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An update on supported employment for people with severe mental illness

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Abstract

Purpose of review—Individual Placement and Support (IPS) is an effective intervention for helping people with severe mental illness obtain competitive employment, yet it has not been widely implemented. This review will examine and summarize the latest research on IPS.

Recent findings—As the effectiveness of IPS has been well established in the literature, newer research is exploring nonvocational outcomes, such as quality of life and mental health services utilization and expanding the reach of IPS to include different countries and different population groups. There is also a growing literature exploring the cost-effectiveness of IPS compared with traditional vocational services, which has favored IPS. By far, the area of research that has expanded the most is aimed at enhancing IPS outcomes, at both the intervention level and the client level. Researchers are exploring the variance in IPS outcomes as a means of increasing competitive employment rates with IPS.

Summary—Although the field of research continues to expand, it is clear that many barriers remain to broad implementation of IPS. The solution goes beyond further research and involves policies and practices that support a recovery oriented mental healthcare system.

Keywords

disability policy; mental illness; schizophrenia; supported employment

INTRODUCTION

The Individual Placement and Support (IPS) model of supported employment is an evidence-based approach for helping people diagnosed with severe mental illness (SMI) gain competitive employment [1]. The most studied model of supported employment, IPS is based on a ‘place then train’ model of obtaining employment for consumers and has eight fundamental principles: obtaining competitive employment is the goal, zero exclusion policy (everyone is eligible), consumer preferences are important, integration with treatment,

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Conflicts of interest

There are no conflicts of interest.

provision of personalized benefits counseling, employment specialists develop relationships with employers in the community according to client preferences, rapid job placement, and follow-along supports. The role of the employment specialist in IPS is important and core skills include: engagement with the client; assessment; employment planning; benefits counseling; job development with employers in the community; and providing supports along the way. IPS is often compared with 'traditional vocational rehabilitation' programs, which vary significantly, but are mostly based on the 'train then place' model of vocational rehabilitation and generally include vocational groups, workshops, and counseling, with more emphasis on placement in sheltered and transitional employment.

A recently published Cochrane Review [2[■]] considered 14 randomized controlled trials of IPS that included 2265 people with SMI. The meta-analysis found that supported employment significantly increased levels of employment over the long term compared with other vocational approaches. On secondary outcomes, such as quality of life, overall global functioning, and rate of hospitalization, supported employment did not show increased benefit over other vocational approaches, although a very low number of studies examined these outcomes. As effectiveness of IPS has now been established, research has shifted from measuring effectiveness to exploring cost-effectiveness, adaptation in international settings, utilizing IPS in the first episode psychosis (FEP) population, enhancing IPS outcomes, and barriers to implementation. This review describes and summarizes the latest research in IPS and elucidates areas in which more research is needed.

THE IMPACT OF INDIVIDUAL PLACEMENT AND SUPPORT: BEYOND COMPETITIVE EMPLOYMENT

New research aims to answer questions regarding the impact of IPS on nonvocational outcomes and its cost-effectiveness with the hope of encouraging policy makers across the country to increase access to IPS services. In collaboration with the Social Security Administration (SSA), Drake *et al.* [3[■]] conducted the Mental Health Treatment Study in 2005 with a \$52 million contract to provide a comprehensive package of services in a chronic care model of treatment [4], which enhances outcomes for chronic diseases by coordinating care at multiple levels of healthcare service provision, including patient, provider, delivery system, and community. The study provided vocational services in the form of IPS, systematic medication management, complete health insurance coverage, elimination of disability reviews, and other behavioral health interventions, such as case management to the intervention group and treatment and services as usual for the control group, which included the usually covered Medicare services, such as outpatient physician visits, medications, and hospital care as needed. The primary outcome of interest for the SSA was obtaining paid employment, although researchers also hypothesized that participation in the intervention would have a positive impact on nonvocational outcomes as well. Consistently with prior IPS studies, the rate of paid and competitive employment was significantly higher in the intervention group compared with the control group, yet fewer than 3% of individuals in the intervention group and fewer than 2% in the control group earned enough money to stop receiving benefits, the threshold for which was \$1000 per month in 2010. The authors found that intervention participants increased their use of

