



IPS Trial Literature Review

For the Department of Social Services

2020

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Main Messages

This literature review aims to identify and consider a number of adaptations that have been made to Individual Placement and Support (IPS) and supported employment models across the globe, to establish what could be adapted or added to the domestic model of IPS, specifically within the IPS Trial, to enhance outcomes for participants. In addition, it investigates what outcomes look like for distinct cohort groups.

Despite limited studies into various IPS adaptations, there have been studies both internationally and domestically to understand what the incorporation of skills training, cognitive skills training, peer group interaction and education means for participants.

The research found three key elements which showed the most promise to support young people:



Supported Education

The supported education model could be considered in line with the focus on education within the IPS Trial, however, ideally, it would be included as its own component with its own education specialist, rather than using employment specialists. Additionally, the appropriateness to provide education support to young people of compulsory school ages needs to be considered.



Cognitive Adaptions

Cognitive adaptations have been proven to be successful in providing multi-faceted approaches to improve social skills, ability to learn and executive functioning. Research demonstrated that, for this cohort, the Thinking Skills for Work model appeared most effective, with 69.6 per cent achieving employment outcomes.



Integrated Supported Employment

Integrated supported employment (ISE) improves participants' social skills in work environments, including the management of difficult situations. Studies showed that 60 per cent of participants who accessed ISE with IPS gained competitive employment, compared to 30 per cent who only accessed IPS.

Limited research has been conducted to determine whether there are particular contextual factors that may influence the effectiveness of outcomes beyond implementation enablers; however, the below has been identified within the literature:



Age

Older participants face greater barriers to employment than younger cohorts due to younger cohorts being eligible to access 'youth-specific' employment.



Young people experiencing homelessness

For this cohort, the IPS model was found to be successful, particularly given the high rates of unemployment and significant barriers to accessing both education and employment.



Remoteness

Limited research has been undertaken within Australia to understand the impact remoteness has on participant outcomes, however US studies have found little impact.



Cultural Background

Due to limited research, it is unclear if outcomes for Indigenous populations differ, but some instances have found success when the model considers barriers to employment such as subconscious cultural bias, institutional racism, higher instances of mental illness, lower education rates and a higher history of criminal activity.



Technology

Technology has been found to reduce barriers to entry into IPS through providing remote support to improve the ability for young people to leverage online services to guide and support them through the employment journey.

Executive summary

The purpose of this document is to provide a literature review that sets out insights into how the Individual Placement and Support (IPS) model can be strengthened, particularly for the IPS Trial. This will be considered through two key research questions:

1. How can the effectiveness of the IPS model be improved?
2. What are the considerations in the transferability and scalability of the IPS model?

The IPS model and IPS Trial

The IPS model was originally developed in the United States in the early 1990s and integrates employment and vocational support with traditional mental health and non-vocational support. It focuses on the individual needs of people with mental illness who are seeking to remain in employment, and aims to support participants to rapidly seek employment and gain paid work in a competitive employment setting. The IPS model focuses on eight core Practice Principles:

- focus on competitive employment;
- eligibility based on participants' choices;
- integration of rehabilitation and mental health services;
- attention to participants' preferences;
- personalised benefits counselling;
- rapid job search;
- systematic job development; and
- time-unlimited and individualised support.

The 2015-16 Federal Budget allocated funding for IPS to be trialled to support young people experiencing mild to moderate mental health disorders. The IPS Trial commenced in 2016 in 14 headspace sites across Australia. The Trial was extended in 2019 to current and additional sites to June 2021. There are now 24 headspace sites delivering IPS as part of the Trial.

How can the effectiveness of the IPS model be improved?

The literature review identified a number of adaptations to the IPS model. They are summarised in the table below.

Table 1: IPS Model Additions and Outcomes

Model Addition	Description	Outcomes Summary
Skills Training		
Integrated Supported Employment (ISE) (Tsang 2003)	Teaches participants social skills to retain a job, such as developing good working relationships, and how to manage difficult situations in the workplace.	60 per cent who accessed the IPS model enhanced with ISE gained competitive employment, compared to an IPS model only with the control group achieving a 30 per cent employment rate.

Model Addition	Description	Outcomes Summary
Workplace Fundamentals Training (WFT) (Wallace & Tauber 2004)	Teaches participants workplace skills, including problem-solving to cope with job stress and how to successfully interact with colleagues and supervisors.	The combined model showed no significant differences in the rate of competitive employment attained when compared with an IPS only model, but the combined cohort demonstrated longer job retention. A qualitative benefit of the combined model was greater job satisfaction.
Cognitive Skills Training		
Neurocognitive Enhancement Therapy (NET) (Greig et al. 2007)	Is focused on providing a multi-faceted cognitive remediation program to improve cognition in participants.	The addition of NET to the IPS model demonstrated that, after a year of combined supports, participants had improved executive functioning and working memory.
Thinking Skills for Work (TSFW) (McGurk et al. 2005)	Participants undertake a computer-based cognitive assessment that covers attention, memory, executive functioning and other cognitive domains, which results in tailored, cognitive remediation support based on their cognitive strengths and challenges.	Those accessing combined TSFW and the supported employment model demonstrated stronger competitive employment rates, of 69.6 per cent compared to 4.8 per cent for those only accessing supported employment. In addition, they also experienced higher earnings.
Errorless learning (Kern et al. 2002)	Involves repetitively practising tasks while eliminating mistakes, to enhance learning.	The combined model showed participants remained in employment for 32.8 weeks, whereas those accessing only the IPS model experienced an employment duration of 25.6 weeks.
Cognitive Behavioural Therapy (CBT) (Boycott et al. 2016; Reme et al. 2005)	Involves problem-solving skills, interpersonal skills, and cognitive rehabilitation aimed at improving attention, language, memory, and executive functioning.	44.2 per cent of participants accessing a combined CBT and IPS model maintained competitive employment at 18 months, compared to 37.2 per cent of those only accessing the IPS model. Participants accessing the combined model also experienced reduced depression and anxiety symptoms, and improved health-related quality of life.
Peer Group Interaction		
Peer Mentors (Cohen et al. 2020; Ellison et al. 2014)	Involves pairing of participants with a peer mentor who is someone of similar age and who has overcome obstacles to achieve their own career goals.	The incorporation of peer mentors into the IPS model provides qualitative benefits through enabling participants to feel supported, safe, understood and provides a positive influence to enable encouragement towards education, employment and their mental health treatment.

Model Addition	Description	Outcomes Summary
Group programs (Corrigan 1995; Ellison et al. 2014)	Can encompass a variety of aspects in a group setting, including learning, interpersonal skills, information sharing and motivational based communication to improve job readiness.	Enabling communication and collaboration within participant peer groups has shown to enhance interpersonal skills, information sharing and improved job-readiness through soft skills, such as searching for employment and completing job interviews.
Education		
Supported Education (Becker et al. n.d.; Cohen et al. 2020; Ellison et al. 2014; Rapp & Goscha 2011; Waghorn et al. 2007)	Underpinned by the same principles as IPS with a focus on supporting people into education.	15 of 22 participants (68 per cent) in a combined employment and education program enrolled into education over a 12 month period, with six completing their education.

Source: KPMG

The evidence to support the effectiveness of these adaptations is somewhat limited, and there is a lack of clarity from the available evidence as to whether these adaptations are suitable for all cohorts of participants, in particular for the IPS Trial and young people with mild to moderate mental illness. The model adjustments that have shown the most success to date include supported education, cognitive adaptations and integrated supported employment.

