Research Bulletin

Vocational Interventions for Young People with Mental Ill-Health

ISSUE 01

Like their peers, most young people with mental ill-health want to work and/or study. For a variety of reasons however, the outcome of meaningful paid employment, vocational training and/or higher education may not be achieved by a significant proportion. This Research Bulletin considers the evidence regarding the reasons for impaired vocational outcomes in young people with mental ill-health and how education and employment opportunities can be both enhanced and ultimately fulfilled as part of mental health care and treatment.

Why is vocational functioning impaired in young people with mental ill-health?

For many young people, the goal of being able to work or study, despite their mental health conditions, is unfortunately met with pessimism by clinicians, friends and family (Orygen Youth Health Research Centre, 2014; Rinaldi et al., 2010). This pessimism relates to a longstanding history of poor employment outcomes for individuals with mental ill-health. In Australia, adults with a mental disorder are the most disadvantaged 'disability' group when it comes to employment (Australian Burea of Statistics, 2012). The onset of any mental illness in youth (i.e. prior to the age of 25) is also associated with unemployment, underemployment and rising levels of disability (Gibb, Fergusson, & Horwood, 2010).

In 2011-12, only 79% of Australians aged 16-30 years with a self-reported mental illness were employed and/or enrolled in study compared to 90% of their same age peers (see Figure 1, Department of Health and Ageing, 2013).

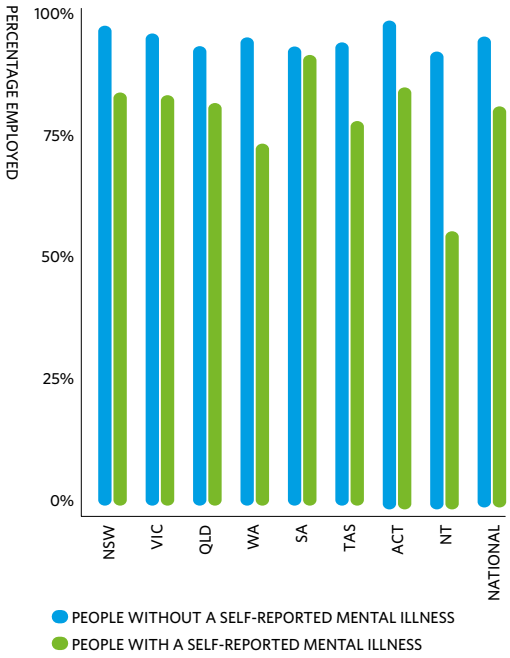

Figure 1. Percentage of young people aged 16-30 years who are employed and/or enrolled for study, nationally and in each state and territory by mental health status, 2011-2012. Department of Health and Ageing (2013) National Mental Health Report 2013: tracking progress of mental health reform in Australia 1993 – 2011. Commonwealth of Australia, Canberra. Copyright by Department of Health and Ageing. Reprinted with permission.

Orygen
The National Centre of Excellence in Youth Mental Health

Unemployment rates are particularly high for young people with certain forms of severe mental illness, such as psychotic and affective disorders. Internationally, unemployment rates among young people experiencing a first episode of psychosis (FEP) are reported to be 40-50% (Killackey, Jackson, Gleeson, Hickie, & Mcgorry, 2006; Marwaha & Johnson, 2004), compared to 4.2% among same age, healthy peers (Australian Bureau of Statistics, 2012). If a first episode of psychosis persists to become a chronic psychotic disorder, unemployment rates rise to 70-92% (Lehman et al., 2002; Marwaha & Johnson, 2004; SANE, 2002). In fact, many young people are already disengaged from work and/or study by the time they present to mental health services (Rinaldi et al., 2010; Scott et al., 2014). In a recent Australian study by Scott and colleagues (2014), a third of young people (n=1,241 aged 16-25 years) presenting to clinical services for the first time with a mood disorder reported vocational inactivity and 6% were already receiving a Disability Support Pension.

Other barriers can also impede a young person's goal to find or re-engage with work including: (i) difficulty accessing employment support services in the early stages of illness, (ii) employment services failing to provide an appropriate level of support to young people with severe mental illness, (iii) vocational staff having high case loads, and (iv) a strong focus on assessing a client's readiness to return to work prior to implementing an intervention (OYHRC, 2014).

Youth mental health services, which typically have an early intervention focus, are well placed to support vulnerable young people to achieve vocational recovery. However, if this potential is to be achieved, two prominent myths about mental ill-health and employment must be dispelled. These myths act as particularly powerful barriers to vocational recovery and affect clinicians, employers, young people with mental ill-health and their friends and family (OYHRC, 2014).

