



# IPS Research Update Annual IPS Meeting USA

May 2025

**Lars de Winter**

# Topics to discuss

- General evidence base for IPS: Quick overview
- IPS for multiple target groups: extending the reach
- Additional interventions supporting IPS
- Cost-effectiveness
- Fidelity and quality of the IPS model: model adaptations versus quality standards
- Summing up and future directions



## Quick overview: RCTs

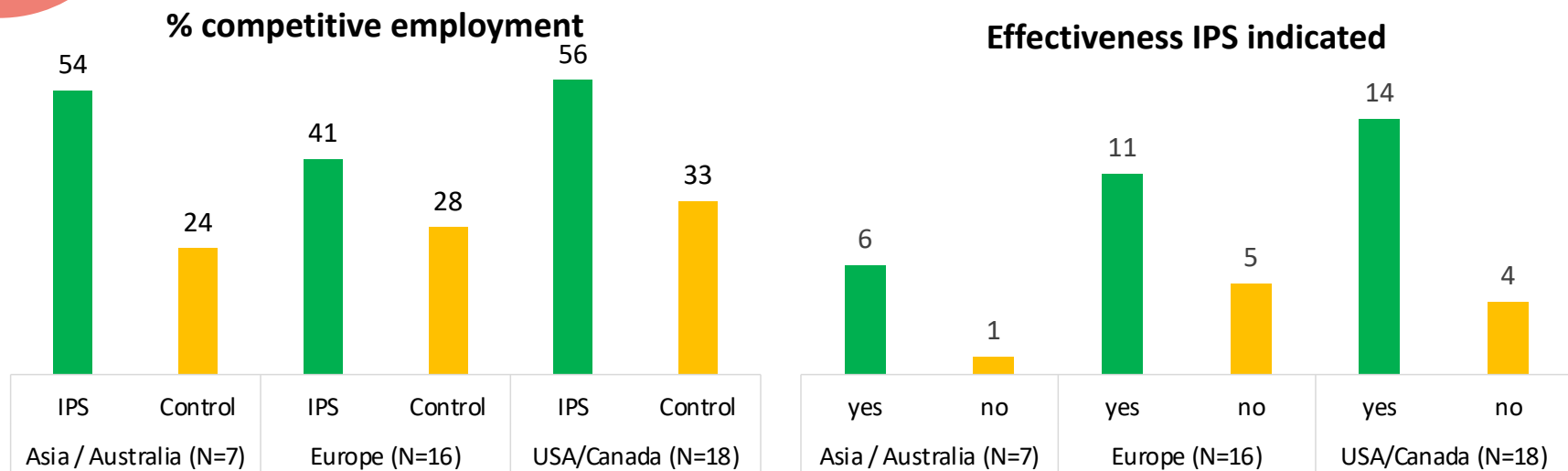
### Disclaimers

- ❑ Only focused on RCTs
- ❑ Comparing IPS (also in 'adapted' form) with any control group
- ❑ Studies investigated in multiple articles count as one
- ❑ Any target group is taken into consideration
- ❑ Outcome: only competitive employment rate

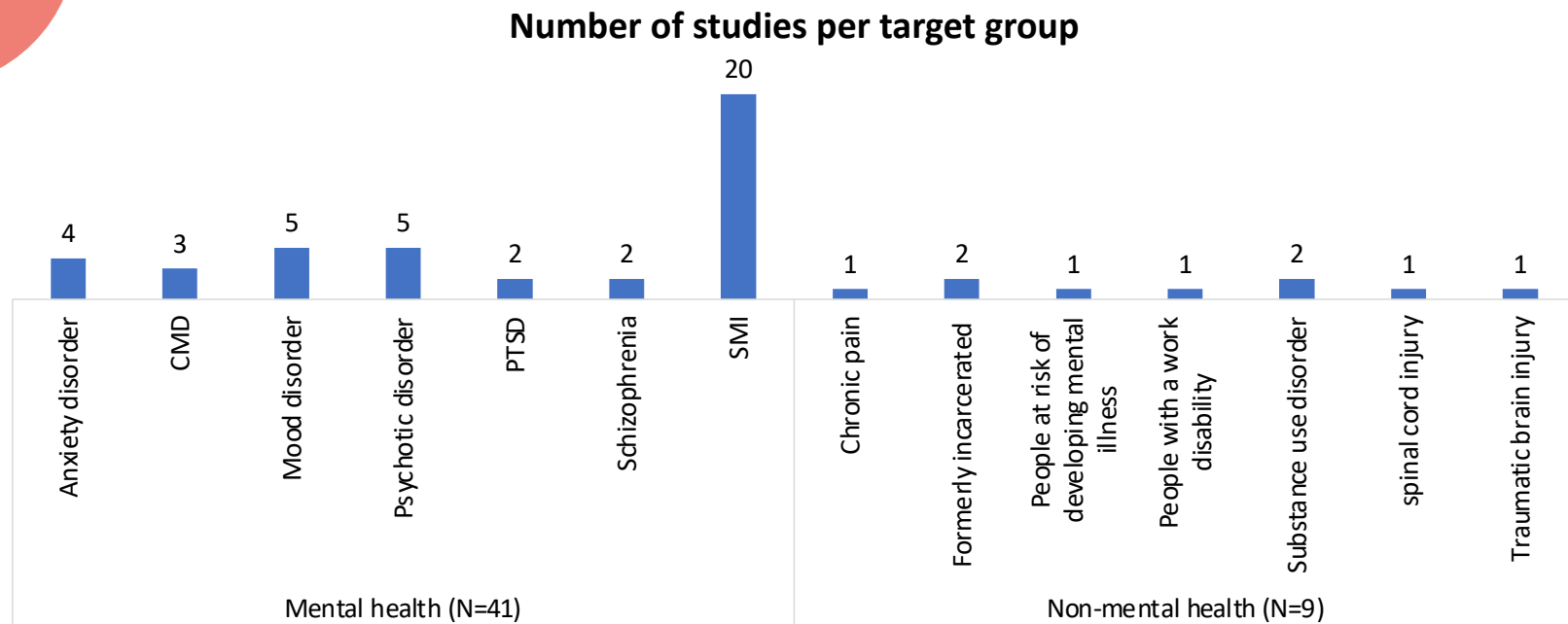
### Overview

<b>41</b>	RCTs executed
<b>4,954</b>	Clients received IPS in studies
<b>16</b>	Different countries of publication
<b>31</b>	Studies found significant better outcomes in IPS compared with control group
<b>46.9%</b>	Average employment rate IPS group in RCTs
<b>14</b>	Different target groups investigated

