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**The Employment Intervention
Demonstration Program:
Major Findings and
Policy Implications**



Judith A. Cook

University of Illinois at Chicago

Crystal R. Blyler

Substance Abuse and Mental Health
Services Administration, Rockville, MD

H. Stephen Leff

Human Services Research Institute,
Cambridge, MA

William R. McFarlane

Maine Medical Center, Portland, ME

Richard W. Goldberg

University of Maryland

Paul B. Gold

Medical University of South Carolina

Kim T. Mueser

Dartmouth Medical School

Michael S. Shafer

Arizona State University

Steven J. Onken

University of Hawaii at Manoa

Kate Donegan

The Matrix Center at Horizon House,
Philadelphia, PA

Martha Ann Carey

Azusa Pacific University

Caroline Kaufmann

Private Consultant, Pittsburgh, FL

Lisa A. Razzano

University of Illinois at Chicago

This article summarizes the published results of the Employment Intervention Demonstration Program (EIDP), a federally-funded, multi-site study examining the effectiveness of supported employment programs for 1273 unemployed individuals with psychiatric disabilities in the U.S. Findings confirm the effectiveness of supported employment across different models, program locations, and participant populations. The study's results are discussed in the context of public policies designed to encourage return to work for those with a severe mental illness.

Keywords: supported employment, evidence-based practices, labor force participation

Introduction

The Employment Intervention Demonstration Program (EIDP) was a multi-center study designed to generate knowledge about effective approaches for enhancing employment among adults with severe mental illnesses (Cook, Carey, Razzano, Burke, & Blyler, 2002). At seven sites, 1273 unemployed individuals with psychiatric disabilities were randomly assigned to experimental supported employment programs or to comparison/services as usual conditions and followed for two years. A Coordinating Center at the University of Illinois at Chicago Department of Psychiatry, in collaboration with the Human Services Research Institute in Cambridge, MA, was responsible for data management

and analysis in collaboration with each site's principal investigators, federal funding agency staff, and consumer researchers. The following describes the study design, models that were tested, and study participants.

Study Overview

The EIDP was an "implementation effectiveness trial" (Gordis, 2000), a randomized experiment designed to test the effectiveness of an intervention with established efficacy called supported employment by implementing it under real-world conditions of availability and recipient acceptance. Several different supported employment models were studied, including Individual Placement and Support

(Drake et al., 1999), Program of Assertive Community Treatment (Russert & Frey, 1991), Family-Aided Assertive Community Treatment (McFarlane et al., 2000) combined with an Employer Consortium (Balsler, Hornby, Fraser, & McKenzie, 2003), and Employment Assistance through Reciprocity in Natural Supports (EARNs) (Toprac et al., 2002). For pre-existing models, fidelity was assessed via established measures; the EIDP also developed and administered a cross-site measure of adherence to supported employment principles and practices.

Just over half of participants were male (53%); 50% were Caucasian, 30% African American, 14% Hispanic/Latino, and 6% mixed or other race/ethnicity. Average and median age was 38 years at baseline. Most (72%) were receiving Social Security Administration disability income support, one-third had not completed high school, and a third had not held paid employment in the five years prior to the study. Half of participants had a schizophrenia spectrum diagnosis while another 40% were diagnosed with major depression or bipolar disorder. Vocational outcomes that were studied included competitive employment (i.e., a job that pays minimum wage or higher, located in a mainstream setting, not reserved for people with disabilities, and not controlled by a service agency), earnings, employment status, and number of hours worked, among others. Sites were located in Baltimore, Maryland; Hartford, Connecticut; Sumter, South Carolina; Phoenix, Arizona; Worcester, Massachusetts; Portland, Maine; and San Antonio, Texas. The following summarizes findings published in the EIDP's major articles to date.

Results of the Randomized Implementation Effectiveness Trial (Cook, Leff et al., 2005)

- Supported employment models tailored by integrating clinical and vocational services were more effective than services as usual or comparison conditions.
- Experimental condition subjects were more likely to be competitively employed (55% of experimental versus 34% of control participants), work 40 or more hours per month (51% versus 39%), and have higher earnings (\$122/month vs. \$99/month) despite controlling for demographic, clinical, and work history confounds.
- The advantage of experimental over control group participants increased over the 24-month study period.

These findings illustrate the effectiveness of supported employment across different models, program locations, and participant populations. Moreover, employment success of the experimental group increased over time, suggesting that model effects are sustainable or even reinforced by continued participation. Although the experimental program models varied, all shared common characteristics of rapid job development, integration of clinical and employment services, focus on competitive positions, availability of ongoing vocational support, and development of jobs consonant with individual career preferences. The EIDP results show that these programs can work in diverse service settings, in different geographical regions, and for a wide variety of service consumers.

Specific Vocational Services and Employment Outcomes (Leff et al., 2005).