Individuals with mental ill-health can't work. This relates to the idea that people will be unable to perform their job, or that they will be unreliable, inefficient or even 'risky' employees.

Individuals with mental ill-health should not work. Well-meaning and concerned clinicians, friends and relatives may actively discourage a young person from engaging in work due to fear of relapse, decrease in functioning and/or increased likelihood of an inpatient admission (Craig et al., 2014; OYHRC, 2014; Rinaldi et al., 2010). Health professionals and significant others may also worry that the young person would risk losing their benefits and/or be victimized in the workplace (Rinaldi et al., 2008). Similar beliefs and pessimistic attitudes may also lead to a lack of attention to young person's educational goals (2014). While the intentions of family, friends and clinicians are well meaning, their fears are misplaced (Craig et al., 2014; OYHRC, 2014; Rinaldi et al., 2010).

“Evidence shows that young people with mental ill-health can work if they are adequately supported.

Evidence shows that young people with mental ill-health can work if they are adequately supported to do so, even if their illness is severe (Bond, Drake, & Campbell, 2014a; Bond, Drake, & Luciano, 2014b). Research also suggests that a return to work and/or education is likely to improve, rather than harm, a young person's clinical outcomes. In a landmark 7.5 year follow-up study of 209 young people treated for first episode psychosis (FEP), returning to work or school within 14-months of treatment commencing was a better indicator of long-term recovery than symptomatic recovery at 14-months (Alvarez-Jimenez et al., 2012). Nearly 60% of young people who had re-engaged with work or education at 14-months went on to attain full functional recovery at 7.5years follow-up (Alvarez-Jimenez et al., 2012). Vocational services can also act as a powerful clinical engagement tool for young people experiencing mental ill-health, as most want to return to work or study (Bond et al., 2014b)

In light of the growing recognition that vocational recovery is as important as symptomatic recovery, research is increasingly focusing on the efficacy of vocational interventions for people with mental ill-health. Individual Placement Support (IPS) is an **evidence-based vocational intervention** demonstrated to be superior to traditional vocational interventions among adults with severe mental illness (Bond, Drake, & Becker, 2012; Twamley, Jeste, & Lehman, 2003). Early trials with young people with FEP also demonstrated promising results. For example, Killackey et al., (2008) demonstrated that 6-months of IPS embedded within a comprehensive early psychosis program was superior to treatment as usual (TAU, which for vocational assistance included referral to external vocational agencies and participation in a group program) for improving employment outcomes in young people with schizophrenia spectrum disorders (mean age= 21 years). Specifically, 85% of the young people randomised to the IPS group (n=20) gained employment, enrolled in a course or did both, compared to only 29% of participants in the TAU condition (n=21). Of those who commenced work, young people in the IPS group worked more hours per week, were paid more, and retained their jobs for longer than the TAU group. Furthermore, the IPS intervention was popular, as evidenced by a 0% refusal rate and only one dropout during the trial. In contrast, five participants dropped-out of the TAU group with four giving the reason that they were not getting the help they wanted to find work.

Disengaging from clinical services altogether on the basis that vocational goals are not being adequately supported in treatment highlights the importance of functional recovery to young people with mental ill-health, and the role that IPS might play in this regard. A secondary analysis of a major international clinical trial across six European cities found that IPS is also “probably cost-saving and almost certainly cost-effective” in comparison to standard vocational recovery services (Knapp et al., 2013, p.60). IPS has now been successfully integrated into early intervention services in Australia, America, United Kingdom and New Zealand (Browne & Waghorn, 2010).
The next section summarises the key findings and implications of recent research into IPS in early intervention services for young people with mental ill-health.

Recent research on individual placment support (IPS) in young people with early psychosis

Employment and educational outcomes in early intervention programmes for early psychosis: a systematic review.

Bond, G., Drake, R., & Luciano, A. (2014b)
The British Journal of Psychiatry, 205, p.145-150.

This is the first systematic review of vocational interventions in first episode psychosis (FEP). Reviewed studies included uncontrolled (i.e. pre-post designs), quasi-experimental and experimental designs. Eleven trials of early intervention programs offering IPS were identified. Three were randomised controlled trials (RCTs) and one was a quasi-experimental study. Eight trials (combined sample of n=709 receiving supported employment, and n=165 receiving early intervention services excluding supported employment) reported separate education and employment outcomes.