## Quick overview: RCTs per continent



## Quick overview: RCTs per target group



# IPS for multiple target groups

- ❑ Meta-analysis with 32 RCTs
- ❑ Only diagnosed mental health population
- ❑ Effectiveness for IPS in different target group based on:
  - ❑ Diagnosis
  - ❑ Clinical, functional and personal patient characteristics
- ❑ Outcomes:
  - ❑ Competitive employment rate
  - ❑ Job duration
  - ❑ Wages

*Epidemiology and Psychiatric Sciences*

cambridge.org/eps

## Original Article

**Cite this article:** de Winter L, Couwenbergh C, van Weeghel J, Sanches S, Michon H, Bond GR (2022). Who benefits from individual placement and support? A meta-analysis. *Epidemiology and Psychiatric Sciences* 31, e90, 1–24. <https://doi.org/10.1017/S2045796022000300>

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**Key words:**  
Mental health; randomised controlled trials; rehabilitation; systematic reviews

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## Who benefits from individual placement and support? A meta-analysis

Lars de Winter<sup>1</sup>, Chrisje Couwenbergh<sup>1</sup>, Jaap van Weeghel<sup>1</sup>, Sarita Sanches<sup>1</sup>, Harry Michon<sup>2</sup> and Gary R. Bond<sup>3</sup>

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### Abstract

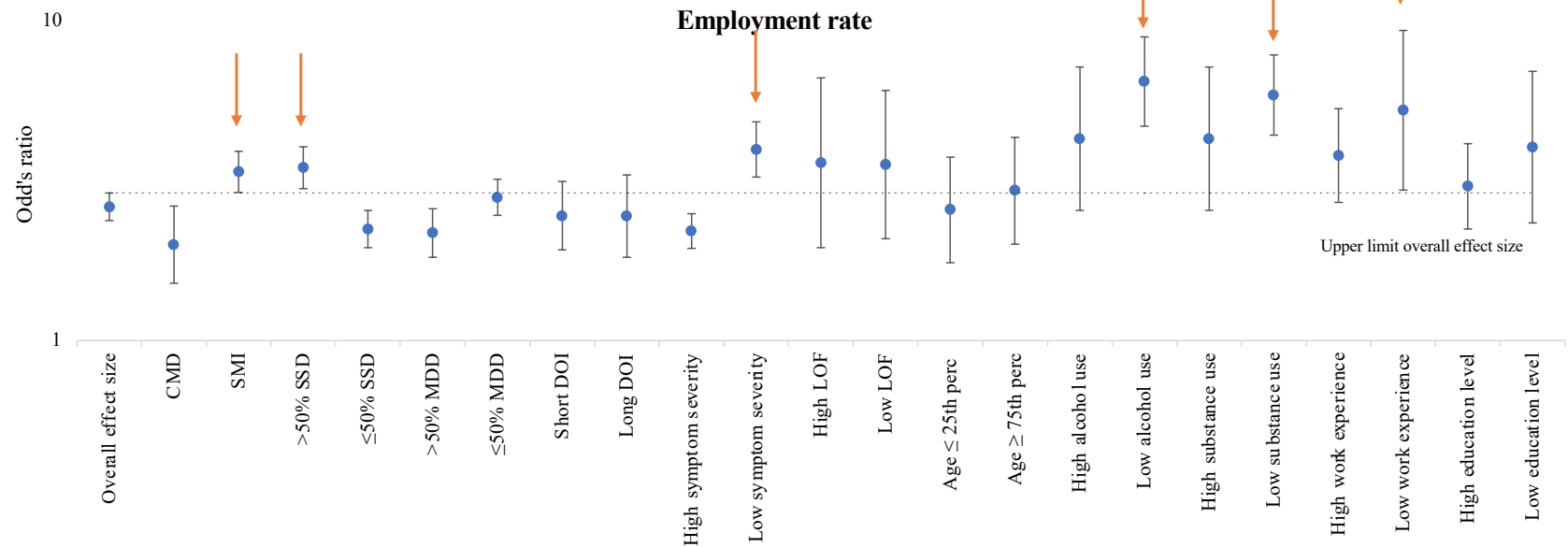
**Aims.** Individual placement and support (IPS) is an evidence-based service model to support people with mental disorders in obtaining and sustaining competitive employment. IPS is increasingly offered to a broad variety of service users. In this meta-analysis we analysed the relative effectiveness of IPS for different subgroups of service users both based on the diagnosis and defined by a range of clinical, functional and personal characteristics.

**Methods.** We included randomised controlled trials that evaluated IPS for service users diagnosed with any mental disorder. We examined effect sizes for the between-group differences at follow-up for three outcome measures (employment rate, job duration and wages), controlling for methodological confounders (type of control group, follow-up duration and geographic region). Using sensitivity analyses of subgroup differences, we analysed moderating effects of the following diagnostic, clinical, functional and personal characteristics: severe mental illness (SMI), common mental disorders (CMD), schizophrenia spectrum disorders, mood disorders, duration of illness, the severity of symptoms, level of functioning, age, comorbid alcohol and substance use, education level and employment history.