outpatient mental health services and showed better mental health and quality of life measures compared with the control group. Of note, only a small percentage (14%) of eligible social security disability income (SSDI) beneficiaries who were contacted agreed to participate, and they were significantly younger, had spent less time in the SSDI program, and were more recently looking for work compared with those who chose not to participate. The authors concluded that, for the subset of SSDI beneficiaries who are motivated to get back to work, the intervention was successful in implementation, increasing the rate of paid and competitive employment, increasing the utilization of outpatient mental health services, and increasing quality of life for participants, despite the lack of short-term cost-savings to the SSDI benefit programs to be attained by 'graduating' beneficiaries from the program once they had obtained paid employment.

Salkever [5[■]] examined the potential cost-effectiveness and cost-savings of broadly expanding access to the IPS model of supported employment by employing a newly developed analytic framework for 'social cost-effectiveness', which defines the 'program's social cost impact as its effect on net consumption of all goods and services' (p. 111). This is a more inclusive definition of cost-effectiveness that can be applied to health programs in which the impact of costs often reaches beyond agency budgets from which they are financed. He reviewed 27 articles over 20 years of research to apply this analytic framework to IPS and concluded that, while IPS is cost-effective compared with traditional vocational rehabilitation programs, existing evidence does not necessarily support long-term budgetary savings associated with expansion of IPS services, although he attributed this inconclusive finding to gaps in the literature and not negative research findings. A commentary on the Salkever article [6] affirms the findings and encourages policy makers to 'be satisfied with developing programs that simply make the lives of very sick people better at the same cost' (p. 103). In many areas of medicine, when new treatments are developed that make 'sick people better', there is less often the requisite need to prove the intervention's cost-savings in the literature prior to use in clinical practice. If recovery for people with SMI is defined as an optimizing community functioning and inclusion, and if obtaining competitive employment is a key component to that process, then the fact that there is a proven effective treatment, that is, IPS, should in itself drive broad implementation of this intervention.

CROSS-CULTURAL INDIVIDUAL PLACEMENT AND SUPPORT

European countries are exploring whether the IPS model can translate across cultures, particularly given the highly developed social security systems and vastly different labor markets in these countries. The Enhancing Quality of Life and Independence of Persons Disabled by Severe Mental Illness through Supported Employment (EQOLISE) trial [7], conducted between 2003 and 2005 in six different European countries, found significantly higher rates of competitive employment for at least 1 day during follow-up for the IPS participants compared with traditional vocational rehabilitation programs in four of six sites, with competitive employment rates ranging from 34% in The Netherlands to 82% in Bulgaria. It was the first IPS study to demonstrate a link between the local economic climate and competitive employment; IPS was more successful in areas with lower unemployment. A recently published follow-up cost-effectiveness study [8[■]] estimated that IPS was more cost-effective compared with traditional vocational services in terms of the actual costs

associated with the intervention and value of employment achieved over the duration of the study.

A recent review article [9] examined the effectiveness of IPS in European countries compared with the United States and found that the mean competitive employment rate was 50% for IPS compared with 20% for controls, which is still lower than the competitive employment rate for IPS in US studies (65%). Several hypotheses are offered to explain the discrepancy, including labor and disability policies in non-US countries that create disincentives to seeking competitive employment. Studies [10,11] have described the difficulties of implementing IPS in such environments in countries, such as Sweden and The Netherlands. Furthermore, the authors pointed out the importance of adherence to the IPS model, using as an example the only failed study of IPS [12], conducted in the United Kingdom, which demonstrated a competitive employment rate of 13% in the IPS group, compared with 7% in the control group who received traditional vocational rehabilitation services. There was a significant dose-response relationship in terms of the low intensity of employer and client contacts by job developers, averaging roughly once per month during the course of the trial, and competitive job placement for clients, despite 'good' self-assessed fidelity scores in the intervention [13]. The creators of IPS attribute this fact not to an inherent fault in the fidelity score, but rather to the fact that it was self-assessed [9].

