupational attainments of people with deaf and hard of hearing can be explicated by a college education, higher quality communication with work colleagues, a supportive supervisor, personal assertiveness, and knowing how to make requests.

An additional status attainment study was conducted by Rojewski
21 to compare the aspirations and attainments of persons with and without learning disabilities 2 years after high school completion. Results indicate that people with learning disabilities showed lower rates of high school graduation, were more likely to express low-prestige occupations, and less likely to participate in postsecondary education program than those without disabilities. A number of feasible explanations for lower status attainment for individuals with learning disabilities have been suggested. At first, in terms of social-cognitive perspectives, lower educational and occupational aspirations are considered as a consequence of social prejudice or structural barriers which stem from disabilities status
17. Also, lower prestige aspirations of individuals with learning disabilities could be explained by lower self-concept, a more external locus of control, delayed or damaged career development, lower socioeconomic status
8, and low expectations by parents, teachers, and friends
15.
3. Method

3.1 Data Collection

A sample of matched pairs of individuals with and without psychiatric disabilities that are participated in the labor force was used. Particularly, a total of 200 applicants were engaged from the clients of a One Stop Career Center in Gloucester County, New Jersey. One-Stop clients were enrolled through staff statements made at the Re-Employment Orientation (RO) meeting held numerous times per week for all new One-Stop customers. All new consumers of the One Stop center are offered a summary and overview of the many associate agencies and services available within the One-Stop center.

The enrollment of applicants occurred between March, 2005 and December, 2005. The sample consisted of 100 persons with psychiatric disabilities, and 100 persons without psychiatric disabilities. The Institutional Reviews Board at University of Wisconsin-Madison reviewed and approved this study with human subjects on May 2, 2008.

The One-Stop system is an exclusive setting that offers admission to both persons with psychiatric disabilities and without psychiatric disabilities. Contrary to previous employment services, the One-Stop Career Center attempts to incorporate in one complete service location all federal and state employment services, so that all people can attain employment services from a single access point. All individuals with psychiatric disabilities were matched on age, ethnicity, gender and educational level with individuals without psychiatric disabilities. Members were contacted by telephone every month to gather information on career seeking activities and employment status using the Monthly Employment Status Follow-Up Form during the six-month study.

3.2 Instruments

3.2.2 Intake Questionnaire

This 51-item survey form gathers information: 1. Demographic information such as age, gender, ethnicity, educational background, and marital status; 2. Employment history including job title and wage history of the last five years, and length of jobs held; 3. History of mental illness such as diagnoses, onset age of the illness, treatment and medication history, emergency room visit and hospitalization history, family history of mental illness; and 4. Socioeconomic information including parents' education and occupational background.

3.2.3 The Hollingshead Index of Social Position

The Hollingshead Index of Social Position is a tool of socioeconomic status that utilizes a scoring system that links a person's educational and occupation attainment. The occupational index comprises nine positions ranging from higher executives and proprietors of large businesses and major professionals to farm laborer and unskilled service workers.

3.2.4 Monthly Employment Status Follow-up Form

The Monthly Employment Status Follow-up Document was completed during each monthly telephone interview throughout the six-month follow-up period conducted with each subject. The form collects subject's information with regard to the number of job applications submitted, the number of job interviews completed, the job title, starting date, work hours, hourly wage and employee benefits if a participant has obtained a job. Furthermore, unemployment report was documented on this document.

3.3 Data Analyses

So as to examine the social mobility process, occupational attainment of persons with psychiatric disabilities (n = 100) was compared to occupational attainment of persons without psychiatric disabilities (n = 100). In the research, analyses of occupational attainment process consist of four variables. Table 1 shows all the variables for these analyses.

According to Featherman, the effects of both social background and educational attainment are likely to decrease throughout the career. In order to examine the
effects of father’s SES (X5) and educational attainment (X2) on occupational attainment over five years, father’s SES (X5) and educational attainment (X2) were compared to respondent’s prior job (X3) and occupational attainment (X1) by using regression analyses and z-tests.

4. Results

4.1 Demographic Characteristics

The ages of persons with psychiatric disabilities ranged from 19 to 66 years, with a mean age of 40.12 (SD = 10.87). Also, the ages of individuals without psychiatric disabilities ranged from 20 to 69, with a mean age 39.71 (SD = 10.73). Since persons with psychiatric disabilities were matched on age, gender, ethnicity and educational level with persons without psychiatric disabilities, no noteworthy differences were found between the groups with respect to age, gender, ethnicity, and educational level.