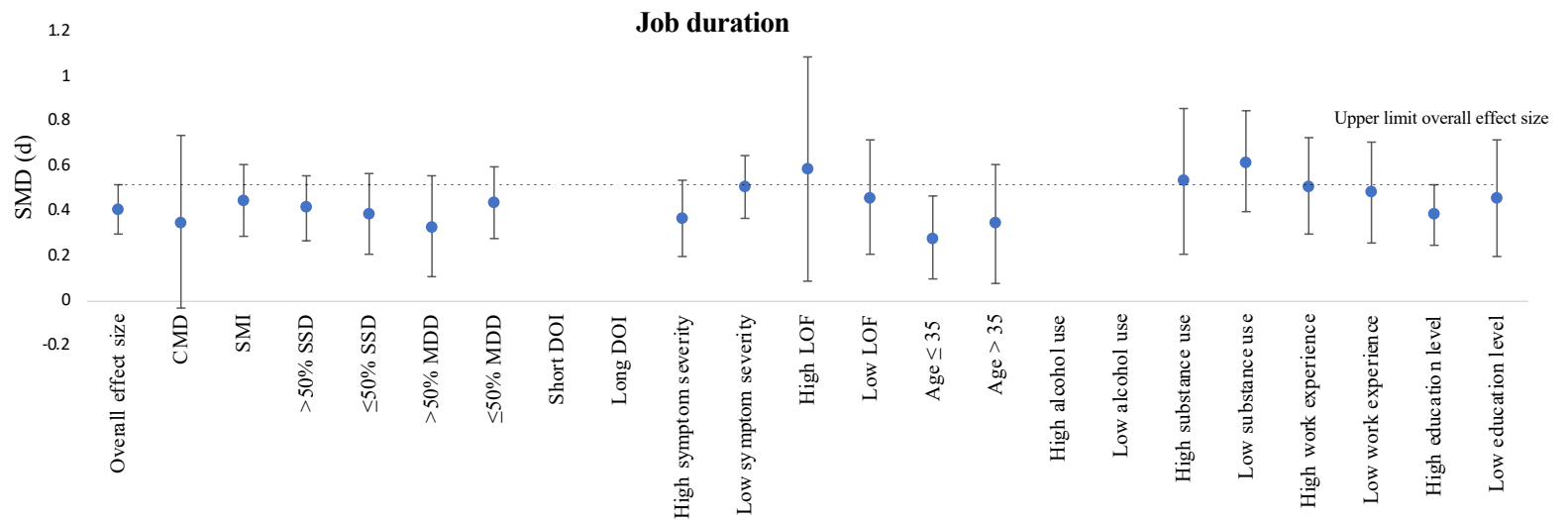
**Results.** IPS is effective in improving employment outcomes compared to the control group in all subgroups, regardless of any methodological confounder. However, IPS was relatively more effective for service users with SMIs, schizophrenia spectrum disorders and a low symptom severity. Although IPS was still effective for people with CMD and with major depressive disorder, it was relatively less effective for these subgroups. IPS was equally effective after both a short and a long follow-up period. However, we found small, but clinically not meaningful, differences in effectiveness of IPS between active and passive control groups. Finally, IPS was relatively less effective in European studies compared to non-European studies, which could be explained by a potential benefits trap in high welfare countries.

**Conclusions.** IPS is effective for all different subgroups, regardless of diagnostic, clinical, functional and personal characteristics. However, there might be a risk of false-positive subgroup outcomes and results should be handled with caution. Future research should focus on whether, and if so, how the IPS model should be adapted to better meet the vocational needs of people with CMD and higher symptom severity.

# IPS for multiple target groups



# IPS for multiple target groups



# IPS for multiple target groups

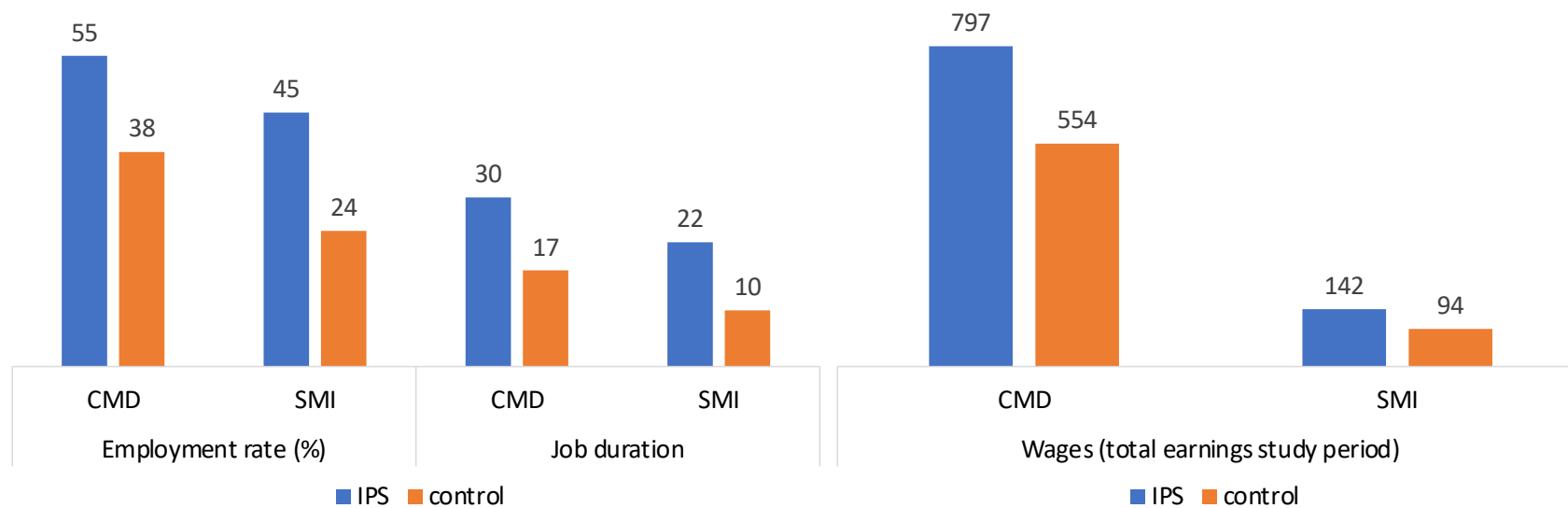




## IPS for multiple target groups

- ❑ IPS was more effective, regarding employment rate, for people with SMI and psychotic disorders than for people with CMD and depression.
- ❑ Other patient characteristics that profit more from IPS: low symptom severity, low level of substance use and low work experience
- ❑ European studies showed less indications of effectiveness compared to studies published in other continents. Most plausible explanation: benefits trap.

## IPS necessary for CMD?



# IPS for multiple target groups: non-mental health

- Systematic review for patients with no SMI
- Two main target groups with no mental health problems investigated:

**Substance use disorder:** 2 studies; both significant more favorable results for IPS

Employment rate: 46-50% IPS vs. 5-21% in control group.

**Spinal cord injury:** 1 study; significantly more favorable outcomes.

Employment rate 31% IPS vs. 11% control group

## Expanding Individual Placement and Support to Populations With Conditions and Disorders Other Than Serious Mental Illness

Gary R. Bond, Ph.D., Robert E. Drake, M.D., Ph.D., Jacqueline A. Pogue, M.A.

**Objective:** A systematic review of studies of individual placement and support (IPS) for populations other than those with serious mental illness was conducted.

**Methods:** The authors searched three electronic databases (PubMed, Web of Science, and Scopus) for studies of IPS and modified IPS. Eligibility criteria for the systematic review included randomized controlled trials with prospective data collection on competitive employment rate and at least 10 study participants from a well-defined population other than people with serious mental illness. Results were compiled for competitive employment rates, IPS fidelity, and other outcomes.

