International evidence on the impact of Individual Placement and Support (IPS) on vocational outcomes for conditions other than severe mental illness

Executive summary

This briefing provides a comprehensive and consolidated evidence review around the impact of Individual Placement and Support (IPS) employment support interventions on vocational (i.e. work-related) outcomes for population groups other than those experiencing severe mental illness – the traditional group supported by IPS programmes.

This briefing can be used by policy-makers to inform the funding and design of new and existing employment services, by practitioners to benchmark their performance and make the case for their work, and by researchers to understand the current evidence base and identify priorities for future research.

An overview review and meta-analysis of relevant studies was conducted. Almost all studies were randomised controlled trials with robust control groups. 18 individual studies were identified across a range of population groups. Studies were concentrated in the USA, Scandinavia and UK. IPS services were sometimes combined with other interventions and sometimes omitted key elements of the IPS fidelity model (e.g. integration).

The evidence across these studies shows that IPS consistently delivers positive impacts on job entry compared to control groups. Across the larger studies – where effect sizes can be expected to map more realistically onto roll-out of IPS policies at reasonable scale – IPS was 32% more effective than 'business-as-usual' employment support at helping people into paid employment. Further, there is consistent evidence that IPS improved hours worked, job sustainment and time to job entry compared to control groups. There is positive modest impacts on earned income and hourly wages.

Research context

Employment for working age adults with a disability is around 30% points lower in the UK than for those without a disability. Further, a substantial proportion on non-working disabled people state that they wish to work given the right job and support. In the UK, for instance, just under a quarter of economically inactive disabled people of working age state that they would like to work. This gap matters for more than just economic reasons. There is strong evidence that wider social determinants account for a far larger share of the variation in people's health outcomes than clinical care.

FUNDED BY



IPS is a voluntary model of employment support for people out of work with health conditions and disabilities. It is characterised by adherence to a fidelity scale, personcentred values, strengths-based support, client preferences and empowerment. It includes proactive employer engagement, job matching, in-work support, and support for health and other needs. IPS has been shown to be effective in its 'traditional' population group of individuals with severe mental illness. By severe mental illness the IPS literature refers to the nature and severity of the mental health condition (e.g. schizophrenia, bipolar disorder) and to treatment within secondary (rather than primary) mental health services.

As a result, policy makers in the UK and internationally have been trialling and expanding IPS provision in wider and larger population groups. In that context, this briefing provides a comprehensive and consolidated evidence review around the impact of IPS employment support interventions on vocational outcomes for population groups other than those experiencing severe mental illness.

Literature search: inclusion criteria

This overview review and meta-analysis forms part of a larger systematic review of evidence aroundSupported Employment – both IPS and the Supported Employment Quality Framework (SEQF) fidelity models. The literature search for the systematic review was conducted in April 2022, and updated in January 2024, with the following inclusion criteria:

Intervention participants	Individuals without severe mental health difficulties				
Type of intervention	IPS or SEQF employment programmes – operating to IPS or SEQF fidelity				
Study design	Any for the systematic review searches; for this quantitative overview review of impact evidence studies were required to have a robust counterfactual				
Publication type	Peer-reviewed or grey literature				
Outcomes	For the systematic review, any effect including relating to employment, quality of life, health or wellbeing or any views or perceptions of programme success factors, barriers or programme implementation. For this overview review, all effects relating to vocational outcomes				
Date	Published since 2000				
Countries	Any high-income or upper-middle-income nation as defined by the World Bank Atlas method				
Language	Published in English				

Literature search: studies identified for this overview review and meta-analysis of vocational impacts

The table below shows how eligible studies were identified from the overall systematic review for inclusion in this overview review and meta-analysis of vocational impacts. From an initial pool of 7,830 studies identified from initial searches in Apr 2022, 3,206 were non-duplicates and 70 were identified as eligible for inclusion in the overall systematic review. Of these, 5 were identified as eligible review studies of relevance – that is, existing review studies that synthesise the results from several individual studies for the present overview review. Later follow-on searches conducted in Jan 2024 identified a further 5 new individual studies published subsequent to these reviews and our initial searches and that meet our inclusion criteria. Taken together, a total of 18 individual studies were therefore identified for the present analyses and all 18 studies relate to the IPS fidelity model. Risk of bias is low across these studies.

Table 1 below shows the 18 IPS studies included. Table 1 shows the 5 existing review studies along the top and columns show the eligible individual studies sourced from each review. A final column shows the 5 more recent studies identified from later follow-on searches. Rows show the main health condition/population group of study participants (noting that several studies contained more than one condition/group). 15 studies are randomised controlled trials and one study (italics) is a statistical quasi-experimental design. Two studies have weaker evaluation designs and counterfactuals (bolded).