When considering the combined results of the eight trials, employment rates were significantly higher for participants who received supportive employment versus those in control conditions (49% vs. 29%). When results were adjusted to control for employment at baseline, the difference between groups remained significant, with a medium effect size. In contrast, the enrolment rate in education during follow-up was slightly lower (27%) for the supported employment participants than the control participants (33%), although this difference was not statistically significant.

Bond and colleagues also conducted a meta-analysis on the four trials that included a control group (i.e. the 3 RCTs and 1 quasi-experimental trial). There was a combined sample of n=167 in the IPS conditions, and n=165 in the TAU conditions. Overall, IPS participants had significantly better employment outcomes, and a significantly larger increase in employment rate from baseline compared to TAU. However, there was no significant difference in educational outcomes between groups. Similarly, none of the four studies found a significant difference in enrolment in education between the two groups.

Take home messages This systematic review demonstrated that integrating high fidelity IPS into comprehensive early intervention services for patients with FEP significantly improves employment, but not educational outcomes in comparison to early intervention services that do not provide IPS. It also demonstrated that the effect of adding IPS to TAU was larger within early intervention services than generic psychiatric services. The authors noted that the overall competitive employment rate at follow-up was lower for young adults receiving IPS than outcomes demonstrated among adults with severe mental illness. They suggested that young people's interest in pursuing educational goals might contribute to this difference. More research is needed to strengthen the evidence in this area, and in particular to ascertain how IPS programs can better meet the educational goals of young people.

Due to a lack of high quality trials, it was not possible to conclude whether providing comprehensive early intervention services in the absence of any specific vocational services is effective compared to providing generic mental health treatment.

Vocational rehabilitation in early psychosis: cluster randomised trial.

Craig, T., Shepherd, G., Rinaldi, M., Smith, J., Carr, S., Preston, F., & Singh, S. (2014). *Epidemiology and Psychiatric Services.*

A cluster-randomised controlled trial (n=159) was conducted in the UK across four early psychosis services that already provided IPS. Two of the treatment teams were randomised to receive extra clinical training in Motivational Interviewing (MI), which targeted clinicians' concerns about the risks associated with clients returning to competitive employment (IPS+MI). The other two teams continued to implement IPS alone. MI was offered to the whole clinical team on the rationale that clients would be more likely to be motivated to pursue IPS if encouragement was provided by their treating clinicians, as well as the employment specialists. Clients were excluded from the trial if they were working (part-time or full-time) in mainstream employment or enrolled in full-time education. In keeping with IPS principles, motivation to return to work or education was not necessary to participate. Participants reported a strong desire to return to work, but a lack of confidence that this would be achievable in the short-term. Experienced clinicians provided clinician training for both interventions (IPS and MI) and fidelity of the IPS implementation was independently assessed.

At 12-month follow-up, participants in the MI+IPS intervention teams were significantly more likely to be in open employment than those in the IPS alone intervention teams (43% vs. 18%). Most of the participants who found work had done so by 6-month follow-up. Competitive employment outcomes for the IPS+MI group were significantly better after controlling for care coordinator, gender, ethnicity, educational attainment, employment history, psychotic symptoms and functioning at baseline. The only participant characteristic that had a significant effect (independent of the treatment effect) was prior educational attainment. There was no significant difference between groups in hours worked per week or duration of employment. A secondary analysis demonstrated that when voluntary and casual 'cash-in-hand' positions were considered in addition to competitive employment, there was no significant difference between the two groups in employment outcomes.

Educational outcomes also favoured the combined intervention. At 6-month follow-up, significantly more participants in the MI+IPS teams had returned to formal education than those in the IPS alone teams (28% vs. 14%). By 12 months follow-up, almost half of the participants in the combined intervention group had returned to formal education, which was significantly higher than the quarter of those in the IPS only group

Take home messages This research differs from other trials of IPS in examining the benefit of adding MI for clinical staff in an early psychosis program that already utilizes IPS. However the employment outcomes for young people in this cluster RCT are inferior to those reported in other IPS trials. The authors speculated that this may have been due to the trial being conducted at the height of the recession in the UK. Furthermore, in contrast to other trials, all of the participants were disengaged from competitive employment and not engaged in full-time study at the start of the trial.