The literature review cannot make specific recommendations for the IPS Trial given the limited research available (small numbers of studies with small numbers of participants). When considering which adaptations could be introduced into the IPS Trial, those adaptations that address a need in the Trial cohort, such as workplace skills and interpersonal skills, may be a valuable addition to the Trial given that many young people in the Trial have limited previous work experience.

The use of a specific supported education model and education specialists, which has shown some success to date (particularly in combination with other adaptations), may be beneficial to implement within the education focus of the IPS Trial.

What are the considerations in the transferability and scalability of the IPS model?

The literature review was not able to identify particular considerations in the transferability and scalability of the IPS model with limited evidence available on the differences in outcomes for different cohort groups or those in different locations. However, for some cohort groups, particular adaptations were found to be effective in improving outcomes of participants, for example, the use of technology to break down access barriers and provide additional forms of assistance and the use of peer mentors, skills training and supported education models.

There is limited evidence to suggest that the age of a participant impacts on the likelihood of achieving employment, with only one study suggesting that young people had better job prospects than older participants (Ferguson et al. 2011). Young people experiencing homelessness (or at risk of) often have high rates of unemployment and face significant barriers to education and employment. The IPS model has been found to be successful for young people experiencing homelessness (Ferguson et al. 2011).

Remoteness was found not to impact on the effectiveness of IPS, however, the research is limited to the United States which has a different population distribution to Australia. It is unknown how applicable to Australia these findings may be.

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Glossary of terms

Key Term	Definition
CBT	Cognitive Behavioural Therapy
Competitive employment	Gaining employment that pays at least minimum wage and the wage that others receive performing the same work, based in community settings alongside others without disabilities, and not reserved for people with disabilities.
DCP	Dartmouth Career Profile
DES	Disability Employment Services
IPS	Individual Placement and Support
ISE	Integrated Social Employment
NET	Neurocognitive Enhancement Therapy
RCT	Randomised Controlled Trial
SEd	Supported Education
The Department; DSS	Department of Social Services
The Trial	Individual Placement and Support Trial
TSFW	Thinking Skills for Work
Vocational education	Tertiary education and/or training which provides accredited training in job related and technical skills.
WFT	Workplace Fundamentals Training

1 Introduction

1.1 Purpose

KPMG has been engaged by the Department of Social Services (the Department or DSS) to undertake further evaluation of the Individual Placement and Support (IPS) Trial (or the Trial). The Trial is based on the IPS model, which integrates employment and vocational support with clinical mental health and non-vocational support to assist individuals with mental illness to obtain vocational education or employment outcomes.

The purpose of this document is to provide a literature review that sets out insights into how the IPS model can be strengthened. This document includes:

- an overview of the IPS model and IPS Trial;
- methods used; and
- key findings with respect to the key research questions.

1.2 The IPS model

The IPS model was developed in the United States in the early 1990s, as a form of supported employment that contrasts with traditional vocational programs. In the IPS model, participants undertake rapid employment searches to gain paid employment in a normal setting with ongoing support provided by vocational specialists and mental health specialists (Bond et al 2012). This creates a point of difference from other employment programs, which generally cease to offer support following the attainment of employment.

The IPS model centres on eight core Practice Principles that underpin the delivery of support to participants by vocational specialists, as outlined overleaf.

Figure 1: IPS model core Practice Principles

Focus on competitive employment

Vocational specialists help participants obtain competitive jobs. Competitive employment is defined as gaining employment that: pays at least the minimum wage and the same wage that others receive for performing the same work; is based in community settings alongside others without disabilities; and is not reserved for people with disabilities.

Eligibility based on participants' choices

The core philosophy of the IPS model is that all people with mental illness can work at competitive jobs in the community without prior training, and that no one should be excluded from this opportunity. Every person with mental illness who wants to work is eligible for IPS supported employment, regardless of characteristics such as psychiatric diagnosis, symptoms, work history, substance abuse and cognitive impairment.

Integration of rehabilitation and mental health services

The IPS model is closely integrated with mental health treatment. Vocational specialists are members of multi-disciplinary teams that meet regularly to review participant progress. Discussions include clinical and rehabilitation information that is relevant to work, such as medication side effects, persistent symptoms, cognitive difficulties, or other rehabilitation needs. They share information and develop ideas to help participants improve their functional recovery.

Attention to participants' preferences

Services are based on participants' preferences and choices, rather than providers' judgments about what employment they would be suitable for. Participant preferences help determine the type of job that is sought, the nature of support provided by the vocational specialist and team, and whether to disclose details of a participant's mental illness to an employer.

Personalised benefits counselling

Vocational specialists help participants to access ongoing guidance regarding income support. Fear of losing income support is a major reason that participants may not want to seek employment, which means that it is vital that participants obtain accurate information to inform and guide their plan for starting work and, over time, for making decisions about changes in wages and work hours.

Rapid job search

Vocational specialists help participants seek jobs directly, rather than providing extensive pre-employment assessment and training, or intermediate work experiences. Beginning the job search process early (i.e. within 30 days) demonstrates to participants that their desire to work is taken seriously, and conveys optimism that there are multiple opportunities available in the community for participants to achieve their goals.

Systematic job development

Vocational specialists develop relationships with employers, based upon participants' work preferences, by meeting face-to-face with employers over multiple visits. Vocational specialists learn about the work environment and the employers' work needs in order to find out about jobs that they may not be aware of at employment sites. They gather information about the nature of job opportunities and assess whether they may be a good job fit.

Time-unlimited and individualised support

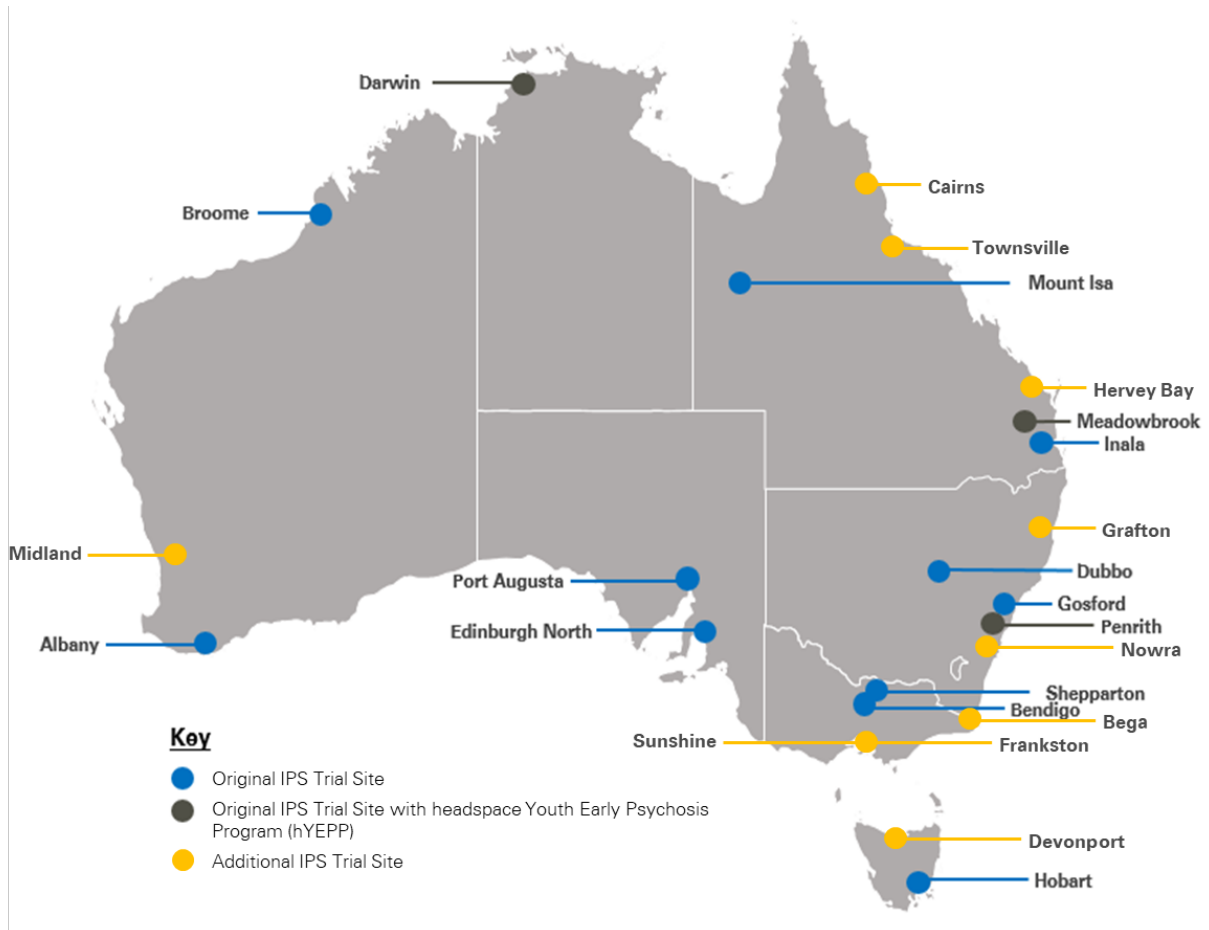
Support provided to participants is individualised and continued for as long as the participant wants and needs it. Vocational specialists and other members of the treatment team provide employment support, and also seek natural supports for the participant (e.g. family member, co-worker) that would be available over time. The goal is to help the participant become as independent as possible in employment, while providing support and assistance as needed. Once a participant has worked steadily (e.g. one year), transitioning from IPS is discussed.

