

Criminal Justice Involvement of Individuals with Severe Mental Illness and Supported Employment Outcomes

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Abstract This study examined the impact of criminal justice involvement on competitive employment outcomes for clients with severe mental illness enrolled in supported employment. Based on chart reviews of 154 clients enrolled in supported employment, the CJI and no CJI groups differed on several clinical and demographic variables, but did not differ on competitive employment outcomes. This study suggests that clients with criminal justice involvement do benefit from supported employment. Further research should track employment outcomes for a longer interval with a larger study group in order to provide a more complete picture of the extent to which CJI impacts employment.

Keywords Vocational rehabilitation · Evidence-based supported employment · Criminal justice involvement

Introduction

Many people with severe mental illness have had contact with the criminal justice system. An estimated 15% of males and 31% of females in prison have a severe mental illness, and approximately 28% of clients in the public mental health system have been arrested at least once (Fisher et al. 2006; Steadman et al. 2009). When released from prison, these individuals often seek services at community mental health centers. One survey found that 45% of new users in outpatient mental health agencies had at least one contact with the criminal justice system, and 36% had at least one criminal conviction (Theriot and Segal 2005).

Mental health clients with criminal justice involvement (CJI) need services that promote recovery and prevent reincarceration. Supported employment has potential to do both, since jobs increase self-sufficiency and decrease recidivism (Osher and Steadman 2007). This evidence-based practice assists individuals to obtain and succeed in competitive employment by providing individualized and ongoing supports (Bond et al. 2008). Reviews have consistently shown that supported employment is effective (Crowther et al. 2001; Twamley et al. 2003; Burns et al. 2007). One recent review reported a mean competitive employment rate of 61% for clients with severe mental illness receiving supported employment compared to 23% for clients receiving other vocational services (Bond et al. 2008).

Although supported employment is effective for different subgroups of clients with a variety of demographic, clinical and employment characteristics (Campbell et al. 2009), research on CJI has been limited. One review found no published studies comparing supported employment outcomes between consumers with CJI and those without CJI (Anthony 2006). Research on CJI and supported employment includes access to services, barriers to

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employment, and strategies for obtaining jobs. One mixed-methods study found that the presence of CJI did not reduce access but did delay entry into supported employment (Frounfelker et al. 2010). In another qualitative study, direct service staff identified CJI as a major barrier to employment (Tschopp et al. 2007). Employers routinely use computerized databases to screen for CJI, and people with CJI are restricted from certain jobs (Harrison and Schehr 2004). Specific charges, particularly sexual offenses, narrow employment opportunities even further (Whitley et al. 2009). To overcome these barriers, practitioners report that they use positive working relationships, transitional employment options, and customized job development techniques (Tschopp et al. 2007; Whitley et al. 2009). But the effectiveness of these efforts remains uncertain.

The aim of this study was to examine the impact of criminal justice involvement (CJI) on competitive employment outcomes for clients with severe mental illness enrolled in supported employment services. We hypothesized that clients with severe mental illness and CJI would have poorer competitive employment outcomes than clients with severe mental illness and no CJI.

Methods

Setting

The study was conducted at Thresholds Psychiatric Rehabilitation Centers in Chicago, an agency that provides a comprehensive array of mental health and rehabilitation services for individuals with severe mental illnesses such as schizophrenia, bipolar disorder, or schizoaffective disorder. Thresholds employment specialists provided comprehensive vocational services, ranging from vocational engagement, vocational assessment, job searching, job retention and job leaving supports. During the study period all supported employment practitioners and teams were monitored for adherence to the evidence-based supported employment scale (Bond et al. 1997) and maintained at least fair fidelity. The Institutional Review Board of Thresholds approved the study.

Participants

The study group included 154 clients who were admitted to Thresholds services from December 2007 to December 2008 and received supported employment services during this same time period.