**Results:** Three clinical groups other than people with serious mental illness have been studied: people with psychiatric disorders other than serious mental illness, people with substance use disorders, and people with musculoskeletal or neurological disorders. Nine controlled trials with a total of 2,902 participants included six trials with people who had psychiatric disorders other than serious mental illness, two with people who had substance use disorders, and one with

people who had spinal cord injuries. In eight studies, results for competitive employment rates significantly favored IPS. Meta-analysis yielded an overall weighted odds ratio of 2.23 (95% confidence interval=1.53–3.24,  $p<.001$ ). Findings for other employment outcomes also favored IPS, but findings on symptom reduction and quality of life were inconsistent. The strongest (and only replicated) findings were for veterans with posttraumatic stress disorder (PTSD). Methodological limitations included small samples, major modifications to IPS fidelity, and short follow-up periods.

**Conclusions:** IPS, often with modifications, is a promising employment intervention for several populations in addition to people with serious mental illnesses. The strongest evidence pertains to veterans with PTSD. IPS should be offered to these veterans. Research on other populations, including people with anxiety, depression, substance use disorder, musculoskeletal or neurological conditions, or pain syndromes, needs development, amplification, and replication.

*Psychiatric Services* 2019; 70:488–498; doi: 10.1176/appi.ps.201800464

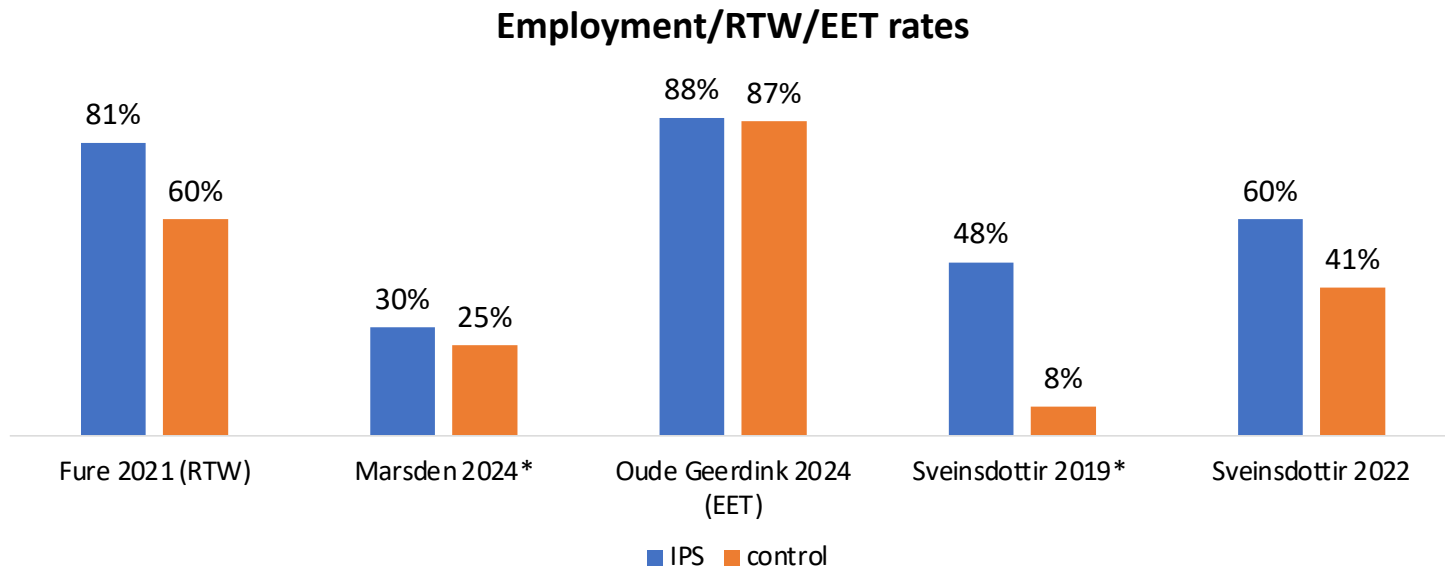


## IPS for multiple target groups: non-mental health

### **Other, more recent RCTs not included in Bond 2019:**

- ❑ Fure et al (2021): Traumatic brain injury
- ❑ Marsden et al (2024): substance use disorder
- ❑ Oude Geerdink et al (2024): People with work disabilities outside of mental health care
- ❑ Sveinsdottir et al (2022): Chronic pain
- ❑ Sveinsdottir et al (2019): People at risk of developing mental disorders

## IPS for multiple target groups: non-mental health



## IPS for multiple target groups: conclusions

- ❑ IPS has the biggest benefits for people with SMI in long-term mental healthcare
- ❑ People with more common mental disorders (e.g., anxiety, depression) in shorter mental healthcare also profit from IPS but biggest added values are in sustainability of work (e.g., salaries and job duration)
- ❑ For people with 'non-mental health' problems IPS is often provided in adapted forms and have mixed indications of effectiveness compared with other types of SE
- ❑ IPS has more added value for people who are clinically stable and a longer distance to the labor market

# IPS extended with additional interventions

- Why adding interventions to IPS?
  - Optimizing results in finding a new job
  - Additional support to help people sustain employment
- Types of additional interventions to be discussed:
  - Cognitive remediation
  - Work-focused CBT
  - Social skills training
  - Virtual Reality
  - Conceal or Reveal (CORAL)



# Cognitive remediation

- Cognitive deficits are a barrier for:
  - Finding and maintaining work (McGurk & Mueser, 2004)
  - Response to rehabilitation interventions (Tsang et al., 2010)
- Cognitive remediation provides a key solution for these barriers
- Cognitive remediation has different approaches, including combinations of:
  - Repetitive exercise (Drill & practice)
  - Cognitive compensatory strategies (strategy-based)
  - CR interventions provided integrated with psychiatric rehabilitation



# Cognitive remediation: evidence-base

- ❑ Multiple studies focused on CR + PR (IPS)
- ❑ Adding CR to IPS leads to better vocational functioning than while providing IPS alone
- ❑ Critical factors for succes:
  - ❑ Integrating repetitive exercise with strategy-based approaches (Drill & Strategy)
  - ❑ Integrating the goals of CR with IPS

The effect of rehabilitation combined with cognitive remediation on functioning in persons with severe mental illness: systematic review and meta-analysis

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<sup>1</sup>Phrenos Center of Expertise, Utrecht, the Netherlands; <sup>2</sup>Timbos Institute, Utrecht, the Netherlands; <sup>3</sup>Tilburg School of Social and Behavioral Sciences, Tilburg, the Netherlands; <sup>4</sup>University of Groningen, Groningen, the Netherlands and <sup>5</sup>University Medical Center Groningen, Groningen, the Netherlands

## Abstract

**Background.** Psychiatric rehabilitation (PR) can improve functioning in people with severe mental illness (SMI), but outcomes are still suboptimal. Cognitive impairments have severe implications for functioning and might reduce the effects of PR. It has been demonstrated that performance in cognitive tests can be improved by cognitive remediation (CR). However, there is no consistent evidence that CR as a stand-alone intervention leads to improvements in real-life functioning. The present study investigated whether a combination of PR and CR enhances the effect of a stand-alone PR or CR intervention on separate domains of functioning.