Source: Adapted from Dartmouth Psychiatric Research Centre, 2011

1.3 Overview of the IPS Trial

The 2015-16 Federal Budget allocated funding for IPS to be trialled to support young people experiencing mild to moderate mental health disorders. The IPS Trial commenced in 2016 in 14 headspace sites across Australia. The Trial was extended in 2019 to current and additional sites to June 2021. There are now 24 headspace sites delivering IPS as part of the Trial (Figure 2).

Figure 2: headspace IPS Trial Sites



Source: KPMG

2 Method

This section presents the methods used to obtain research to respond to the scope of questions.

2.1 Scope of research

The scope of the research was limited to two core research questions and two sub-questions:

- 1 How could the effectiveness of the IPS model be improved?
 - a) What adjustments have been made to the IPS model?
 - b) Do adjustments to the IPS model result in improved outcomes?
- 2 What are the considerations in the transferability and scalability of the IPS model?
 - a) Are there any differences in outcomes for different cohort groups or those in different locations?
 - b) Are there any considerations or adjustments to the model required for different cohort groups or different locations?

The research did not consider the general evidence base around the use of the IPS model and its implementation, which was included in the literature review undertaken as part of the first evaluation of the IPS Trial.

2.2 Research methods

The literature review is based on findings from desktop-based research, using literature from Australia, New Zealand, Canada, the United States and the United Kingdom.

A full list of search terms is contained in Appendix B.

The following databases were used to search for the literature: *Google*, *Google Scholar*, *psychArticles*, *Wiley Online* and *Sage Journals*.

Articles were also sourced through a review of sources within the literature examined.

2.3 Limitations and challenges

While there is a breadth of research dedicated to the core IPS model, there is limited research and evidence on expansions to the model, and what this means for participants. The limitations and challenges are provided below:

- Limited research containing new information was available, with research often being over five years old. In these instances, older articles were included as they were often referenced within more recent research or proved to be the most up-to-date research available on the topic.
- Many articles, while mentioning methods, did not go into detail of limitations and future improvements pertaining to data collection, therefore this research does not assess how data quality can be strengthened.
- Limited research within in-scope topic areas resulted in findings not having a strong evidence base, and therefore specific recommendations were unable to be formed.
- Due to the limited nature of IPS trials within Australia, international literature has been heavily leveraged to draw conclusions, therefore in some instances, there are additional considerations to implementation in the domestic context.

3 Key findings

This section provides an overview of the key findings in relation to the research questions.

3.1 The evolution of the IPS model

There have been several vocational rehabilitation models developed to support people with mental illness to achieve employment (Waghorn et al 2007). Research shows the IPS model is the strongest evidence-based model available, using and adopting a range of methods to support people with mental illness (Drake et al. 1996). Despite its success, Boycott et al. (2012) suggested that the next step in the development of the IPS model is to incorporate it "...with other interventions which may increase employment rates and improve job tenure". Therefore, this section discusses other expansions and improvements that have been made within IPS programs for this purpose.

3.1.1 Integrating other services to enhance the IPS model

Research has demonstrated that there are a number of service additions that can be provided to improve employability through job readiness. This is demonstrated through the delivery of practical skills training and interactions with the peer group. This section provides insight into additional supports that have been added to IPS models or other supported employment programs.

Practical skills training

Some critics of the IPS model have argued that participants may lack the skills needed to perform on the job and, as a result, require additional skills training (Marcias et al. 2008; Roberts & Pratt 2007; Rogers et al. 2006). One study suggests that almost three-quarters of participants using the IPS model require additional services, such as cognitive, psychosocial skills, and illness management training (Loveland et al. 2007). Engaging with additional interventions has shown an increase in employment attainment, with a mean rate of competitive employment attainment of 52.1 per cent for IPS alone, while enhanced IPS models have shown up to 76.2 per cent success (Boycott et al. 2012).

Skills training

The Integrated Supported Employment (ISE) model teaches participants social skills to retain a job, such as developing good working relationships and how to manage difficult situations in the workplace (Tsang 2003). A comparison of four Randomised Controlled Trials (RCT) evaluating the effectiveness of the IPS model in conjunction with ISE with only the IPS model showed that 60 per cent who received the combined model attained competitive employment, compared to 30 per cent accessing only the IPS model.

The Workplace Fundamentals Training (WFT) model teaches workplace skills, including problem-solving to cope with job stress and how to successfully interact with colleagues and supervisors (Wallace et al. 1999). A RCT compared the IPS model in conjunction with WFT and a lone IPS model and found no significant differences in the rate of competitive employment. However, the group accessing the IPS model in conjunction with WFT reported higher levels of job satisfaction than those accessing only the IPS model (Wallace & Tauber 2004). Wallace and Tauber (2004) also found that participants who received support from the IPS model in conjunction with WFT had longer job retention than participants accessing only the IPS model.

Cognitive skills training

Cognitive skills training has proven to assist people with illness-related challenges to overcome them, and improve their attention, memory and executive functions impacting their vocational outcomes and rate of competitive employment (McGurk & Mueser 2004).

Neurocognitive Enhancement Therapy (NET) is a specific aspect of cognitive skills training focused on providing a multi-faceted cognitive remediation program to improve cognition in participants (Greig et al. 2007). This model provides:

- computer-based cognitive training that targets attention, language, memory and executive functioning;
- a social information processing group, where participants prepare and give presentations to other group members, with the group providing and receiving feedback; and
- a work feedback group where employment specialists provide participants with specific feedback based on observation of, and interviews with, participants (Bell et al. 2001; as referenced by Greig et al. 2007).

A study comparing the effects of NET with a vocational program similar to IPS found that, after a year of receiving combined supports, participants had improved their executive function and working memory compared to those who only accessed supported employment (Greig et al. 2007).