INDIVIDUAL PLACEMENT AND SUPPORT FOR FIRST EPISODE PSYCHOSIS

Researchers are beginning to focus on supported employment in the FEP population, recognizing the possibility that helping young adults regain vocational functioning may hasten recovery and prevent the need for joining disability and welfare programs. Drake *et al.* [14[■]] followed patients who presented to an emergency room with early psychosis for 2 years and found that those who were competitively employed at baseline and over the course of the study were significantly less likely to use medications, had much lower levels of mental health service utilization, and were less likely to be receiving disability payments compared with those who were not employed. The workers also had overall lower rates of drug dependence, homelessness, and incarceration. The findings support the idea that investing early in vocational rehabilitation in the FEP population may be not only beneficial for recovery, but also potentially cost-saving over the long run [15]. Killackey *et al.* [16] measured both competitive employment and enrollment in educational coursework as outcomes in a randomized controlled trial of IPS in FEP vs. treatment as usual consisting of usual medical care and referral to external vocational agencies, with 85% of the study participants achieving the primary outcome in the intervention group, compared with 29% in the treatment as usual group. Exploration of predictors of the vocational and educational outcomes showed that only participation in IPS was predictive, with participants 16 times more likely to obtain vocational and educational outcomes compared with treatment as usual [17[■]]. Although the educational outcomes in this study were enrollment in course-work related to the participants' choice of vocation, the importance of educational attainment as a means to recovery in the FEP population should not be understated. Preliminary evidence of supported education models show promise, although few research studies have been

conducted, and effectiveness of supported education has not yet been established [18]. At the same time, it is likely that future studies of IPS for young people experiencing early psychosis will combine supported employment with education, given the developmental stage of these individuals.

Researchers are also exploring neurocognitive and social cognition factors that may predict recovery in an FEP population, as most demographic and clinical variables have failed to be predictive. Neurocognitive deficits have been shown to explain roughly half of the variance in vocational or educational outcomes in an FEP population [19], and higher baseline social cognition in FEP participants was strongly predictive of work productivity at 12 months [20[■]]. Allott *et al.* [21[■]] found that better visual organization and memory predicted enrollment in education and hours of paid work over 6 months, but other neurocognitive and social cognition factors were not significant. Further research is needed to elucidate the relationship between cognitive factors and vocational and educational outcomes in FEP to identify potential modifiable factors amenable to intervention.

ENHANCING INDIVIDUAL PLACEMENT AND SUPPORT OUTCOMES: FOCUS ON THE EMPLOYMENT SPECIALIST

The rate of competitive employment across studies can vary substantially, and research studies have implicated several explanations of the ‘variance’ in outcomes [22]. The developers of IPS [1] recently added an eighth principle to the IPS model: ‘Employment specialists develop relationships with employers, based upon their clients’ work preferences, by meeting in-person with employers.’ This additional principle directly addresses job development by the employment specialist, which is a vital yet highly variable component in implementation of IPS [23[■]].

Several recent studies have explored competencies of the employment specialist in relation to employment outcomes. Supervisors rated employment specialist efficacy, frequency of contacts with clients, and time in the community as being associated with better employment outcomes for consumers [24]. Glover and Frounfelker [25[■]] explored the competencies of the employment specialists who were more ‘successful’ in employment outcomes based on average monthly competitive employment rates. Using direct observation of employment specialists, they found three factors to be related to greater success: efficient; collaborative; and egalitarian. Further examination of the job development skills of the higher performing employment specialists (those with competitive employment rates between 35.1 and 64.7%) revealed greater competence in six areas: time management; advocacy; building partnerships with consumers; working as part of a team; face-to-face communication; and networking [26]. In order to develop a more objective method of assessing employment specialist competencies, Corbiere *et al.* [27[■]] developed and tested a questionnaire (Behaviors, Attitudes, and Knowledge in Employment Specialists) and found that relationships with employers and a client-centered approach were most predictive of employment outcomes. Consistently with the above studies of employment specialist competencies, interviews with consumers have demonstrated that they value ‘hope, meaning and individualized support’ (p. 589) in addition to the skills of the employment specialist in developing and maintaining

relationships with clients and potential employers [28[■]]. Kern *et al.* [29[■]] explored the feasibility of training consumers employed as peer advocates to provide IPS services. They found that the four trained peer employment specialists obtained a ‘fair’ fidelity rating and a competitive employment placement rate of 33%. Although it is likely feasible based on the findings of this study, there was a small sample and no control group, so further research is needed to determine the effectiveness of peer employment specialists. Taken together, these studies demonstrate the specific job-related skills that agencies should look for in hiring an employment specialist and in providing supervision to IPS staff as a means to maximize employment outcomes.