- Participants who received job development were almost five times as likely to obtain competitive employment as individuals who did not receive it.

- Individuals with no prior work experience had virtually no chance of acquiring a competitive job without job development services.
- Participants who received ongoing job support tended to have significantly longer job tenure in their first competitive job, but there was no impact on total number of hours worked among those who became employed.

The findings of this study demonstrate that job development, a collection of job-seeking activities that match or tailor jobs to particular clients, is a highly effective service for achieving competitive employment, particularly for those with limited prior work experience. However, ongoing job support was a less consistent predictor of outcomes. This suggests that high-quality job development services are a lynchpin of successful supported employment programs.

Importance of Integrating Clinical and Vocational Services (Cook, Lehman et al., 2005)

- Supported employment models with high levels of integration of clinical and vocational services were more effective than models with low levels of service integration.
- Subjects served by models with high integration were over two-and-one-half times as likely to be competitively employed, and over one-and-three-quarters times as likely to work 40 or more hours per month, despite controlling for demographic, clinical, and work history confounds.
- Higher cumulative amounts of vocational services were associated with better employment outcomes, all other things being equal.

This study re-classified all EIDP programs, experimental and control, according to their level of services integration. Integration was defined as vocational services (e.g., job develop-

ment, ongoing support) and mental health services (e.g., medication management, individual therapy) being provided by the same agency, at the same location, with client information combined in a single case file, and with regularly and frequently scheduled staff meetings (at least 3 times per week). The strong associations between integration and work outcomes confirms the importance of provider communication and coordination of mental health and rehabilitation services in helping clients work toward vocational goals.

Local Unemployment Rates and Vocational Outcomes (Cook, Mulhern et al., 2006)

- The local unemployment rates at the different sites had a significant impact on participants' work outcomes, even controlling for study condition and participant characteristics.
- Experimental condition participation had a significant and positive effect on employment outcomes, even controlling for the effects of unemployment rate.
- Despite the powerful impact of unemployment rate on vocational outcomes, in areas with high unemployment, those in the experimental condition had better outcomes than did control participants in areas of low unemployment.

Awareness that workers with psychiatric disabilities are influenced by local labor market conditions has important public policy implications. The provision of evidence-based supported employment appears to be especially critical in areas with poor local economies. Individuals re-entering the labor force in geographic regions with high unemployment are particularly vulnerable to continued unemployment without best-practice services.

Clinical Predictors of Employment (Razzano et al., 2005)

- EIDP participants with diagnoses other than schizophrenia, with fewer recent psychiatric hospitalizations, and with lower levels of psychiatric symptoms were more likely to work and to be competitively employed.
- EIDP participants who rated themselves as higher functioning had better vocational outcomes.

This study points to some groups of vocational rehabilitation clientele who may need additional support or tailoring of services in order to address their clinical impairments. This includes support for dealing with troublesome symptoms or help finding jobs at which persistent symptoms are less conspicuous. In addition, special care should be taken in developing appropriate vocational options and employment opportunities to address the unique needs of those with diagnoses of schizophrenia and other schizophrenia-spectrum disorders. However, regardless of clinical characteristics, those in best-practice supported employment programs were more successful.

Demographic Characteristics as Predictors of Employment (Burke-Miller et al., 2006)

- Study participants who were younger, female, Hispanic/Latino, and who had better work histories and a high school or college education were significantly more likely to be employed and to hold competitive jobs, even controlling for study condition and clinical characteristics.
- There was a notable difference in the effect of being African American, depending on the employment outcome: African Americans were more likely to engage in paid employment of any kind, but significantly less likely to engage in competitive employment compared to Caucasians.

These results confirm that demographic characteristics of people with psychiatric disabilities are related to employment outcomes. Participant age, gender, and race/ethnicity operate in terms of larger social and institutional contexts and systemic labor market influences. Demographic characteristics must be considered for what they are: contextual factors that reflect labor market and social context realities, such as bias, stigma, and social and economic trends.

Costs of Supported Employment Interventions (Marcotte & Wilcox-Gök, 2003)

- Average total program costs (defined as clinical and vocational direct and indirect costs) per client ranged from \$2,000 to \$6,000, while average direct vocational service costs range from under \$500 to about \$2,000 per client per year.
- By far, direct costs accounted for the bulk of total and per client costs. Among direct costs, personnel costs were significantly larger than other (non-personnel) costs.
- Average per client per year vocational costs were related more to the nature of the site at which the program was implemented than to the particular program model tested, although cross-site comparisons could only be made with great caution.

The primary focus of this analysis was on identifying the direct costs of supported employment interventions. As a secondary goal, other costs were estimated, including direct non-vocational costs as well as indirect costs associated with program delivery. Cross-site differences may be informative in identifying broad patterns of cost variations associated with providing services to clients treated under programs with substantially different treatment strategies.