**Method.** A meta-analysis of randomized controlled trials of PR combined with CR in people with SMI was conducted, reporting on functioning outcomes. A multivariate meta-regression analysis was carried out to evaluate moderator effects.

**Results.** The meta-analysis included 23 studies with 1819 patients. Enhancing PR with CR had significant beneficial effects on vocational outcomes (e.g. employment rate: SMD = 0.41), and social skills (SMD = 0.24). No significant effects were found on relationships and outcomes of community functioning. Effects on vocational outcomes were moderated by integration of treatment.

## Article

### Cognitive Training for Supported Employment: 2-3 Year Outcomes of a Randomized Controlled Trial

Susan R. McGurk, Ph.D.

Kim T. Mueser, Ph.D.

Karin Feldman, M.A.

Rosemarie Wolfe, M.S.

Alysia Pascaris, M.S., M.P.A.

**Objective:** To address cognitive impairments that limit the effectiveness of supported employment services for patients with schizophrenia, a cognitive training program, the Thinking Skills for Work Program, was developed and integrated into supported employment services.

**Method:** Patients with severe mental illness (N=44) and prior histories of job failures who were enrolled in supported employment programs at two sites in New York City were randomly assigned to receive either supported employment alone or supported employment with cognitive training. Measures at baseline and 3 months included a brief cognitive and symptom assessment. Work outcomes were tracked for 2-3 years.

**Results:** Patients in the supported employment with cognitive training program demonstrated significantly greater improvements at 3 months in cognitive functioning, depression, and autistic pre-occupation. Over 2-3 years, patients in the supported employment with cognitive training program were more likely to work, held more jobs, worked more weeks, worked more hours, and earned more wages than patients in the program offering supported employment alone.

**Conclusions:** The findings support the feasibility of integrating cognitive rehabilitation into supported employment programs and suggest that more research is warranted to evaluate the effects of the Thinking Skills for Work Program.

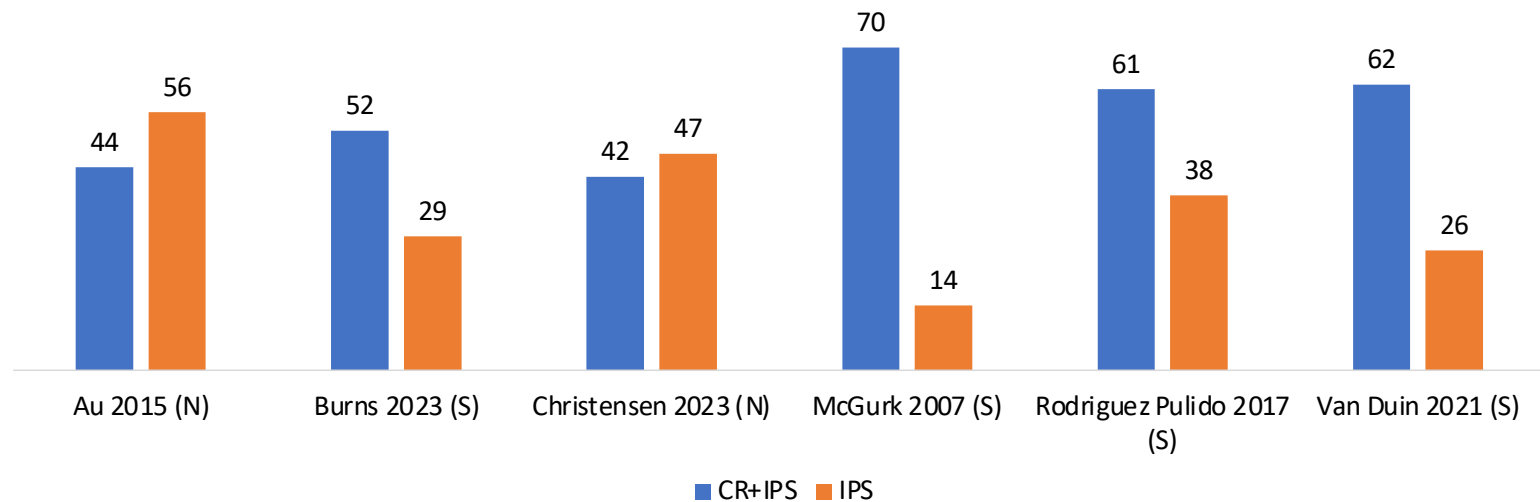
(Am J Psychiatry 2007; 164:437-441)



kenniscentrum  
phrenos

# Cognitive remediation: evidence-base

Employment rate CR+IPS studies



# Work-focused cognitive-behavioral therapy

- Work-focused CBT approach:
  - Handling challenging situations on the workplace
  - Redefining unhelpful thoughts related to work
  - Coping with mental health problems at work
- Three studies (Lystad et al., 2018; Reme et al., 2015; Schneider et al., 2016)
- CBT+IPS had significantly better results in:
  - Maintaining work
  - Sustainable employment
- Biggest benefits for people with a long distance to the labour market



ORIGINAL ARTICLE

Work-focused cognitive-behavioural therapy and individual job support to increase work participation in common mental disorders: a randomised controlled multicentre trial

Silje Endresen Reme,<sup>1</sup> Astrid Louise Grasdal,<sup>2</sup> Camilla Løvli, <sup>1,4</sup> Stein Atle Lie,<sup>1</sup> Simon Øverland<sup>1,4</sup>

► Additional material is published online only. To view please visit the journal online (<http://dx.doi.org/10.1136/med-2014-102700>).

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## ABSTRACT

**Objectives** Common mental disorders (CMDs) are a major cause of rising disability benefit expenditures. We urgently need evidence on programmes that can increase work participation in CMDs. The aim of this study was to evaluate the effectiveness of work-focused cognitive-behavioural therapy (CBT) and individual job support for people struggling with work participation due to CMDs.

**Methods** A randomised controlled multicentre trial (RCT) including 1193 participants was conducted. Participants were on sick leave, at risk of going on sick leave or on long-term benefits. The intervention integrated work-focused CBT with individual job support. The control group received usual care. The main outcome was objectively ascertained work participation at 12 months follow-up, with changes in mental health and health-related quality of life as secondary outcomes.