Other research has provided different perspectives on the effort to boost IPS outcomes. Bond *et al.* [30[■]] tested the ‘occupational matching hypothesis’, which proposes that closer matching of jobs to client preferences increases the rate of placement, the tenure of the job, and job satisfaction, although they found no difference for those clients who were matched vs. nonmatched with their preferences. A randomized trial [31] currently being conducted in Switzerland is investigating the effect of ‘placement budgets’, which involve designating a specific and finite amount of time within which a client is to be placed in a competitive job. A 2006 policy change in Ontario, Canada demonstrated that substituting a fee-for-service model of reimbursement for employment services that incentivized preemployment training and services with an outcomes-based model that reimburses for job placement outcomes encouraged rapid job placement, but raised concerns about the quality of jobs obtained by clients and lack of career development [32]. Key informants including agency staff, consumers, and policy makers involved in the process questioned whether a balance could be achieved between providing some preemployment supports in combination with a rapid job placement approach.

BARRIERS TO INDIVIDUAL PLACEMENT AND SUPPORT IMPLEMENTATION

The updated Schizophrenia Patient Outcomes Research Team recommendations and guidelines of 2009 [33] endorsed supported employment as an evidence-based practice in the treatment of schizophrenia, yet the practice has yet to be widely implemented. According to a Substance Abuse and Mental Health Services Administration report in 2009, roughly 2% of people with SMI in the US public mental health system received IPS services [34]. The developers of the IPS model argue that the primary problem is ‘misaligned funding’ followed by social security regulations and lay out recommendations for addressing them, including the development of a simplified funding system for IPS services, disconnecting health insurance benefits from disability benefits through healthcare reform, and reforming the SSDI benefit system, which creates multiple disincentives for beneficiaries to go back to work [35]. Boardman and Rinaldi [36[■]] go further to cite attitudes of clinicians and society, organizational factors, local contextual factors (i.e., local unemployment rates), and low program fidelity as additional barriers to widespread implementation.

CONCLUSION

Participation in work and school is one of the core elements of recovery. The challenges of implementing IPS and even enhancing its efficacy are thus at the heart of the development of

a recovery oriented system of care. These challenges are complicated by the fact that improving participation in work and school involves economic and social forces that are often excluded from consideration when planning and evaluating healthcare. Individuals experiencing psychiatric disabilities will have diminished chances for recovery if we let those forces impede progress in promoting evidence-based approaches for employment.

REFERENCES AND RECOMMENDED READING

Papers of particular interest, published within the annual period of review, have been highlighted as:

■ of special interest

■ of outstanding interest

1. Drake, RE., Bond, GR., Becker, DR. IPS supported employment: an evidence-based approach to supported employment. New York: Oxford University Press; 2012.
- 2■. Kinoshita Y, Furukawa TA, Kinoshita K, et al. Supported employment for adults with severe mental illness (Review). *Cochrane Database Syst Rev*. 2013; 9:CD008297. Large and rigorous meta-analysis of 14 randomized controlled trials of supported employment for adults with SMI, which lends further evidence to supported employment as an effective intervention for obtaining employment in people with SMI.
- 3■. Drake RE, Frey W, Bond GR, et al. Assisting Social Security Disability Insurance beneficiaries with schizophrenia, bipolar disorder, or major depression in returning to work. *Am J Psychiatry*. 2013; 170:1433–1441. Randomized controlled trial that enrolled SSDI beneficiaries in a multifaceted intervention and examined employment outcomes, as well as other non-vocational outcomes, such as quality of life and utilization of health services, and explored the possibility of graduating beneficiaries from the disability payrolls. [PubMed: 23929355]
4. Wagner EH, Austin BT, Davis C, et al. Improving chronic illness care: translating evidence into action. *Health Aff*. 2001; 20:64–78.
- 5■. Salkever D. Social costs of expanding access to evidence-based supported employment: concepts and interpretive review of evidence. *Psychiatr Serv*. 2013; 64:111–119. Economic policy analysis that examines the financial impact of expanding access to supported employment. [PubMed: 23117344]
6. Frank RG. Supported employment: evidence on economic impacts. *Psychiatr Serv*. 2013; 64:103. [PubMed: 23370619]
7. Burns T, Catty J, Becker T, et al. The effectiveness of supported employment for people with severe mental illness: a randomized controlled trial. *Lancet*. 2007; 370:1146–1152. [PubMed: 17905167]
- 8■. Knapp M, Patel A, Curran C, et al. Supported employment: cost-effectiveness across six European sites. *World Psychiatry*. 2013; 12:60–68. Follow-up study of a large, multicountry randomized controlled trial, which estimates the costs of implementing IPS in different countries and evaluates the potential cost-effectiveness and cost-savings. [PubMed: 23471803]
9. Bond GR, Drake RE, Becker DR. Generalizability of the Individual Placement and Support (IPS) model of supported employment outside the US. *World Psychiatry*. 2012; 11:32–39. [PubMed: 22295007]
10. Hasson H, Andersson M, Bejerholm U. Barriers in implementation of evidence-based practice: supported employment in Swedish context. *J Health Organ Manag*. 2011; 25:332–345. [PubMed: 21845986]
11. van Erp NH, Giesen FB, van Weeghel J, et al. A multisite study of implementing supported employment in the Netherlands. *Psychiatr Serv*. 2007; 58:1421–1426. [PubMed: 17978251]
12. Howard LM, Heslin M, Leese M, et al. Supported employment: randomized controlled trial. *Br J Psychiatry*. 2010; 196:404–411. [PubMed: 20435968]
13. Latimer E. An effective intervention delivered at sub-therapeutic dose becomes an ineffective intervention. *Br J Psychiatry*. 2010; 196:341–342. [PubMed: 20435955]

- 14■. Drake RE, Xie H, Bond GR, et al. Early psychosis and employment. *Schizophr Res.* 2013; 146:111–117. A prospective study of FEP and the importance of employment or education for recovery. [PubMed: 23490762]
15. Killackey EJ, Jackson HJ, Gleeson J, et al. Exciting career opportunity beckons! Early intervention and vocational rehabilitation in first-episode psychosis: employing cautious optimism. *Aust N Z J Psychiatry.* 2006; 40:951–962. [PubMed: 17054563]
16. Killackey E, Jackson HJ, McGorry PD. Vocational intervention in first-episode psychosis: individual placement and support v. treatment as usual. *Br J Psychiatry.* 2008; 193:114–120. [PubMed: 18669993]
- 17■. Baksheev GN, Allott K, Jackson HJ, et al. Predictors of vocational recovery among young people with first-episode psychosis: findings from a randomized controlled trial. *Psychiatr Rehabil J.* 2012; 35:421–427. Secondary analysis of data from a randomized controlled trial of IPS to explore predictors of employment found that only participation in the intervention was significant; no demographic or clinical variables predicted the outcome. [PubMed: 23276234]
18. Manthey TJ, Rap CA, Carlson L, et al. The perceived importance of integrated supported education and employment services. *J Rehabil.* 2012; 78:16–24.
19. Nuechterlein KH, Subotnik KL, Green MF, et al. Neurocognitive predictors of work outcomes in recent-onset schizophrenia. *Schizophr Bull.* 2011; 37(Suppl 2):S33–S44. [PubMed: 21860045]
- 20■. Horan WP, Green MF, DeGroot M, et al. Social cognition in schizophrenia, part 2: 12-month stability and prediction of functional outcome in first-episode patients. *Schizophr Bull.* 2012; 38:865–872. A 1-year prospective study of FEP patients, which demonstrated that better baseline social cognition scores were associated with better work and social functioning over time. [PubMed: 21382881]
- 21■. Allott KA, Cotton SM, Chinnery GL, et al. The relative contribution of neurocognition and social cognition to 6-month vocational outcomes following Individual Placement and Support in first-episode psychosis. *Schizophr Res.* 2013; 150:136–143. Explored neurocognitive and social cognition factors that predicted vocational outcomes in an FEP population and found that some neurocognitive factors but no social cognition factors were predictive at 6 months. [PubMed: 23938175]
22. Drake RE, Bond GR, Rapp C. Explaining the variance within supported employment programs: comment on ‘what predicts supported employment outcomes?’ *Comm Mental Health J.* 2006; 42:315–318.
- 23■. Swanson SJ, Becker DR, Bond GR. Job development guidelines in supported employment. *Psychiatr Rehabil J.* 2013; 36:122–123. Aims to create a framework for job development, as this is an important skillset for the employment specialist in IPS. [PubMed: 23750766]
24. Taylor AC, Bond GR. Employment specialist competencies as predictors of employment outcomes. *Comm Mental Health J.* 2012 Epub ahead of print.
- 25■. Glover CM, Frounfelker RL. Competencies of more and less successful employment specialists. *Comm Mental Health J.* 2013; 49:311–316. Compares the skills of more and less successful employment specialists.
26. Glover CM, Frounfelker RL. Competencies of employment specialists for effective job placement. *Am J Psychiatr Rehabil.* 2011; 14:198–211.
- 27■. Corbiere M, Brouwers E, Lancot N, et al. Employment specialist competencies for supported employment programs. *J Occup Rehabil.* 2013 [Epub ahead of print] Describes the creation of a survey called Behaviors, Attitudes, and Knowledge in Employment Specialists to assess employment specialist competencies.
- 28■. Areberg C, Bjorkman T, Bejerholm U. Experiences of the individual placement and support approach in persons with severe mental illness. *Scand J Caring Sciences.* 2013; 27:589–596. Presents the perspectives of people with mental illness on their experience of individual placement and support, with special emphasis on working with the employment specialist.
- 29■. Kern RS, Zarate R, Glynn SM, et al. A demonstration project involving peers as providers of evidence-based, supported employment services. *Psychiatr Rehabil J.* 2013; 36:99–107. An interesting feasibility study on the use of peers as employment specialists. [PubMed: 23750760]