The Thinking Skills for Work (TSFW) program, when paired with supported employment, includes a cognitive specialist working with the employment specialist on the service delivery team. Within the model, the participant completes a computer-based cognitive assessment that covers attention, memory, executive functioning and other cognitive domains. Thereafter, the cognitive specialist provides the participant with tailored, cognitive remediation support based on their cognitive strengths and challenges. A study comparing the supported employment and TSFW combined model to an IPS only model found that those accessing services from the combined model had stronger competitive employment rates and greater earnings (McGurk et al. 2005), with 69.6 per cent of those accessing the combined TSFW program and supported employment achieving an employment outcome over a one year period when compared to 4.8 per cent for those only accessing supported employment (McGurk et al. 2005).

Errorless learning involves repetitively practising tasks while eliminating mistakes, to enhance learning. It is commonly used for people with learning disabilities, dementia, and schizophrenia (Jones & Eayrs 1992; Clare et al. 2000; Kern et al. 2002). Kern et al. (2002) identified that those accessing a combined errorless learning and IPS model remained in competitive employment for a greater duration than those accessing only IPS services, with those accessing the combined model remaining in employment for 32.8 weeks, compared to 25.6 weeks for IPS model only participants.

Recently, Cognitive Behavioural Therapy (CBT) was trialled with the IPS model to assist people with mental illness to cope with employment-related stressors. Similar to the other programs, it uses problem-solving skills and cognitive rehabilitation aimed at improving attention, language, memory, and executive functioning, and differs to include improving interpersonal skills. A comparison of the IPS model and the combined CBT IPS model found both methods improved competitive employment rates, however those accessing the combined model were more successful in maintaining a greater employment duration (Boycott et al. 2016). Another RCT with 1,193 participants compared a combined model with an IPS model as the control, and found a statistically significant difference with 44.2 per cent of the treatment group maintaining competitive employment at 18 months compared to 37.2 per cent of the control group (Reme et al. 2015). Reme et al. (2015) also identified that there were additional differences in non-vocational outcomes for the treatment group, whereby they experienced reduced depression and anxiety symptoms and an increase in health-related quality of life.

Through incorporating cognitive skills training into the IPS model, as described, there are benefits for those that assist to develop participants' core interpersonal skills (Rose & Perz 2005). When combined with the IPS model, the training provides individuals the skills to better overcome the employment barriers facing people with mental illness. In these studies, cognitive training was used in addition to the therapeutic mental illness treatment provided to participants as part of the baseline principles underpinning IPS. Therefore, it is important to note that some IPS model participants may receive some type of cognitive behavioural therapy or therapeutic social support as part of their treatment strategy. As a result, it is difficult to determine the extent that outcomes can be attributed to IPS, therapeutic treatment, or both treatments.

Incorporating peer group interaction

The role of peer mentors

Many programs that cater to young people have seen the benefits of peer mentors as follow-along supports, particularly within programs where participants have high instances of poor mental health and/or intellectual disabilities. One definition of a peer mentor, for the purposes of the IPS model, is someone of similar age to participants who have “overcome obstacles to achieve their own career goals, and how they continue to move forward in their own recovery” (IPS Learning Community 2016).

Commonly, peer mentors see success through their ability to influence young people and present their own achievements as examples, especially when paired with a lived experience with Ellison et al. (2014) stating “peers exert strong influence in this age group, including influence in academic achievement and career development”.

These peer mentors act as role models for participants demonstrating first-hand how to maintain employment, particularly for those first-time employed (Ellison et al. 2014). Many young people who have accessed IPS have social impairments as a result of their diagnosis, and the use of peer mentors has seen them take on a role that means participants feel supported, safe, understood and positively influenced to enable encouragement towards education, employment and their mental health treatment (Ellison et al. 2014). In addition, the incorporation of peer mentors assists those with serious mental health conditions to form strong relationships with an individual who understands what they are going through. These relationships often prove to have a positive effect and often see the young person model their personal work habits on the peer mentor (Ellison et al. 2014).

Ellison et al. (2014) identified, in an open trial feasibility study, that young people utilised their peer mentors at a reasonable rate, with peer mentors providing support, on average, once per month for approximately 38 minutes, with 30 of 35 young people choosing to access peer support.

While peer mentors are shown to have a positive impact on young people as a follow-along support, it can be highly challenging to implement, particularly for young people (Cohen et al. 2020). Common challenges include:

- the need for lived experience being difficult to find;
- high turnover in the role;
- reoccurrence of mental health symptoms;
- competing commitments making role management difficult;
- difficulty in integrating with the IPS team due to lack of clarity in the role and team in which they belong;
- boundary violations such as fighting or romantic involvement with participants; and
- inability to travel to meet participants, limiting connection for those who did not frequent the agency (Ellison et al. 2014).

Group programs

Participants within IPS programs commonly reported that interactions with their peers engaged with IPS assisted them to maintain their motivation and offered positive encouragement (Corrigan 1995). As a result, a group-based program incorporating learning, emphasising interpersonal skills, information sharing and motivational based communication can be used to encourage this interaction while also increasing their skills within IPS (Figure 3).

Figure 3: Seven elements encouraged by group activities



Source: Corrigan 1995

Furthermore, the incorporation of peer group activities has seen participants become proactive in prioritising their job search activities and has seen them begin self-directed job searching, independent of their employment specialists (Corrigan 1995).

For many youth-focused IPS models, a greater emphasis is required for career development as career path exploration was identified as an area of need for young people. This is particularly evident for young people with disability and with a history within the out-of-home-care system, as they often experience limited exposure to possible career avenues. The inclusion of group activities was found to be successful in supporting young people to identify a career of interest (Ellison et al. 2014).

Education within the IPS model

Overwhelmingly, the focus of the IPS model and other supported employment programs has been on vocational attainment and, as a result, little research has assessed educational outcomes through IPS. While further research is still required into the new models of education support, it is evident that young people with mental illness entering the post-secondary education system face additional barriers to entering and remaining in education. Common methods to overcome barriers to education include tutoring, job placement and development, peer support groups, transportation, special class instruction, registration assistance and note taker assistance (Rapp & Goscha 2011).

Supported education aims to deliver individualised, practical support and instruction to achieve education goals (Rapp & Goscha 2011). This section details the supported education model, and what it means in the Australian setting.

The Australian education system

For school-aged students, there are a number of government frameworks in Australia, such as the Australian Student Wellbeing Framework, for schools to assist students identify, support and educate on mental health and wellbeing through school based psychology services (Australian Psychological Society 2020). However, it has been identified that, while it should be the role of the school to encourage vocational and educational exploration, given the narrow role of school psychologists and counsellors, this is limited in practicality (Australian Psychologists and Counsellors in Schools n.d.).

It is important to recognise the role educational attainment plays in predicting labour force participation and successful employment for those with mental illness in the community. However, it is generally not the fundamental focus of the IPS model, and within the Australian policy setting, it is usually seen as the role of the State Education Departments to provide this support through specifically funded programs (Waghorn et al. 2007).

The Supported Education (SEd) Model

Despite the limitations in research into supporting educational achievement, some research has suggested implementing an adapted IPS model known as Supported Education (SEd), which uses the IPS model to provide supported education based on participants' preferences. This is designed to encourage social inclusion, community integration and participation in mainstream education and is underpinned by the same values and principles as the IPS model.

The SEd model is focussed on young people who have dropped out of study or are at risk of dropping out to help in:

"...clarifying educational goals; finding academic programs consistent with these goals; navigating the application process; securing appropriate financial support and using educational supports and accommodations to help assure success in meeting academic requirements." (Becker et. al. n.d.)