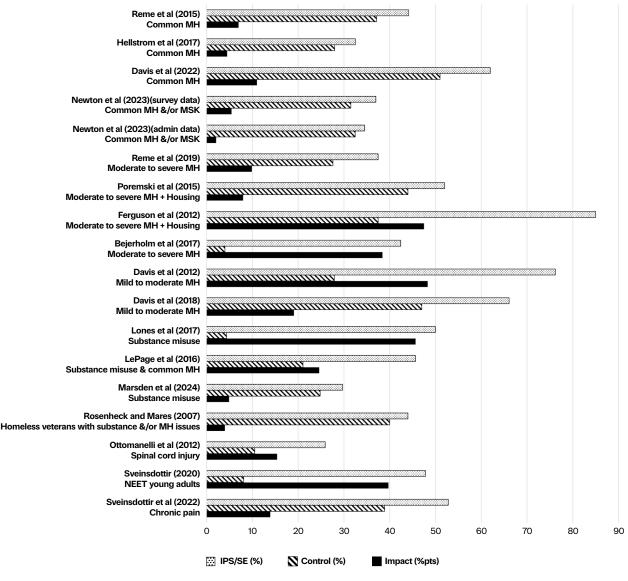
The primary vocational outcome of any employment support programme is the job entry rate, by which is meant the percentage of initially workless programme participants who move into paid employment. Figure 1 presents the job entry rates for IPS participants (dotted bars) and control groups (diagonally shaded bars). Also presented are impact estimates (solid black bars) calculated as the percentage point difference between them. All studies show positive impact estimates with a range of effects from 4 percentage points up to nearly 50 percentage points.

It is noteworthy that the definition and measurement of job entry varies across studies. In most cases the measure relates to the percentage of participants who achieve a job start at any time within a specified number of months from their start on the IPS programme. The duration of the follow-up period varies considerably however: 6 months or 8 months for several studies; within 12 months is most common; and within 24 months for one study. Conversely, five studies measure whether participants are in paid employment at a particular point in time, usually 12 months after the participant's IPS programme start. Further agreement on core definitions and reporting measures would be helpful across the IPS research and policy community to aid future comparability.

Existing Review studies							
	Total distinct papers by cohort group	Bond et al (2019)	Fadyl et al (2020)	Probyn et al (2021)	Harrison et al (2020)	Jetha et al (2019)	Additional recent studies
Focus Population Group		RCTs of IPS beyond SMI	RCTs of vocational interventions for mild to moderate mental health	RCTs of SE beyond SMI	Studies of IPS for substance misuse	Studies of vocational interventions for young adults with chronic health conditions	
Common mental Health (CMH)	3	Reme et al (2015) Hellstrom et al (2017)	Reme et al (2015) Hellstrom et al (2017)				Davis et al (2022)
CMH &/or MSK	1						Newton et al (2023)
CMH or somatic disorder	1						Brinchmann et al (2024)
Moderate to severe mental health	3	Reme et al (2015)	Reme et al (2015) Poremski et al (2015)	Poremski et al (2015)		Ferguson et al (2012)	
Affective disorder	1	Bejerholm et al (2017)	Bejerholm et al (2017)	Bejerholm et al (2017)			
PTSD veterans	2	Davis et al (2012) Davis et al (2018)	Davis et al (2012) Davis et al (2018)	Davis et al (2012)			
Substance misuse	4	Lones et al (2017) LePage et al (2016)		Lones et al (2017) LePage et al (2016)	Lones et al (2017) LePage et al (2016) Rosenheck and Mares (2007)		Marsden et al (2024)
Spinal cord injury	1	Ottomanelli et al (2012)		Ottomanelli et al (2012)			
NEET young adults	1			Sveinsdottir et al (2020)			
Chronic pain	1						Sveinsdottir et al (2022)

Table 1: The 18 IPS studies included in this overview review of vocational impacts