- 30■. Bond GR, Campbell K, Becker DR. A test of the occupational matching hypothesis for rehabilitation clients with severe mental illness. *J Occup Rehabil*. 2013; 23:261–269. This study explores whether occupational matching to the client's preference changes outcomes, but finds that most clients in supported employment obtain a 'rough match' to their preferences regardless of the vocational services provided. [PubMed: 23124684]
31. Nordt C, Brantschen E, Kawohl W, et al. 'Placement budgets' for supported employment: improving competitive employment for people with mental illness – study protocol of a multicentre randomized controlled trial. *BMC Psychiatry*. 2012; 12:165. [PubMed: 23034095]
32. Gewurtz RE, Cott C, Rush B, et al. The shift to rapid job placement for people living with mental illness: an analysis of the consequences. *Psychiatr Rehabil J*. 2012; 35:428–434. [PubMed: 23276235]
33. Kreyebuhl J, Buchanan RW, Dickerson FB, et al. The Schizophrenia Patient Outcomes Research Team (PORT): updated treatment recommendations 2009. *Schizophr Bull*. 2010; 36:94–103. [PubMed: 19955388]
34. SAMHSA. [Accessed 4 November 2013] 2009. <http://www.samhsa.gov/dataoutcomes/urs/urs2009.aspx>
35. Bond GR, Drake RE. Making the case for IPS supported employment. *Adm Policy Ment Health*. 2012 Epub ahead of print.
- 36■. Boardman J, Rinaldi M. Difficulties in implementing supported employment for people with severe mental health problems. *Br J Psychiatry*. 2013; 203:247–249. A commentary on barriers to implementation of IPS that includes clinician attitudes in addition to contextual and organizational factors. [PubMed: 24085736]

KEY POINTS

- IPS has been shown to be effective in many different countries, despite barriers to implementation.
- IPS is cost-effective when compared with traditional vocational rehabilitation services.
- In the FEP population, research suggests that supported employment and supported education are effective in recovery.
- Focusing on the skills of the employment specialist may be an effective way for agencies to increase employment outcomes.