A combined supported employment and SEd model has been applied for young adults in the United States, particularly for those experiencing first episode psychosis (Manthey, Holter, Rapp, Davis, & Carlson, 2012; Ennals et al., 2014; Nuechterlein et al., 2008; as referenced by Becker et al. n.d.). The combined model allows the participant to remain career focused, while promoting the idea that education and employment can be valued equally, allowing young people to use their career aspirations to guide their vocational choices (Ellison et al. 2014). Waghorn et al. (2007) goes on to state that a SEd program also has the ability to encourage re-entry into secondary and vocational education that has been disrupted as a result of psychosis.

It is most common for SEd models to be delivered using self-contained classrooms and onsite program support (Rapp & Goscha 2011). The self-contained classrooms allow participants to attend separate classes from the mainstream but to use resources and complete activities delivered by the educational institution, while onsite support allows participants to remain in normal classrooms and receive individualised additional assistance, rather than be separated as per self-contained classrooms. However, Rapp and Goscha (2011) highlight that the model can also be delivered through a range of settings, including local community centres, other mental health settings, colleges and universities.

A study on a combined supported employment and SEd IPS model found that it was feasible to combine them, demonstrating a 20 per cent program drop-out rate, which was favourable within studies of similar populations (Ellison et al. 2014). This study also found that, of 22 participants enrolled in the program, 15 enrolled into education, with those 15 having 18 education program commencements over a 12 month period and six completing their education. For those who left education while in the program, it was not due to disinterest or dissatisfaction with the services, but instead commonly due to incarceration, psychiatric hospitalisations and leave of absences.

Meanwhile, an adapted IPS model in the United States chose not to implement a SEd model for those under the age of 18, as school structures and collaboration with school clinical support staff made it too complex (Cohen et al. 2020). Cohen et al. (2020) also identified that these students had the ability to access other support services to enable them to remain in education, mitigating the need for additional SEd supports.

In deciding to include SEd within the IPS model, it is important to recognise that, while sometimes delivered together, the SEd model requires different skills of their education specialists, when compared to employment specialists (Ellison et al. 2014). While both education and employment specialists aim for meaningful and satisfying employment as the end goal, they play different roles in its achievement.

3.1.2 Considerations for implementing IPS within Disability Employment Services

The Productivity Commission Draft Report into Mental Health explored further roll out of IPS including consideration into Disability Employment Services (DES).

Within Australia, there are 53 employment specialists working in DES providers (Waghorn et al 2019). In order to fulfil integrated mental health requirements of IPS, partnerships have been developed with community mental health services. In these programs, no special concessions are made for IPS participants within DES, with DES providers free to adopt any model of vocational rehabilitation they choose (Waghorn et al. 2019). A typical issue in implementing IPS within the DES context is the restricted caseload requirements within IPS, with many DES-implemented IPS services having higher than typical IPS caseloads, with over 40 clients per employment specialist (Waghorn, & Hielscher 2015).

This section provides further considerations in implementing IPS within the current DES system.

Access to mental health services

For IPS to be implemented within DES, access to mental health services is needed. As stated above, where this has been implemented in Australia, relationships have been established with community mental health services. However, this presents some challenges in considering a broader roll out of IPS within DES.

Research has shown that some public mental health services are not willing to use their own funding to promote and deliver vocational rehabilitation services, as it is not considered an aspect of their core business (Waghorn and Hielscher 2014). Therefore, funding arrangements may prove to be a consistent barrier to model implementation within Australia in this context.

Literature highlights that, in comparison to the United States where IPS originated, Australia has limited integration between vocational services and publicly funded mental health services (Waghorn et al. 2007). Developing an integrated service delivery model within the Australian vocational sector may not only be complex but may also face structural barriers, as it will require inter-government collaboration (Bond et al. 2001; as referenced by Waghorn et al. 2007). This is due to a division in funding between state/territory governments and the Commonwealth Government (refer Table 1), resulting in questions regarding ‘who pays’?

Table 2: Service interactions to deliver IPS – Service funding source

Services required for a IPS model	State Funded	Federal Funded
Health	X	
Employment		X
Education	X	X
Vocational training	X	X
Housing	X	
Disability	X	X
Income support and payments		X

Source: Adapted from Waghorn et al. 2007 to reflect current funding arrangements

In comparison, a New Zealand study demonstrated that while there are positive aspects to a central government system, it continues to present challenges in service delivery. The New Zealand government has a straight forward administrative system with the Ministry of Health and Ministry of Social Development being responsible for policy development and funding of vocational rehabilitation programs. The study found a key enabler of the IPS model's success derived from key government agencies interrelated with employment and mental health providing formal recognition of the program and the support of local health and employment services leadership (Priest & Lockett 2019). However, Priest and Lockett (2019) highlight that, despite the centralised system, there were still barriers to optimal service delivery due to a lack of integrated policy, contracting and funding arrangements.

As stated previously, successful partnerships can be challenging requiring effective leadership to maintain them, although there have been examples showing it can be done (Waghorn et al. 2019). For example, a trial funded by the Queensland government demonstrated that a partnership between DES and an adult mental health service was more effective than DES providers acting alone (Waghorn et al. 2014).

Despite some successes, research has shown that there are ongoing challenges in making successful partnerships continue to work within the Australian service delivery context (Waghorn et al. 2019). For example, one IPS program established within a DES provider was initially successful, with at least 50 per cent of participants obtaining employment, however due to structural and leadership changes within the service and the mental health service, the program declined rapidly as evidenced by a significant decline in fidelity scores (Waghorn et al 2019).

Another consideration when integrating government funded services is determining where responsibilities between the agencies begin and end. In instances where successful integration occurred, it was most successful when there were levels of high fidelity from the beginning and co-location of a full-time employment specialist with the relevant treatment team (Waghorn et al. 2007), while the less successful agencies saw more difficulties when using non-orthodox co-location and part-time employment specialists (Waghorn et al. 2007).

In order to successfully deliver an integrated service model within government agencies, it is important to recognise that other reforms or enablers may be required to understand and facilitate interactions between agencies, while maintaining fidelity and IPS model standards.

Use of results-based funding arrangements within supported employment models

Results-based funding mechanisms provide compensation for measured outcomes of service. However, these arrangements can at times, fail to consider the quality of services, may provide limited opportunities for quality control and may have little or no incentive for participants to leave the program (Corden & Thornton 2003).

A key issue underlying this arrangement is the potential for the adverse selection of clients, also known as creaming, by selecting clients who are easier to assist achieve outcomes. This means that clients seen as more difficult in achieving outcomes will be neglected at the risk that payment will not be received (Corden & Thornton 2003). This is in contrast to the IPS core Practice Principle regarding eligibility based on participant choice.

This can also lead to quality of service issues and competition between non-profits and business providers, resulting in minimised market choice (Corden & Thornton 2003). In order to manage these risks within a supported employment model, Corden & Thornton (2003) suggest six methods:

- ensuring overall economic viability in the program;
- setting different benchmarks for clients with greater needs;
- providing higher compensation for providing services to client groups or individuals with greater needs, for example in a tiered structure;
- providing additional fee-for-service funding to meet the needs of individuals, for example in blended models;

- requiring quotas of people with greater needs among outcomes; and
- external control and management of referral of clients to providers.

DES providers are currently paid through a mix of volume and outcomes-based payments. Consideration is to be given to whether this model is sufficient to fund the IPS model within DES providers. One assessment found that it was financially viable to adopt the IPS model within the 2010-2018 DES funding model (Parletta and Waghorn 2016).