**Results** A larger proportion of participants in the

## What this paper adds

- Common mental disorders are a major cause of rising disability benefit expenditures.
- We urgently need evidence on programmes that can increase work participation in common mental disorders.
- An integrated model of work-focused cognitive-behavioural therapy and individual job support, emphasising early re-entry, was more effective than usual care in increasing or maintaining work participation for people with common mental disorders.
- The effects were profound for people on long-term benefits.

# Social skills training

- Work-related social skills training:
  - Improvement social skills on the work floor
  - Practical skills training in finding work as well (e.g., job interview training)
- Two studies (Christensen et al., 2019; Tsang et al., 2009)
- Tsang et al (2019), significant effectiveness of IPS+ SST in:
  - Employment rate
  - Job duration
- Christensen et al (2019): no significant differences compared with IPS as stand-alone intervention
- Mixed results of added value social skills training



# Virtual Reality

- ❑ IPS extended with Virtual Reality job interview training
- ❑ 1 RCT and 2 feasibility studies executed

## Results:

- ❑ IPS+VR group had no larger employment rate than the IPS only group
- ❑ IPS+VR group found competitive employment faster than IPS group

## An RCT of Virtual Reality Job Interview Training for Individuals With Serious Mental Illness in IPS Supported Employment

Matthew J. Smith, Ph.D., L.C.S.W., Justin D. Smith, Ph.D., Shannon Blajeski, Ph.D., M.S.W., Brittany Ross, M.A., Neil Jordan, Ph.D., Morris D. Bell, Ph.D., Susan R. McGurk, Ph.D., Kim T. Mueser, Ph.D., Jane K. Burke-Miller, Ph.D., Eugene A. Oulvey, Ph.D., Michael F. Fleming, M.D., M.P.H., Karley Nelson, M.A., Adrienne Brown, M.S., John Prestipino, B.S., Nicole J. Pashka, M.S., C.R.C., Lisa A. Razzano, Ph.D., C.P.R.P.

**Objective:** Virtual Reality Job Interview Training (VR-JIT) is a computerized interview simulator with efficacy at enhancing interview skills and employment outcomes. A randomized controlled trial assessed VR-JIT effectiveness for participants in individual placement and support (IPS), in which approximately 55% of individuals with serious mental illness obtain employment.

**Methods:** Ninety participants with serious mental illness were randomly assigned to IPS+VR-JIT (N=54) or IPS as usual (N=36), completing pretest-posttest assessments and an employment evaluation at 9 months. Intent-to-treat chi-square analysis, multivariable logistic regression, Cox proportional hazards models, and mixed-effects linear regressions were conducted. Fifty-one percent were IPS nonresponders (i.e., no employment within the first 90 days of IPS).

**Results:** IPS+VR-JIT participants did not have significantly higher employment rates, compared with IPS-as-usual participants (43% versus 28%). IPS nonresponders (N=46) in the

IPS+VR-JIT group had greater odds of obtaining employment (odds ratio [OR]=5.82,  $p=0.014$ ) and shorter time to employment (hazard ratio=2.70,  $p=0.044$ ) compared with IPS nonresponders in the IPS-as-usual group. Intent-to-treat mixed-effects linear analyses indicated that IPS+VR-JIT, compared with IPS as usual, significantly improved interview skills ( $p=0.006$ ), interview confidence ( $p=0.013$ ), and interview anxiety ( $p=0.019$ ).

**Conclusions:** VR-JIT's potential benefits (increased employment in a shorter time) appeared to be specific to IPS nonresponders, whereas employment outcomes for recent IPS enrollees were not affected. VR-JIT could be a valuable resource for employment specialists to support IPS nonresponders, because 47% of participants engaged in mock interview training with their specialist. Future research should focus on evaluating the effectiveness and implementation of VR-JIT among IPS nonresponders.

*Psychiatric Services 2022; 73:1027–1038; doi: 10.1176/appi.ps.20210516*

# Conceal or Reveal (CORAL)

- ❑ Conceal or Reveal (CORAL)
  - ❑ Decision-aid that support people with mental illness in how to disclose about their mental illness to employers
- ❑ Developed in the UK (Henderson et al., 2013)
- ❑ 1 RCT in the Netherlands (Janssens et al (2024):
  - ❑ CORAL+SE vs SE
  - ❑ Significant better employment rate outcomes
  - ❑ Significant better outcomes in retaining employment

## Effectiveness of a Stigma Awareness Intervention on Reemployment of People with Mental Health Issues/Mental Illness: A Cluster Randomised Controlled Trial

K. M. E. Janssens<sup>1</sup> · M. C. W. Joosen<sup>1</sup> · C. Henderson<sup>2</sup> · M. Bakker<sup>3</sup> · W. den Hollander<sup>4</sup> · J. van Weeghel<sup>1,5</sup> · E. P. M. Brouwers<sup>1</sup>

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### Abstract

**Purpose** A barrier for reemployment of people with mental health issues/mental illness (MHI) is workplace stigma and discrimination. In this RCT the effectiveness of a stigma-awareness intervention addressing finding work, retaining work and decisional stress were evaluated.

**Methods** A cluster RCT was conducted in 8 Dutch municipal practices. Randomisation took place at practice level. Participants were unemployed people with MHI, receiving social benefits. The intervention consisted of a decision aid for workplace disclosure for participants and a 2×3 h stigma-awareness training for their employment specialists. Primary outcomes were measured at baseline, 3-, 6- and 12-months. Multilevel analyses, containing random intercepts of participants nested in organizations, were conducted to analyse the effects of the intervention.

**Results** Participants (N = 153) were randomized to an experimental (n = 76) or control group (n = 77). At six months, significantly more participants of the experimental group (51%) had found work compared to the control group (26%). At twelve months, significantly more participants of the experimental group (49%) had retained work compared to the control group (23%). Intention-to-treat analyses showed that randomization to the experimental group was associated with finding (OR(95%CI) = 7.78(1.33–45.53), p = 0.02) and retaining (OR(95%CI) = 12.15(2.81–52.63), p < 0.01) work more often at twelve months. Analyses showed that the experimental and control group did not differ in decisional stress.

**Conclusions** Our stigma awareness intervention was effective for finding and retaining work. As the percentage of people who found and retained work almost doubled, this suggests that on a societal level, a vast number of unemployed people could be reemployed with a relatively simple intervention.

**Trial Registration** The study was retrospectively registered at the Dutch Trial Register (TRN: NL7798, date: 04-06-2019).