Measures

Agency psychiatrists assessed clients at intake for DSM-IV diagnoses, including substance use disorders. In addition,

practitioners on the client's treatment team assessed substance use with the Alcohol Use Scale and Drug Use Scale (Drake et al. 1990). Substance use disorder was entered into the electronic medical record if a client met the DSM-IV criteria for substance use or dependence and was not in remission. New clients self-reported current or past CJI as well as age, race, and years of education. Enrollment in employment services was measured by clients being assigned to work with an employment specialist at some time during the study period (between December 2007 and 2008). The primary outcome measure for this study was success in obtaining competitive employment between December 2007 and 2008. Direct service staff documented competitive employment job start and end dates, as well as hours worked, wages earned and job titles, for those jobs obtained within the follow up period.

Procedures

Researchers collected mental health assessment information, service utilization, and employment incident data from the electronic medical record. Direct service staff conducted mental health assessments on all clients at intake and obtained information from clients on age, race, years of education completed, and CJI. Employment specialists documented supported employment service utilization and outcomes. The quality of employment data was enhanced by monitoring administrative reports on employment outcomes on a monthly basis. Job title was extracted verbatim from the electronic record.

Analysis

Data were imported from the electronic medical record to an SPSS database and analyzed using SPSS version 15.0. Missing data and outliers indicative of data entry errors were removed from the analysis. We used descriptive statistics and chi-squares to compare the demographics of CJI and no-CJI groups, T tests to compare wages earned and hours worked between those employed in the two groups, and Kaplan–Meier survival analysis to compare number of months enrolled in supported employment and employment status of CJI and no-CJI groups. The *d* effect size was calculated to measure the size of the differences between group on employment outcomes (Lipsey 1990). The nonstandardized entries for job type precluded a formal statistical analysis using Dictionary of Occupational Title codes for the subsample who obtained employment.

Results

Of 154 supported employment participants, 73 (47%) disclosed CJI and 81 (53%) reported no CJI. The CJI group had higher proportions of men and diagnosis of substance

Table 1 Study participant characteristics and employment outcomes

	No CJI <i>N</i> = 81	CJI <i>N</i> = 73	Test of significance	Sig.	Cohen's <i>d</i> effect size		
Sex							
Male	44 (54%)	61 (84%)	$\chi^2 = 15.13$	<i>p</i> = .00			
Female	37 (46%)	12 (16%)					
Race							
White	39 (48%)	31 (42%)	$\chi^2 = .86$	<i>p</i> = .41			
Black/African American	38 (47%)	41 (56%)					
Primary diagnosis							
Bipolar	25 (31%)	23 (32%)	<i>t</i> = .968	<i>p</i> = .34			
Schizophrenia	14 (17%)	12 (16%)					
Schizoaffective	8 (10%)	15 (21%)					
Depression	15 (19%)	17 (23%)					
Anxiety	8 (10%)	3 (4%)					
Co-occurring condition							
Substance use diagnosis	7 (9%)	29 (40%)	$\chi^2 = 20.00$	<i>p</i> = .00			
	Mean	SD	Mean	SD			
Age	37.6	13.3	37.3	11.7	<i>t</i> = −.139	<i>p</i> = .89	
Years of education	12.9	1.9	12.4	1.7	<i>t</i> = 1.68	<i>p</i> = .10	
Competitively employed during follow-up	30 (37%)		18 (25%)		$\chi^2 = .10$	<i>p</i> = .12	.26
Days employed (total sample)	54.0	97.32	29.44	68.16	<i>t</i> = 1.79	<i>p</i> = .08	.29
Hourly wages (worker sample only)	9.55	3.80	8.46	1.23	<i>t</i> = 1.14	<i>p</i> = .26	.39
Hours worked per week (worker sample only)	23.79	8.23	28.79	8.61	<i>t</i> = −1.96	<i>p</i> = .06	.59

use disorder than the no-CJI group, but the two groups were similar in race, age and education (see Table 1).

Sex, substance use, and education were not significantly associated with employment outcomes. While 18 (37%) females and 30 (29%) males found work, 37 (32%) without substance use disorder and 11 (31%) with a substance use disorder diagnosis were employed. The average years of education of those employed was 12.69 (± 1.83) and for those unemployed was 12.60 (± 1.81).