Mutual obligations and IPS

Mutual obligations for people receiving government payments requires them to comply with a series of requirements, such as searching and applying for jobs. The IPS model is potentially not in alignment with the concept of mutual obligations due to two core Practice Principles of the model being eligibility based on participants' choices and attention to participants' preferences. Given this, limited research has been conducted on the impacts of introducing mutual obligation requirements as an element of the IPS model.

These potential conflicts between the IPS model and the DES model means that with the current obligations within DES, service providers need to compromise elements of choice inherent in IPS to ensure their clients continue to fulfil DES and other government obligations, in order to continue to receive government supports (Waghorn et al 2014).

More broadly, programs across Australia have continued to encounter difficulties in ensuring mutual obligations are fulfilled for people with mental illness. Evidence demonstrates that, in programs such as Newstart Allowance (now JobSeeker) and Youth Allowance, the plans developed to assist young people find employment are not adequately tailored and are developed only to fulfil an administrative function (Productivity Commission 2019). While people with mental illness can request a 'temporary incapacity' exemption, approximately only 17 per cent of those with psychological or psychiatric conditions who are on Newstart receive the exemption (Productivity Commission 2019).

The current policy environment recognises a job seeker's illness or disability when setting mutual obligation requirements, however it remains unclear if the setting is appropriate for people with mental illness (Productivity Commission 2019). Mental illness is complex and often ambiguous in both meaning and significance, as well as the impact it has on an individual (Productivity Commission 2019). Therefore, it is often difficult to identify someone who is experiencing mental illness and comprehend its impact from a clinical perspective, particularly as the individual's condition may fluctuate over time. This is commonly identified for people with severe depression who may struggle to attend job interviews or even communicate with their job active provider, and therefore fail to comply with their obligations and potentially stop receiving payments (Productivity Commission 2019).

A submission from the Mental Health Council of Australia and the National Mental Health Consumer and Carer Forum to the Interim Report by the Reference Group on Welfare Reform contends that current mutual obligation processes contain increased barriers for those with mental illness, and therefore when they are unable to comply, their symptoms can worsen and create other negative impacts, further exasperating their barrier to employment. This report provided a number of recommendations regarding how mutual obligations should be delivered for people with mental illness if required, including:

- ensuring mutual obligations and requirements are tailored, meaningful and flexible to account for changing circumstances;
- making the exemption process straightforward and allowing people to remain exempt for as long as determined by a treating professional or designated practitioner;
- increased choice and control to enable client preference in their mutual obligation activities; and
- no punitive sanctions for non-compliance.

For participants with mental illness and government obligation requirements tied to their income support payments, they may have difficulty fulfilling their obligations. The Productivity Commission in its recommendation to further roll out the IPS model (Recommendation 14.3) suggested that participation in IPS should fulfil obligations for participants on income support.

3.2 Factors that influence success in realising outcomes

Research has continued to reflect the success of the implementation of the IPS model and its effectiveness in helping young adults with mental illness attain competitive employment (Bond et al. 2016) as well as its applicability to other cohort groups (Bond et al. 2019). Limited research has been conducted to determine whether there are particular contextual factors that may influence the effectiveness of implementing IPS beyond implementation success (such as those in the Practice Principles and the strength of relationships between employment support and clinical supports). This section summarises some key factors and any evidence related to outcomes achieved in IPS programs, as well as any adaptations that have been implemented.

3.2.1 Participant characteristics

This section explores the impact of certain characteristics of IPS participants on the outcomes achieved and examines research that has been undertaken around possible adaptations to the model that may improve delivery of services and employment rates.

Age

There is limited published literature relating to how a participant's age may impact the success of the IPS model, with studies generally focused on an age group in isolation rather than comparing outcomes across age groups. One study however, suggested that older participants may face greater employment obstacles in comparison to younger participants. The study explored an adaptation of the IPS model for homeless young people and found that younger participants had access to a greater range of job opportunities than their older peers. This was because younger participants were eligible for 'youth-specific' employment, such as federal-stimulus-funded youth programs (e.g. local youth summer internships), as well as temporary and seasonal positions often filled by younger people (e.g. Christmas casuals) (Ferguson et al. 2011).

Cultural background

There is scarce evidence and literature on how cultural and ethnic factors may impact the delivery of the IPS model. A recent study in New Zealand observed and reported the outcomes of how Indigenous Maori participants responded to the delivery of the model (Priest & Lockett, 2019). The study noted the existing barriers for Indigenous and non-native individuals in the workforce irrespective of an individual's mental health status, such as subconscious cultural bias and institutional racism (Harris et al. 2006, 2012, as referenced by Priest & Lockett et al. 2019). The study also acknowledged research that reflected that Indigenous Maori people are more likely to experience higher rates of mental illness, lower levels of educational attainment and be more likely to have a history of criminal activity (Lones et al, 2017, as referenced by Priest & Lockett 2019). There were limitations to the study, as the number of the Indigenous Maori cohort was small. Despite this, the study managed to demonstrate that the implementation of the IPS model still managed to produce successful outcomes for those Indigenous participants but that further research into how a cultural aspect could be incorporated into the model to improve the delivery of IPS services is important (Priest & Lockett 2019).

Mental health Status

The literature showed that young people experiencing serious mental health conditions transitioning from school to further education or employment often face multiple barriers as their condition can affect academic, social and cognitive functioning (Breslau et al. 2008, as referenced by Ellison et al. 2014). Due to these barriers, this particular cohort are a key target group for IPS. However, as many of these young people qualify for disability payments, due to the severity of their illness, there is a disincentive for them to remain engaged in the program and employment (Breslau et al. 2008; Reid et al. 2004 Souma et al. 2006, as referenced by Ellison et al. 2014).

A trial conducted in the United States examined how adaptations to the IPS model would impact the effectiveness of education, engagement, retention and competitive employment outcomes for young people with serious mental illness. The trial mirrored the key principles of the IPS model with the addition of a greater focus on career development, a supported education element and the inclusion of a peer mentor for each participant. The adaptations were guided by existing research that indicated young people with serious mental health conditions, on average, have lower levels of educational attainment (Wagner et al. 2006, as referenced by Ellison et al. 2014) and often lacked exposure to adults in their lives with steady careers (Vorhies et al. 2012, as referenced by Ellison et al. 2014). Young people are also largely responsive to peer mentors and are positively influenced to achieve academic attainment and career development (Harris 2010; Sargent & Domberger 2007, as referenced by Ellison et al. 2014). After 12 months, the trial found that 49 per cent of the participants had started in an education program or gained competitive employment and the retention rate was 80 per cent (Ellison et al. 2014).

Welfare recipients

Research shows that the effectiveness of the IPS model can differ based on country location and the policies that are in place to support those living with mental illness or disability. Outside of the United States, in places like Europe and Australia, disability payments and support may be more readily accessible. A concept known as the 'benefit trap' explains that ease of access to monetary assistance can encourage people experiencing serious mental illness to remain unemployed and not engage with supported employment programs (Burns et al. 2007). A study carried out in Sweden tested this proposition and discovered that of the eight key principles of the IPS model, four principles were challenged by, or in contrast to, the Swedish welfare system (Bejerhom et al. 2011). As part of the implementation process, it is important to consider how local labour and disability policies can influence those with mental illness and potentially discourage them from participating in the workforce.