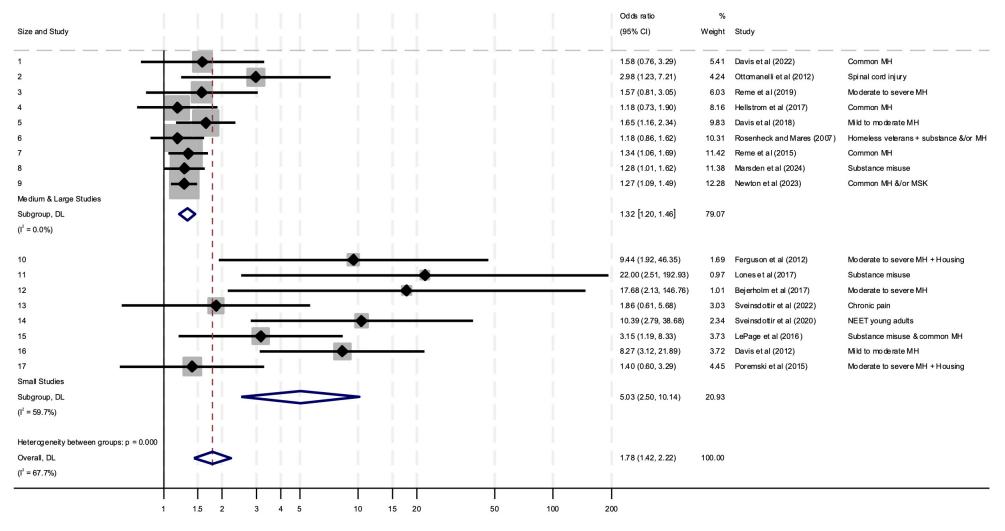
Figure 1: Job entry rates across the 18 IPS studies for IPS services (top dotted bar), control groups (central diagonally shaded bars), and IPS impact/percentage points difference (lower black bars)



Abbreviations: MH = mental health; MSK = musculoskeletal

Note: Brinchmann et al (2024) do not measure or report job entry as an outcome

Figure 2 turns next to the meta-analysis of overall effects of the primary job entry outcomes. An initial pooled meta-analysis estimated an overall effect across all studies of 1.78 |1.42,2.22| but also identified substantial heterogeneity. There is a strong suggestion of smaller studies showing notably larger and less certain effects but there is no evidence of publication bias. In response, meta-analysis was repeated with the studies split into three groups according to study total sample size: below 100 participants (small studies); between 100 and 1000 (medium sized studies); and greater than 1000 (large studies). Heterogeneity was now high only amongst the small studies but low amongst both medium sized and large studies. Therefore, medium and large sized studies were combined whilst small studies remain grouped together. This seems the optimal grouping for the meta-analysis and is presented below in Figure 2 which is ordered by study sample size (largest at the bottom) within each group. Amongst large and medium sized studies combined the overall effect is 1.32 [1.20,1.46] and heterogeneity is low. For policy makers this seems a more appropriate estimate of the likely effects of scaled-up IPS interventions in groups beyond severe mental health. Amongst smaller studies the overall effect is 5.03 [2.50,10.14] and heterogeneity is high. Six studies show statistically insignificant effects at the 95% level. For information, similar subgroup meta-analyses were explored across health conditions and geographical region but did not show similar discriminatory power. Given that readers may be particularly interested in the meta-analysis across different types of conditions this is presented in Figure 3 below.