4.2 Clinical Description of Sample

Sixty percent of individuals with psychiatric disabilities stated having major depressive disorder, 18% bipolar disorder and 15% anxiety disorder. Sixty-three percent of individuals with psychiatric disabilities reported that they had seen a doctor for their symptoms of pain. Twenty-four percent were presently seeing a psychiatrist. Eighty-nine percent described taking psychotropic medications in the past, and 67% stated that they presently were taking psychotropic medicines. To cure their psychiatric disabilities, Seventy-six percent of individuals with psychiatric disabilities stated seeing a mental health counselor. Thirty-three percent of persons with psychiatric disabilities described having been hospitalized for psychiatric reasons. Number of psychiatric hospitalizations ranged from 0 to 11, with a mean of 0.85 (SD = 1.78). The mean number of days spent in a psychiatric hospital during the 12-month period proximately prior to joining in the research was 1.13 (SD = 4.51). Number of days of hospitalization ranged from 0 to 30 days.

4.3 z-Test Analyses on Occupational Process for People with Psychiatric Disabilities

According to Featherman, the effects of both social background and educational attainment are likely to decrease throughout the career. In order to examine the effects of father’s SES (X4) and educational attainment (X2) on occupational attainment over five years, father’s SES (X4) and educational attainment (X2) were compared to respondent’s prior job (X3) and occupational attainment (X1) by using regression analyses and z-tests. Table 2 reports the unstandardized (B), standardized (β) regression coefficients, and standard error of the regression coefficients.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Father’s SES (X4)</th>
<th>Educational attainment (X2)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>β</td>
</tr>
<tr>
<td>Participant’s prior job (X3)</td>
<td>.031</td>
<td>.184</td>
</tr>
<tr>
<td>Occupational attainment (X1)</td>
<td>.044</td>
<td>.269</td>
</tr>
</tbody>
</table>

Note: B = unstandardized coefficient, β = standardized beta coefficient, SEB = standard error of the regression coefficients.

It was hypothesized that the regression coefficient of father’s SES (X4) or educational attainment (X2) predicting occupational attainments would differ over five years (respondent’s prior job and occupational attainment). Generally, a t or z test has been used to examine the structure of a significance test between two sample means. The denominator is the estimated standard error of the disparity while the numerator of this test is the estimated difference between the two coefficients in the population (b1 – b2). To test the hypothesis about the comparability of two regression coefficients, a z-test with the following formula was applied to the proposed study. Equation (1) is calculated as follows; z equals the unstandardized coefficient b1 minus the unstandardized coefficient b2 divided by the square root of the squared standard error b1 plus the squared standard error b2.

\[
z = \frac{b_1 - b_2}{\sqrt{SEb_1^2 + SEb_2^2}}
\] (1)

It was hypothesized that the effect of father’s SES on participant’s prior job (b = .031, s.e. = 1.888) is significantly greater than the effect of father’s SES on participant’s occupational attainment (b = .044, s.e. = 1.807). The unstandardized coefficient .031 minus the unstandardized coefficient .044 divided by the square root of the squared standard error 1.888 plus the squared standard error 1.807.
standard error 1.807 equals -0.005(z value). Using the above equation, it was found that the difference was not statistically significant, since the value of z was not greater than ± 1.96 at the 0.05 level.

\[ z = \frac{0.031 - 0.044}{\sqrt{(1.888)^2 + (1.807)^2}} = -0.005 \]

Also, it was hypothesized that the effect of educational attainment on participant’s prior job (b = .022, s.e. = 1.346) is significantly greater than the effect of educational attainment on participant’s occupational attainment (b = .768, s.e. = 1.338). The unstandardized coefficient .022 minus the unstandardized coefficient .768 divided by the square root of the squared standard error 1.346 plus the squared standard error 1.338 equals -0.002(z value). Using the above equation, it was found that the difference was not statistically significant, since the value of z was not greater than ± 1.96 at the 0.05 level.

\[ z = \frac{b_1 - b_2}{\sqrt{SEb_1^2 + SEb_2^2}} \] (2)

It was hypothesized that the effect of father’s SES on participant’s prior job (b = .517, s.e. = 1.871) is significantly greater than the effect of father’s SES on participant’s occupational attainment (b = .687, s.e. = 1.785). The unstandardized coefficient .517 minus the unstandardized coefficient .687 divided by the square root of the squared standard error 1.871 plus the squared standard error 1.785 equals -0.06(z value). Using the above equation, it was found that the difference was not statistically significant, since the value of z was not greater than ± 1.96 at the 0.05 level.

\[ z = \frac{0.517 - 0.687}{\sqrt{(1.871)^2 + (1.785)^2}} = -0.06 \]

In contrast to Featherman’s hypothesis, the results indicate that the effects of father’s SES (X4) or educational attainment (X2) were not statistically significant throughout the career for people with psychiatric disabilities.