Homelessness or at risk of homelessness

Previous research indicated high rates of unemployment among homeless young people (Ferguson & Xie 2008; Whitebeck, 2009, as referenced by Ferguson et al. 2011). Low levels of education combined with mental illness can create significant challenges in their transition into adulthood, further education and employment (Cauce et al. 2000; Whitebeck 2009, as referenced by Ferguson et al. 2011). Homeless young people are also significantly more likely to experience drug addiction and alcohol dependency compared to their housed peers (Slesnick et al. 2000, referenced by Ferguson 2013). Homeless young people also face the inherent obstacles that arise from living on the streets, such as poor hygiene, involvement in criminal activity and food insecurity (Ferguson 2013) and lack resources which can lead to social estrangement and exclusion from the labour force (Cauce et al. 2000; Dachner & Tarasuk 2002; Gaetz & O'Grady 2002, as referenced by Ferguson 2013).

Most vocational programs for homeless young people rarely have a mental health component (Ferguson 2007; Lenz-Rashid 2006, as referenced by Ferguson et al. 2011). A 2011 United States study partnered with support agencies for homeless young people to examine how augmenting the IPS model with additional supports could improve the effectiveness of the IPS model for this cohort. The IPS model was implemented in agencies that provided additional services that participants could access, such as emergency accommodation, long-term shelters and assisted living apartments. The mental health component of the model was adapted to treat specific mental illnesses that were more common among homeless young people (e.g. depression, substance abuse, post-traumatic stress disorder) (Cauce et al. 2000; Whitbeck 2009, as referenced by Ferguson et al. 2011). The effectiveness of the refined IPS

model was compared against a group receiving traditional vocational training as a control condition. The results of the study found that 85 per cent of the young people participating in the IPS trial were working in competitive employment at some point throughout the duration of the study compared to 37.5 per cent of the control group. The study also found that those in the control group were more likely to be living on the streets through the duration of the study, however participants in the IPS trial became aware of the importance of stable housing in attaining their employment goals and were more likely to remain off the streets (Ferguson et al. 2011).

3.2.2 The impact of remoteness in achieving employment outcomes

There have been several anecdotal claims made that jobs may be harder to obtain in rural communities, and therefore location may impact the successful implementation of the IPS model (Fraser 1987, as referenced by Haslett et al. 2011). Other claims have been made that transportation to and from places of employment may be difficult or unsafe and that there are stigma-related challenges given the close-knit culture of rural communities (Carlson 2009, as referenced by Haslett et al. 2011). However, there is sparse published research to support any of these statements.

Haslett et al. (2011) completed research in the United States examining the difference in competitive employment rates of IPS program participants across metropolitan, micropolitan¹ and small-town communities, using IPS agency data in these locations. The mean competitive employment rate of IPS participants in each of the regions was 43 per cent in metropolitan communities, 49 per cent in micropolitan communities and 40 per cent in small town communities. These results suggest that location does not impact the effectiveness of the IPS model on competitive employment outcomes. However, it is suggested by the researchers that each IPS support agency be guided by the location and community in which they operate (Haslett et al. 2011).

3.2.3 Use of technology to expand service delivery

Lord et al. (2014) highlights that several IPS programs are trialling technology-based tools for enhanced service delivery. This section considers the research around the technology-based options that are available to expand the IPS model and improve client outcomes.

Increasing participation

Despite the success of the IPS model and its ability in improving the rates of competitive employment among individuals with psychiatric disabilities, there is still a large number of individuals living in the community with mental illness who want to work but are unaware of the services available (Tschopp et al. 2007, referenced by Lord et al. 2014). Advancements in technology and ease of use could potentially mean that young people experience less barriers to active participation and therefore are more likely to engage (Lord et al. 2014).

Job planning and employment support

A key component for IPS for young people is the need for additional support in getting employment-ready and continual support once employed when compared to mature adults. Technologies can be leveraged to provide this support. For example, the Dartmouth Career Profile (DCP) (Swanson & Becker 2013, referenced by Lord et al. 2014) is web-based technology that assesses participants' job interests, strengths, concerns and any prior experience. The DCP created an individual job plan for each participant that is fed back to both the participant and employment specialist. Leveraging web and mobile technologies to create participant career profiles offers a delivery format that improves the job matching process, enhances communication between employment specialists and the participant and also means information can be quickly updated and accessed (Lord et al. 2014). The job matching process is an important component to the success of the IPS model, as research reflects participants who gain

¹ A statistical area in the United States where there is an urban cluster of between 10,000 and 50,000 residents.

employment in an area of interest are likely to remain employed for a longer period of time (Henry 2004; Kukla & Bond 2012, referenced by Lord et al. 2014).

Virtual reality job interview training for IPS participants is also another technology-based example that has been trialled to enhance the IPS model (Lord et al 2014). A team funded by the National Institute of Mental Health developed a simulation to allow participants to experience a 'real-life' interview and practice their skills. Participants received encouragement throughout the process and were provided written feedback at the end. The results from the trial showed that those who participated were more likely to gain employment than those who did not participate (Smith et al. 2018).

On-going, "follow-up" communication and support for IPS participants once they gained employment is also key to the success of the program and contributes to fidelity (Bond & Kukla 2011, referenced by Lord et al. 2014). Technologies such as mobile phone applications can offer 'real-time' communication between employment specialists and/or support teams and participants. These applications can also assist in tracking progress and allow employment specialists to provide encouragement to participants. These types of applications can provide easily accessible training modules and resources to assist with job progression (Lord et al. 2014).

4 Conclusion and other considerations

The IPS model is an evidence-based model of supported employment, which evidence has demonstrated out-performs alternative programs or control conditions on outcomes relating to competitive employment (Killackey, 2014). The IPS model is based on eight Practice Principles, and implementation of the IPS model requires high fidelity to the model in order to be effective. The question then becomes, how can the IPS model be strengthened to improve its effectiveness, particularly for young people in Australia experiencing mental illness?

4.1 How can the IPS model be strengthened into the future?

The literature review identified a number of adaptations to the IPS model. They are summarised in the table below.

Table 3: IPS Model Additions and Outcomes

Model Addition	Description	Outcomes Summary
Skills Training		
Integrated Supported Employment (ISE) (Tsang 2003)	Teaches participants social skills to retain a job, such as developing good working relationships, and how to manage difficult situations in the workplace.	60 per cent who accessed the IPS model enhanced with ISE gained competitive employment, compared to an IPS model only with the control group achieving a 30 per cent employment rate.
Workplace Fundamentals Training (WFT) (Wallace & Tauber 2004)	Teaches participants workplace skills, including problem-solving to cope with job stress and how to successfully interact with colleagues and supervisors.	The combined model showed no significant differences in the rate of competitive employment attained when compared with an IPS only model, but the combined cohort demonstrated longer job retention. A qualitative benefit of the combined model was greater job satisfaction.
Cognitive Skills Training		
Neurocognitive Enhancement Therapy (NET) (Greig et al. 2007)	Is focused on providing a multi-faceted cognitive remediation program to improve cognition in participants.	The addition of NET to the IPS model demonstrated that, after a year of combined supports, participants had improved executive functioning and working memory.
Thinking Skills for Work (TSFW) (McGurk et al. 2005)	Participants undertake a computer-based cognitive assessment that covers attention, memory, executive functioning	Those accessing combined TSFW and the supported employment model demonstrated stronger competitive employment rates, of 69.6 per cent compared to 4.8 per cent for