Odds Ratios

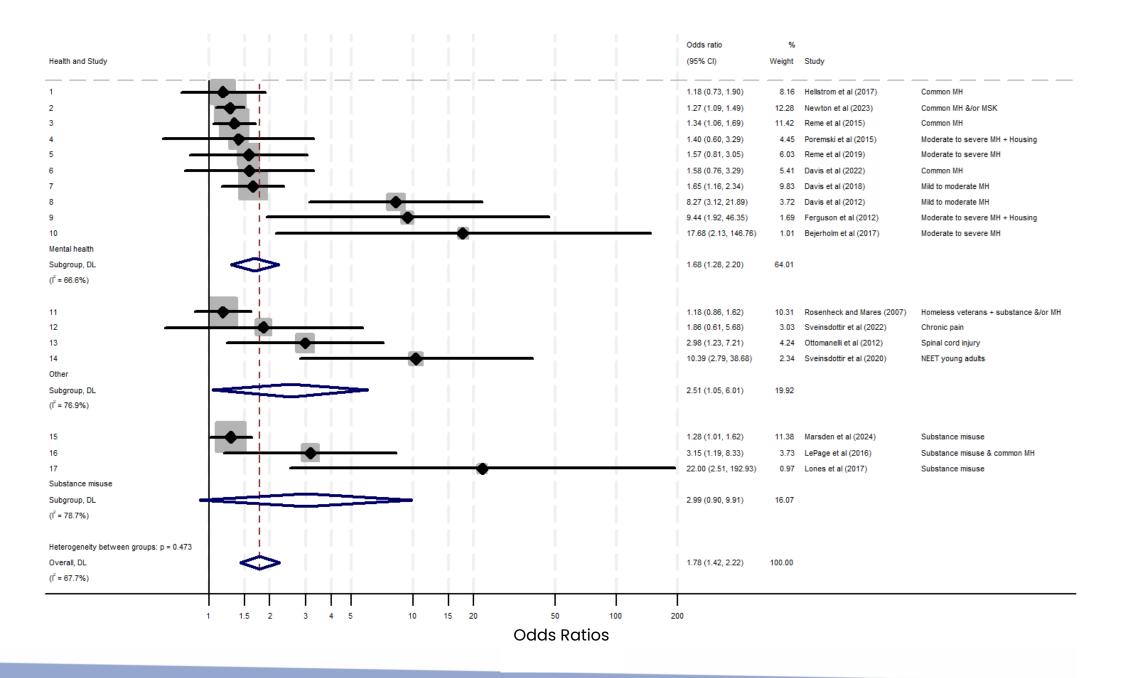


Figure 3: Meta-analysis of IPS impacts on job entry across the studies by condition/population group

Evidence around secondary vocational outcomes

Studies also present a range of secondary vocational outcomes beyond the primary outcome measure of job entry rates. There is consistent evidence from the studies that IPS improves hours worked, job sustainment and time to job entry compared to control groups. There is positive but more modest impacts on earned income and hourly wages.

Table 2 below shows the weighted odds ratio for the effect of each secondary vocational outcome measure that was available across the study evidence. In other words, the analysis below takes all available evidence and weights it according to the sample size of each study. It is important to note that studies report different secondary outcomes in different ways and to different extents and so these findings relate to different sub-sets of the 18 studies and define their secondary outcomes in different ways to one another.

Table 2: Overall evidence on secondary vocational outcomes from the 18 IPS studies

Secondary vocational outcome	Weighted odds ratio	Summary of the evidence
Total work hours	6.8	On average IPS participants work around 7 times more hours in total in the study follow-up period compared to control group participants.
Weekly hours worked	7.1	On average IPS participants work around 7 times more hours per week in the study follow-up period compared to control group participants.
Job sustainment	1.3	On average IPS participants sustain paid work for 30% longer than control group participants in the study follow-up period compared. Job sustainment is defined differently across studies but usually refers to the number of days or weeks worked in the follow-up period.
Total income earned	1.1	On average IPS participants earn just under 10% more total income during the study follow-on period compared to their control group participants.
Hourly wage if employed	1.0	On average IPS participants earn slightly more per hour (3% more) than control participants.
Time to job entry	1.4	On average IPS participants enter paid work around 40% faster than control group participants.

Study limitations

The study is limited by the following factors:

- Modest sample sizes: typically below 100 and frequently below 50 in study trials
- Inconsistency regarding the definition and measurement of vocational outcome measures
- Inconsistency regarding reporting of outcomes across studies
- Unclear terminology or lack of details to allow clear identification of groups and interventions
- Some studies contaminate IPS with other interventions, other studies omit key IPS elements
- Some studies do not report fidelity scores (making it hard to verify the quality of the services)
- Outcomes measurement timescales are rapid given that studies trial new IPS services which routinely show fidelity starting weak/moderately and strengtheing during the trial period.

Policy

- Findings support the continued use and trialling of the IPS model in diverse groups beyond severe mental illness.
- Findings highlight the value of generating clear academic research into the impact of different employment interventions to inform funding and policy decisions for new services.
- Findings can be used to inform outcomes metrics for commissioners seeking to design and manage IPS employment services in diverse population groups.

Practice

- Practitioners can use this paper to make the case for the impact and value of their work, to expand or extend funding, or expand existing IPS services.
- Practitioners can use this evidence paper to benchmark their own service performance.

Research

 Future studies should be clearer and more consistent in definitions, measures and reporting.

Want further details?

This briefing is a high-level summary of a published journal article that contains full details. The published journal article is freely available at: <u>https://www.sciencedirect.com/science/article/pii/S1936657424000013?via%3Dihub</u>

Feel free to contact the lead author, Prof Adam Whitworth, Strathclyde Business School, University of Strathclyde, to discuss further: adam.whitworth@strath.ac.uk

Funding Acknowledgement and Disclaimer

This work was supported by the National Institute for Health and Care Research Policy Research Programme reference NIHR202996. The views and opinions are those of the authors and do not necessarily reflect those of the NIHR or the Department of Health and Social Care.

Sep 2024