**Keywords** Mental health issues · Mental illness · Stigma · Discrimination · Employment rates

## Conclusions adding additional intervention

- ❑ Cognitive remediation most elaborately investigated
- ❑ In most studies beneficial effects of CR are indicated when integrated well with goals IPS
- ❑ Work-focused CBT interventions beneficial, mostly for people with long distance to labour market
- ❑ Virtual reality and social skills training showed no consistent beneficial effects in combination with IPS for finding or maintaining competitive employment
- ❑ CORAL is not broadly investigated but showed some first hopeful indications of added value

# Cost-effectiveness

- Cost-effectiveness: balance between costs of the intervention and both financial and societal gains as a consequence of the intervention on the long run
- What are the societal gains of IPS regarding:
  - Healthcare costs
  - Social benefits costs
  - Health, quality of life and vocational functioning of service users
- Insights are very important for national policy makers and for structural funding for IPS in the future

# Cost-effectiveness

- ❑ Two main cost-effectiveness overviews:
  - ❑ Bond (2023) → worldwide
  - ❑ Knapp et al (2013) → EQOLISE Europe

## Summary:

- ❑ 10 studies in total considered
- ❑ 6 studies showed less costs of IPS, 2 equal costs and 2 more costs than control group
- ❑ All studies: better employment outcomes
- ❑ In Europe: lower healthcare and social benefits cost in 5 out of 6 countries (only not for the Netherlands)



### Key Points

- Policymakers, program administrators, service providers, and many others are interested in the costs and benefits of Individual Placement and Support (IPS), an evidence-based model of supported employment that improves competitive integrated employment (CIE) for people with mental health conditions.
- The central question is whether the benefits of IPS are worth its costs. The most useful cost studies compare the costs and benefits of IPS to an

two studies,<sup>2,9</sup> and greater in two studies.<sup>3,12</sup> All ten of the economic analyses showed significantly better employment outcomes for IPS than the comparison group.

• The economic analyses reviewed were primarily short-term studies of 12 to 18 months in duration. Long-term studies (that is, studies with follow-up periods of five years or more) suggest that the benefits of IPS persist and even increase over time.<sup>3,12,17</sup> Therefore, the long-term benefits from IPS may exceed those found in the existing cost-effectiveness studies.

### RESEARCH REPORT

## Supported employment: cost-effectiveness across six European sites

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A high proportion of people with severe mental health problems are unemployed but would like to work. Individual Placement and Support (IPS) offers a promising approach to establishing people in paid employment. In a randomized controlled trial across six European countries, we investigated the economic case for IPS for people with severe mental health problems compared to standard vocational rehabilitation. Individuals (n=312) were randomized to receive either IPS or standard vocational services and followed for 18 months. Service use and outcome data were collected. Cost-effectiveness analysis was conducted with two primary outcomes: additional days worked in competitive settings and additional percentage of individuals who worked at least 1 day. Analyses distinguished country effects. A partial cost-benefit analysis was also conducted. IPS produced better outcomes than alternative vocational services at lower cost overall to the health and social care systems. This pattern also held in disaggregated analyses for five of the six European sites. The inclusion of imputed values for missing cost data supported these findings. IPS would be viewed as more cost-effective than standard vocational services. Further analysis demonstrated cost-benefit arguments for IPS. Compared to standard vocational rehabilitation services, IPS is, therefore, probably cost-saving and almost certainly more cost-effective as a way to help people with severe mental health problems into competitive employment.

**Key words:** Supported employment, cost-effectiveness, severe mental illness, economics, work

(World Psychiatry 2013;12:60-68)

# Cost-effectiveness

Costs of IPS are mostly lower and outcomes are better than control group

## However:

- Healthcare costs are mostly higher in IPS than in control group
- Benefits regarding social benefits mostly clearly visible on the longer run

## Therefore:

- Quality of the model also comes with a price
- Studies with more long-term outcomes are necessary to investigate the cost-benefits of IPS on the long run

# Fidelity, quality and adaptations

- Fidelity is a critical element of the success of IPS
- Higher fidelity scores are associated with:
  - Better program-level employment rates (Bond et al., 2012; De Winter et al., 2020; Locket et al., 2016; Kim et al., 2015)
  - Employment duration and better disclosure about mental health problems (Yamaguchi et al., 2022)
- Also 'predictive fidelity' established:
  - Programs that improve in fidelity, also improve in program-level outcomes
  - Regardless of the fidelity score

Social Psychiatry and Psychiatric Epidemiology (2020) 55:1607–1617  
<https://doi.org/10.1007/s00127-020-01890-0>

ORIGINAL PAPER



**Fidelity and IPS: does quality of implementation predict vocational outcomes over time for organizations treating persons with severe mental illness in the Netherlands?**

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## Abstract

**Purpose** Individual placement and support (IPS) is an evidence-based supported employment intervention. Quality of IPS implementation is assessed using a validated fidelity scale. Previous studies found a positive association between fidelity and employment outcomes at a single time-point. This study examines the longitudinal associations between IPS fidelity scores and employment outcomes.

**Methods** We examined fidelity and employment outcome data for 27 IPS programs in the Netherlands providing IPS. These programs received at least one fidelity assessment and reported quarterly employment outcomes for at least one year to a central registry between 2014 and 2019. We first examined changes over time for fidelity and employment outcome. Then we analyzed the longitudinal associations between the quarterly employment outcomes and the IPS fidelity assessments on multiple time-points using a mixed-model analysis for the 17 programs with at least two fidelity assessments.

**Results** Both IPS fidelity and employment outcomes improved over time, with the largest improvement in employment outcomes achieved after 18 months of implementation. We found a significant positive longitudinal association between IPS fidelity and employment.

**Conclusions** Improvement of fidelity is associated with improvement of employment outcomes over time. Future research should be focused on the improvement of specific elements of IPS implementation and their influence on employment outcomes.

**Predictive Association of Low- and High-Fidelity Supported Employment Programs with Multiple Outcomes in a Real-World Setting: A Prospective Longitudinal Multi-site Study**

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## Abstract

**Purpose** The individual placement and support (IPS) model of supported employment is a leading evidence-based practice in community mental health services. In Japan, individualized supported employment that is highly informed by the philosophy of the IPS model has been implemented. While there is a body of evidence demonstrating the association between program fidelity and the proportion of participants gaining competitive employment, the association between fidelity and a wider set of vocational and individual outcomes has received limited investigation. This study aimed to assess whether high-fidelity individualized supported employment programs were superior to low-fidelity programs in terms of vocational outcomes, preferred job acquisition, and patient-reported outcome measures (PROMs).

**Methods** A prospective longitudinal study with 24-month follow-up analyzed 16 individualized supported employment programs. The Japanese version of the individualized Supported Employment Fidelity scale (ISEF) was used to assess the structural quality of supported employment programs (scores: low-fidelity program,  $\leq 90$ ; high-fidelity program,  $\geq 91$ ). Job acquisition, work tenure, work earnings, job preference matching (e.g., occupation type, salary, and illness disclosure), and PROMs such as the INSPIRE and WHO-Five Well-being index were compared between groups.