### 4.4 z-Test Analyses on Occupational Process for People without Psychiatric Disabilities

In order to examine the effects of father’s SES (X4) and educational attainment (X2) on occupational attainment over five years, father’s SES (X4) and educational attainment (X2) were compared to respondent’s prior job (X3) and occupational attainment (X1) using regression analyses z-Tests. Table 3 reports the unstandardized (B), standardized (\( \beta \)) regression coefficients, and standard error of the regression coefficients.

It was hypothesized that the regression coefficient of father’s SES (X4) or educational attainment (X2) predicting occupational attainments would differ over five years (respondent’s prior job and occupational attainment) for the working well. To test the hypothesis about the comparability of two regression coefficients, a z-test with the following formula was applied to the proposed study. Equation(2) is calculated as follows; z equals the unstandardized coefficient \( b_1 \) minus the unstandardized coefficient \( b_2 \) divided by the square root of the squared standard error \( b_1 \) plus the squared standard error \( b_2 \).

\[ z = \frac{b_1 - b_2}{\sqrt{SEb_1^2 + SEb_2^2}} \] (2)

It was hypothesized that the effect of father’s SES on participant’s prior job (b = .022, s.e. = 1.346) is significantly greater than the effect of father’s SES on participant’s occupational attainment (b = .026, s.e. = 1.444). The unstandardized coefficient .022 minus the unstandardized coefficient .026 divided by the square root of the squared standard error 1.346 plus the squared standard error 1.444 equals -0.002(z value). Using the above equation, it was found that the difference was not statistically significant, since the value of z was not greater than ± 1.96 at the 0.05 level.

\[ z = \frac{0.022 - 0.026}{\sqrt{(1.346)^2 + (1.444)^2}} = -0.002 \]

Also, it was hypothesized that the effect of educational attainment on participant’s prior job (b = .768, s.e. = 1.211) is significantly greater than the effect of educational attainment on participant’s occupational attainment (b = .748, s.e. = 1.338). The unstandardized coefficient .768 minus the unstandardized coefficient .748 divided by the square root of the squared standard error 1.211 plus the squared standard error 1.338 equals 0.01(z value). Using the above equation, results indicate that the difference was not statistically significant, since the value of z was not greater than ± 1.96 at the 0.05 level.

\[ z = \frac{0.768 - 0.748}{\sqrt{(1.211)^2 + (1.338)^2}} = 0.01 \]
Thus, the results indicate that the effects of father’s SES (X4) or educational attainment (X2) were not statistically significant throughout the career for the working well. Taken together, the status attainment process is proceeding in a similar way between individuals with psychiatric disabilities and for individuals without psychiatric disabilities.

5. Conclusions

Individuals with psychiatric disabilities still struggle in effectively attaining occupational goals in spite of significant efforts made in current years\(^6\). Many mental health investigators have verified that individuals with psychiatric disabilities are more downwardly mobile and less upwardly mobile with regard to their social status than people without disabilities\(^10\). Currently general populations believe that occupational mobility and work capacity of individuals with disabilities may be considerably under-estimated.

Inappropriately, the view that most individuals with disabilities are more downwardly mobile and less upwardly mobile with regard to their social status than people without disabilities may intensify the prejudices\(^19,20\). From attaining suitable occupational goals in our society, these largely embraced undesirable perceptions toward individuals with psychiatric disabilities have created substantial barriers to individuals with psychiatric disabilities.

Nonetheless, the results of the research dispute numerous prejudices and biases with regard to individuals with psychiatric disabilities. For example, persons with disabilities are not imagined to be able to work or desire to work. Furthermore, individuals with psychiatric disabilities are expected to have impractical work goals. In our society, these largely held undesirable perceptions toward individuals with psychiatric disabilities have created substantial barriers to individuals with mental disorders form achieving suitable occupational status. However, the findings of the research suggest some possibilities to overcome numerous prejudices. The results reveal that many people with psychiatric disabilities in the labor force do not differ considerably with respect to their social mobility process.

Also, this study could have several implications for rehabilitation research and intervention of people with psychiatric disabilities. Namely, to investigate the social movement and vocational skills of individuals with psychiatric disabilities, more efforts are required to examine the less severe individuals with psychiatric disabilities in the workforce. Possibly from investigating the more dynamically employed the field can convert some of what we learn into more successful treatment interventions and strategies for the more severe individuals with psychiatric disabilities. Through more balanced study for individuals with psychiatric disabilities, researchers could develop more advanced public policy with regard to people with disabilities.

6. References

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