The CJI and no CJI groups did not differ on competitive employment outcomes, as shown in Table 1. Of the 48 clients who obtained jobs, 38 (84%) worked 20 or more hours a week and 8 (17%) worked full-time. During the follow-up period, 40 jobs were held by the non-CJI group and 26 jobs by the CJI group. Length of employment, wages earned and hours worked were similar between the groups. Length of time in supported employment services during the follow-up period was not different between the CJI ($M = 116.66$ days, $SD = 73.56$) and no CJI ($M = 138.22$ days, $SD = 82.42$) groups ($t = 1.59$, $p = .12$). Survival analysis indicated no difference in employment

status and time in supported employment services for the two groups ($\chi^2 = .19$, $p = .66$).

We observed no pattern of job titles for clients with CJI compared to those without CJI. In both groups, the job types were diverse. Jobs held by clients with CJI included driver, laborer, cook, janitor, bagger, nursing assistant, quality auditor, and cashier. Jobs held by clients without CJI were equally diverse and included many of the same occupations held by the CJI group.

Discussion

The competitive employment rates of individuals with and without CJI did not differ. Several interpretations are plausible: First, CJI may not present a significant barrier for clients in supported employment. Second, employment specialists may have augmented job development strategies to overcome the barriers faced by clients with CJI while maintaining fidelity to the supported employment model. Third, clients with more serious CJI problems may have

been informally excluded from supported employment services. Finally, the sample size may be too small to detect differences in outcomes. It is likely that a combination of factors explain the results.

The similarity in employment outcomes may reflect the finding that clients with severe mental illnesses and CJI are similar on many clinical and demographic characteristics to those without CJI. The characteristics on which the two groups did differ were sex and substance use disorder diagnosis, both of which were unrelated to employment outcomes. Employment barriers that exist for the general ex-offender population, including poor employment histories, also characterize clients with severe mental illnesses served in supported employment programs (Harrison and Schehr 2004; Burke-Miller et al. 2006). Barriers unique to employment for clients with CJI include laws that restrict the employment of ex-offenders in certain fields and informal employer screening that blocks ex-offenders from employment (Harrison and Schehr 2004). A combination of traditional supported employment techniques, such as intensive job development and networking with employers, may overcome these barriers. Whether standardized approaches need modification, for example, by not adhering as closely to clients' job preferences because of legal restrictions, is unclear. More severe restrictions or barriers to employment exist for ex-offenders with felonies as opposed to misdemeanors (Harrison and Schehr 2004). Clients with more severe CJI may be less likely to access supported employment services.

Several limitations to this study warrant attention. These include self-report regarding CJI, limited CJI information, lack of employment history data, the use of clinical records, possible sampling bias, the small study group, and the follow up interval. Clients may not disclose CJI at intake for obvious reasons. Thus the no-CJI sample may include some clients with CJI. Researchers did not have information on severity of charges, limiting our understanding of how this may impact access to services and employment outcomes. Unfortunately employment history information, a strong determinant of competitive employment outcomes, was not obtained for the study sample. It is possible that those clients with CJI may not have enrolled in supported employment services at the same rate as those without CJI, resulting in sampling bias. However, CJI was assessed in the total number of clients who enrolled in Thresholds during the study period, and there was no statistical difference in the percentage with CJI in the overall group and the percentage that entered supported employment during the follow-up period (Frounfelker et al. 2010). With its modest sample size, the study may have been underpowered to detect differences in employment outcomes. The follow-up period was of variable duration

depending upon when clients entered Thresholds services during the study period. However, the two groups were similar in the length of time receiving supported employment services.

Future Research

Further research should have a more robust sample size and track employment outcomes over a longer and standardized follow-up period. Additionally, more systematic and detailed assessment of CJI, such as through the use of obtaining records of arrest and prosecution, would serve to verify CJI status as well as identify subgroups of those with CJI (e.g., record with felonies vs. misdemeanors, currently involved with the criminal justice system vs. history of involvement) that may have different employment outcomes.

Conclusion

As the number of individuals with severe mental illnesses who have CJI grows, the public mental health system needs to provide services that advance recovery and prevent recidivism. Employment can be a critical step. This study shows that clients with CJI benefit from supported employment.

Disclosures None.

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