**Results** There were 75 and 127 participants in the low-fidelity group ( $k=6$ ) and high-fidelity group ( $k=10$ ), respectively. The high-fidelity group demonstrated better vocational outcomes than the low-fidelity group, i.e., higher competitive job acquisition (71.7% versus 38.7%, respectively, adjusted odds ratio (aOR)=3.6,  $p=0.002$ ), longer work tenure (adjusted mean difference=140.8,  $p<0.001$ ), and better match for illness disclosure preference (92.6% versus 68.0%, respectively, aOR=5.9,  $p=0.003$ ). However, we found no differences between groups in other preference matches or PROM outcomes.

**Conclusion** High-fidelity individualized supported employment programs resulted in good vocational outcomes in a real-world setting. However, enhancing service quality to increase desired job acquisition and improve PROMs will be important in the future.

**Clinical Trial Registration** UMIN000025648

**Keywords** Evidence-based practices · Fidelity · Individual placement and support · Job preference · Patient-reported outcome measures · Supported employment



# Fidelity, quality and adaptations

Fidelity also has some criticism:

- ❑ Discussion between formative and summative use of fidelity
- ❑ Formative: Adapting implementation to the practical reality
- ❑ Summative: Adapting practice to the model standards

- ❑ Two developments are currently central:

## 1. Self-reported fidelity

- ❑ First studies (Waghorn et al., 2019; Yamaguchi et al., 2024) showed some indications of validity of this approach

## 2. Model adaptations to new target groups

- ❑ Fitting IPS to setting and context new target groups

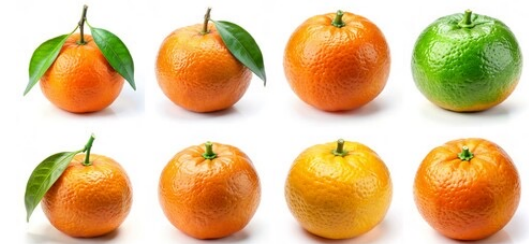
### Fidelity Scale: From Black Box to Holy Grail

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#### Abstract

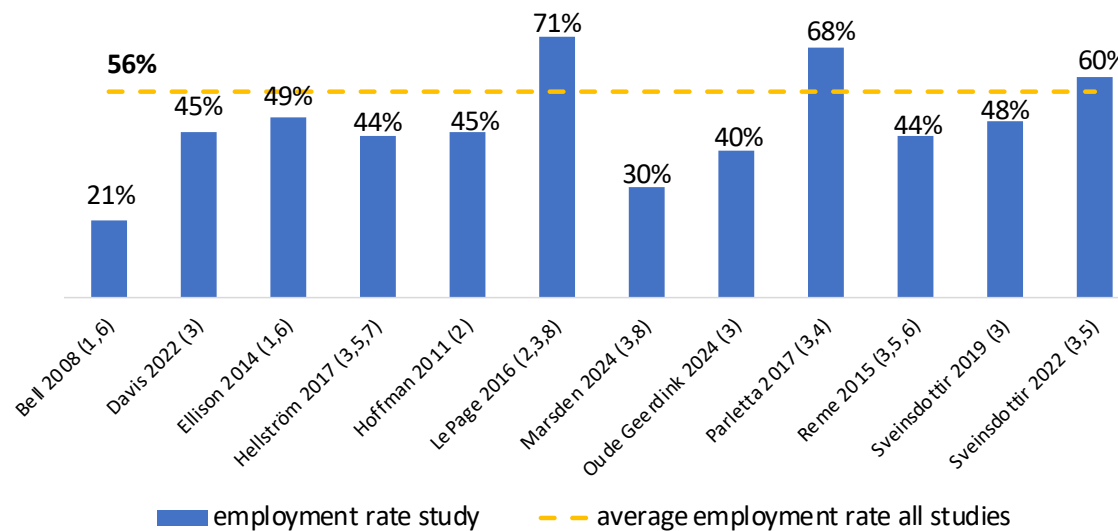
Fidelity scales are indispensable in the pursuit of evidence-based mental healthcare. Without fidelity checks, treatment remains a mysterious black box. The aim of this article is to comment on the studies in this special section, and to discuss some general issues with regard to fidelity assessment. Despite all of their supposed benefits, resistance to fidelity scales persists among mental health practitioners. One way to overcome this resistance is to conduct fidelity assessments in the context of a well-guided learning community. The predictive validity of fidelity scales is considered the single most valuable attribute of these instruments. Research on predictive validity requires large sample sizes, which is difficult to achieve. It should nevertheless not prevent us from rigorously searching for this Holy Grail of fidelity assessment. In addition, fidelity assessment should be placed in a broader perspective. The quality of care for people with severe mental illness cannot be assessed conclusively according to the extent to which separate interventions have been applied with good fidelity. These individuals need access to high-quality treatment and support systems within the community, which can enable them to live their lives as valued citizens. In conclusion, fidelity assessment, both at the level of interventions and systems, contributes to a highly desirable transparency in practice variations within the field of mental healthcare.



One size does not fit all!

# Fidelity, quality and adaptations

Results studies with IPS adaptations



## Model adaptations

1. Goal of competitive employment
2. Zero exclusion
3. **Integrated services**
4. Worker preferences
5. **Benefits planning**
6. **Rapid job search**
7. Systematic job development
8. Time-unlimited support

# Fidelity, quality and adaptations

## Conclusions and remarks

- Balance between reach and quality is very important for the future of IPS
- Cautions about model adaptations IPS:
  - IPS is developed for mental healthcare population
  - Adaptations might blur the principles and implementation for all service users
  - Adapt IPS to new populations vs. development of new SE interventions
  - When do we still call and brand it as IPS?
- Fidelity: paradigm shift from scoring to more flexible learning and development
- International discussion about these topics are critical!

# Future directions: international research network

- ❑ **Conclusion:** impressive developments in IPS-research!
- ❑ Better translation research to practice:
  - ❑ Increase communication and accessibility
  - ❑ Tighter collaboration with clients, lived experience, practitioners and policy makers
- ❑ Developments fidelity and quality improvement
- ❑ Improve accessibility IPS for all people in mental healthcare
- ❑ Give better insights for what target groups and in what setting IPS is suitable:
  - ❑ Development of quality standards for programs
  - ❑ Use IPS principles for development high-quality SE new populations
  - ❑ Support implementation of IPS in new cultures
- ❑ Use of modern technology and AI in IPS



## Final remark





# Thank you!

## Further questions?

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