Model Addition	Description	Outcomes Summary
	and other cognitive domains, which results in tailored, cognitive remediation support based on their cognitive strengths and challenges.	those only accessing supported employment. In addition, they also experienced higher earnings.
Errorless learning (Kern et al. 2002)	Involves repetitively practising tasks while eliminating mistakes, to enhance learning.	The combined model showed participants remained in employment for 32.8 weeks, whereas those accessing only the IPS model experienced an employment duration of 25.6 weeks.
Cognitive Behavioural Therapy (CBT) (Boycott et al. 2016; Reme et al. 2005)	Involves problem-solving skills, interpersonal skills, and cognitive rehabilitation aimed at improving attention, language, memory, and executive functioning.	44.2 per cent of participants accessing a combined CBT and IPS model maintained competitive employment at 18 months, compared to 37.2 per cent of those only accessing the IPS model. Participants accessing the combined model also experienced reduced depression and anxiety symptoms, and improved health-related quality of life.
Peer Group Interaction		
Peer Mentors (Cohen et al. 2020; Ellison et al. 2014)	Involves pairing of participants with a peer mentor who is someone of similar age and who has overcome obstacles to achieve their own career goals.	The incorporation of peer mentors into the IPS model provides qualitative benefits through enabling participants to feel supported, safe, understood and provides a positive influence to enable encouragement towards education, employment and their mental health treatment.
Group programs (Corrigan 1995; Ellison et al. 2014)	Can encompass a variety of aspects in a group setting, including learning, interpersonal skills, information sharing and motivational based communication to improve job readiness.	Enabling communication and collaboration within participant peer groups has shown to enhance interpersonal skills, information sharing and improved job-readiness through soft skills, such as searching for employment and completing job interviews.
Education		
Supported Education (Becker et al. n.d.; Cohen et al. 2020; Ellison et al. 2014; Rapp & Goscha 2011; Waghorn et al. 2007)	Underpinned by the same principles as IPS with a focus on supporting people into education.	15 of 22 participants (68 per cent) in a combined employment and education program enrolled into education over a 12 month period, with six completing their education.

Source: KPMG

The evidence to support the effectiveness of these adaptations is somewhat limited, with them all showing a variety of positive outcomes compared to IPS programs alone, however in general, the number of studies is small, undertaken with a small number of participants. It is also unclear from the available evidence whether these adaptations are suitable for all cohorts of participants, in particular for the IPS Trial and young people with mild to moderate mental illness.

Those adaptations that show the most promise include:

- supported education;
- cognitive adaptations, particularly TSWF; and
- integrated supported employment.

In considering the cohort of young people in the IPS Trial, it is likely that those adaptations that teach workplace skills and interpersonal skills may be a valuable addition to the Trial given that many young people in the Trial have limited previous work experience.

One trial in the United States demonstrated successful results with the addition of a number of extra supports, including a greater focus on career development, a supported education element and the inclusion of a peer mentor for each participant. After 12 months, the trial found that 49 per cent of the participants had started in an education program or gained competitive employment, and the retention rate was 80 per cent (Ellison et al. 2014). This suggests that a combination of additions that are most relevant to the target population could also be explored.

The continued inclusion of education within the IPS Trial should also be considered in light of the roles of government in Australia. If it is to be included then the use of the supported education model may be beneficial, with support provided by an education specialist rather than an employment specialist. Furthermore, whether supported education through the IPS Trial is the appropriate support for young people of compulsory school age (for which state and territory governments have responsibility) should be reflected upon.

The use of technology to support IPS service delivery has also been explored. The research has shown that the use of technology could break down barriers to active participation for young people in IPS as well as the provision of follow-along supports post-employment (Lord et al 2014). In addition, technology can be used to support the development of career profiles and job matching and the provision of virtual reality interview training. How technology can be leveraged within the IPS Trial to increase participation is worth considering.

Limited research has been conducted to determine whether there are particular contextual factors that may influence the effectiveness of outcomes beyond implementation enablers (such as those in the Practice Principles and the strength of relationships between employment supports and clinical supports). For example, there is limited evidence to suggest that the age of a participant impacts on the likelihood of achieving employment, with just one study suggesting that young people had better job prospects than older participants (Ferguson et al. 2011).

Young people experiencing homelessness (or at risk of) often have high rates of unemployment and face significant barriers to education and employment. The IPS model has been found to be successful for young people experiencing homelessness (Ferguson et al. 2011).

Remoteness was also found not to impact on the effectiveness of IPS, however, the research is limited to the United States which has a different population distribution to Australia. How applicable these findings are to Australia is unknown.

4.2 Conclusion

The literature review has identified a number of additions that could be considered to augment the IPS model within the IPS Trial, although limited research into these adaptations (a small number of studies with small numbers of participants) means that definitive recommendations on what those additions should be cannot be provided. However, a number of more successful adaptations were identified and discussed above. It is suggested that any adaptations used to complement the current IPS Trial be focused on filling the gaps most likely in the IPS Trial cohort, for example, those that address work-place skills and interpersonal relationships.

The use of a specific supported education model and education specialists may be helpful in continuing the education focus of the IPS Trial. Some early success has been shown in supporting young people to access education, particularly when used in combination with other supports.

The literature review was not able to identify particular considerations in the transferability and scalability of the IPS model, with limited evidence available on the differences in outcomes for different cohort groups or those in different locations. However, for some cohort groups, particular adaptations were found to be effective in improving outcomes of participants.

Appendix A: Reference list

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Appendix B: Search terms

Age	
"individual placement and support" ideal age	"individual placement and support" young people
"individual placement and support" young people ideal age	"individual placement" model age cohort
"individual placement and support" young people target age	"individual placement" ideal age
"individual placement" model age appropriateness	"individual placement" model age appropriateness for young people
"individual placement" model age cohort	"individual placement" model recommended age
age of "individual placement and support" participants	age of people in "individual placement and support"
individual placement and support ideal age	
Indigenous Populations	
Individual placement and support Indigenous	
Location	
"individual placement and support" ideal location	"individual placement and support" locations with limited employment
"individual placement and support" rural	"individual placement and support" town
"individual placement support" employment model effectiveness based on remoteness	individual placement support employment model effectiveness based on remoteness
individual placement support model effectiveness based on remoteness	IPS model and location variables
Outcomes	
Improved outcomes	Improved outcomes and IPS model
improved outcomes and IPS model	individual placement model improving outcomes
IPS cohort groups	IPS model cohort groups
Technology	
"individual placement and support" use of technology	individual placement and support use of technology

Obligations	
"individual Placement" and Support model why are there no mutual obligations	"Individual placement" scale
Individual placement and support compulsory	Individual Placement and Support Model with mutual obligations
job search obligations mental health	Mental health and mutual obligations for job seekers
mutual obligations for job seekers	mutual obligations for people with mental illness
mutual obligations impact on people with poor mental health	issues with resolving mental illness
Peer Mentoring	
peer mentoring in IPS	peer mentor individual placement support
peer mentoring in IPS model	
Education	
"individual placement" model for education	"individual placement" model of supported employment but education
individual placement "education for young adults	
Employment	
individual placement working life	peer employment model
tiered support for IPS employment model	
Young Person Centred	
"individual placement" model for youth	"individual placement and support" young people start age
"individual placement" model young people	how young is too young to start "individual placement and support"?
average age young people age "individual placement and support"	average age young people enter "individual placement and support"
individual placement "employment for 12 to 25 year olds"	individual placement "employment for teenagers"
individual placement "employment for young adults"	

Government	
independent placement support and government service provision	intensive service support and government service provision
Future Expansions	
"individual placement" model of supported employment	"individual placement" model of supported employment and expanding for the future
"individual placement" model of supported employment and expanding service size	Individual placement and support
Individual placement and support adjustments	individual placement support model cohort groups
IPS and adaptive model	IPS model and ability to increase
IPS model and ability to scale	



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