Effects of Supported Employment on Economic Self-Sufficiency (Cook, Leff et al., 2006)

- Restricting the sample to those 450 participants receiving employment services whose work histories qualified them for monthly Social Security Disability Income (SSDI), while 69% of SSDI beneficiaries worked, their jobs tended to be low-paying, part-time, and without benefits such as paid vacation, sick leave, or health insurance.
- During the 2-year follow-up, only 4% of SSDI beneficiaries had monthly incomes that would have earned enough for them to complete their trial work period and leave the SSDI rolls financially self-sufficient.

While employment services are successful in helping SSDI beneficiaries return to work, their labor force participation is not at a level that would enable them to leave the public disability income rolls. This may be due, in part, to work disincentives in the policies of public disability income support programs, particularly those that eliminate cash payments for those who earn enough to complete their trial work periods.

Co-Occurring Disorders and Work Outcomes (Cook et al., 2007)

- Sixty percent of the total population had a co-occurring medical condition, and a quarter had two or more conditions; the most common were substance abuse/dependence, mental retardation, head injury, and visual impairment.
- Individuals with any co-morbidity had lower earnings and were less likely to work competitively; those with physical co-morbidities had lower earnings, worked fewer hours, and were less likely to work competitively, compared to those with other co-morbidities.

- Experimental condition was associated with more positive work outcomes even controlling for co-occurring disorders.

These results underscore the importance of tailoring supported employment programs for those with co-occurring conditions. This need may be especially acute among those with physical impairments. Mental health rehabilitation programs are seldom equipped to serve individuals with physical impairments and often need to be adapted for those with physical disabilities. Supported employment specialists must be trained for and sensitive to return-to-work issues that arise for individuals with different types of co-morbidities, be they physical or cognitive disabilities, or chronic or acute medical conditions.

Summary and Conclusions

EIDP findings contributed substantial support to the notion that people with psychiatric disabilities receiving high-quality supported employment programs could return to work in the competitive labor market. The longer-term effectiveness of supported employment was also demonstrated by the fact that greater proportions of people worked over time, at jobs of increasing tenure, and with shorter periods of unemployment between positions. More was learned about specific employment services that were most strongly associated with vocational success, such as job development, as well as the importance of service volume, since those who received more vocational services had better outcomes. However, vocational rehabilitation for this group of workers did not occur in a vacuum, but instead within the context of the larger labor market and other societal and individual influences such as the local economy and availability of other types of

services and supports. Thus, for most EIDP participants, work did not serve as a springboard to financial self-sufficiency, but instead as a route to membership into a social stratum of society referred to as the "working poor" (Shipler, 2004). Policy implications of these findings have been elaborated elsewhere (Cook, 2006; Cook & O'Day, 2006) and include the need to understand how funding can be organized to better integrate clinical and vocational services, enhance educational levels, and remove work disincentives contained in benefit design for public programs.

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JUDITH A. COOK, PHD, UNIVERSITY OF ILLINOIS AT CHICAGO, CHICAGO, IL

CRYSTAL R. BLYLER, PHD, SUBSTANCE ABUSE AND MENTAL HEALTH SERVICES ADMINISTRATION, ROCKVILLE, MD

H. STEPHEN LEFF, PHD, HUMAN SERVICES RESEARCH INSTITUTE, CAMBRIDGE, MA

WILLIAM R. MCFARLANE, MD, MAINE MEDICAL CENTER, PORTLAND, ME

RICHARD W. GOLDBERG, PHD, UNIVERSITY OF MARYLAND, BALTIMORE, MD

PAUL B. GOLD, PHD, MEDICAL UNIVERSITY OF SOUTH CAROLINA, CHARLESTON, SC

KIM T. MUESER, PHD, DARTMOUTH MEDICAL SCHOOL, CONCORD, NEW HAMPSHIRE

MICHAEL S. SHAFER, PHD, ARIZONA STATE UNIVERSITY, PHOENIX, AZ

STEVEN J. ONKEN, PHD, UNIVERSITY OF HAWAII AT MANOA, HONOLULU, HI

KATE DONEGAN, EDD, THE MATRIX CENTER AT HORIZON HOUSE, PHILADELPHIA, PA

MARTHA ANN CAREY, PHD, AZUSA PACIFIC UNIVERSITY, AZUSA, CA

CAROLINE KAUFMANN, PHD, PRIVATE CONSULTANT, PITTSBURGH, FL

LISA A. RAZZANO, PHD, UNIVERSITY OF ILLINOIS AT CHICAGO, CHICAGO, IL

CORRESPONDING AUTHOR:

DR. JUDITH COOK
UNIVERSITY OF ILLINOIS AT CHICAGO DEPARTMENT OF PSYCHIATRY
1601 WEST TAYLOR STREET, 4TH FLOOR M/C 912
CHICAGO, IL, 60612
EMAIL: cook@ripco.com
P: 312-355-3921
F: 312-355-4189

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