The results nonetheless demonstrated that supporting young people with psychosis to engage in competitive employment leads to superior outcomes than encouraging them to engage in voluntary work first (which only lead to two participants finding work). This is also the only RCT to demonstrate significant gains in educational outcomes, although it's possible that the economic context encouraged more people to pursue a return to education rather than employment. It is interesting to note that the gains from 6-month to 12-month follow-up differed for educational and vocational outcomes. Most young people who found employment had done so by 6-months. In contrast, the number of participants engaged in full-time education increased markedly from 6- to 12- month follow-up for both intervention groups. This suggests that positive educational outcomes may be more likely to be apparent at longer-term follow-up, and if IPS programs continue to provide support over a 12-month period or longer.

(Note: this trial was not included in the Bond et al (2014) meta-analysis)

> Young people with mental ill-health self-identify vocational recovery as one of their main treatment goals.

What about using IPS to assist young people with other forms of mental ill-health with their vocational goals?

Effectiveness of individual placement and support supported employment for young adults.
Bond, G., Drake, R., & Campbell, K. (2014a)
Early Intervention in Psychiatry.

This research conducted a secondary analysis of four RCTs comparing the effectiveness of IPS to other well-established vocational interventions in individuals with severe mental illness who were receiving community-based mental health treatment. Control conditions included group vocational skills training followed by competitive job placement services from an external rehabilitation program (Drake, McHugo, Becker, Anthony, & Clark, 1996); enhanced vocational rehabilitation (Drake et al., 1999); clubhouse and brokered supported employment (Mueser et al., 2004); and diversified placement (Bond et al., 2007). In two of the RCTs, participants were required to have over two years of 'role dysfunction' to participate. The subset of data from 109 young adults (20-30 years; mean=26 years) included in these studies was examined. Half of the sample (47%) had a primary diagnosis of a mood disorder, half (46%) a psychotic disorder, and 7% another disorder. The IPS group had significantly better outcomes on all of the employment outcomes, even when controlling for work history, ethnicity, and diagnosis. Effect sizes were medium (0.48) to large (0.86).

Participants in the IPS group were nearly twice as likely to be competitively employed at 18-month follow-up as those in the control condition (82% vs. 42%). Moreover, the IPS group worked more weeks, longer hours, earned more, and held their jobs for longer than the control group. When the analyses were separated into an under-25 years, and an over-25 years age-group, the outcomes for the younger group were superior. Among 20-24 year olds, 93% of those in the IPS group held a competitive job compared to 39% of control participants.

Take home messages This study indicates that high-fidelity IPS can be effective in improving a wide range of employment outcomes for young people who are receiving treatment both for psychotic and non-psychotic disorders (mainly severe depression). Furthermore, this study demonstrates that vocational interventions can be effective, even if a young person has experienced a long duration of vocational impairment, and benefits can be sustained over a long term follow-up period (in this instance 18-months). It is also noteworthy that the outcomes were positive, even though the IPS programs were not specifically adapted to meet the needs of young people. This suggests that IPS programs adapted for youth (e.g. having an equal focus on educational and employment goals, and including a career development focus) may have the potential to achieve even better outcomes. Limitations of this study include that educational outcomes were not considered (as outcome data were not available), and some of the source RCTs required participants to be motivated to find competitive work. This requirement is not in keeping with the IPS principle of being fully inclusive.

Adapting supported employment for emerging adults with serious mental health conditions.

Ellison, M. L., Klodnick, V. V., Bond, G. R., Krzos, I. M., Kaiser, S. M., Fagan, M. A., & Davis, M. (2014) *Journal of Behavioral Health Services & Research*, p.1-16.

This small, pre-post study examined the feasibility of an adapted IPS program for young people (17-20 years; n=35) identified as having severe and persistent mental health difficulties, consisting predominantly of mood disorder (80%), psychosis (14%) or an impulse or addiction disorders (6%). Most participants in this study were residing in state care or supervised living arrangements in the US state of Illinois. Treatment included comprehensive clinical and vocational (IPS) services, provision of community housing and assistance with the transition from youth to adult services (at age 18). IPS was adapted for youth by training specialists to provide educational support, including peer mentors, and adding a career development focus. Fidelity of the IPS intervention was assessed, and clients had to be unemployed and interested in pursuing employment or education to participate.

There was an 80% acceptance rate into the study among eligible participants. Twenty-two participants enrolled in the education program and 33 enrolled in the employment program (some participants enrolled in both). As few participants made progress on their educational goals, a separate role was created for an IPS education specialist during the study. Eighty percent of participants were retained in the program and completed 12-month follow-up, however many had gaps in their participation in the program due to incarceration, hospitalization or absconding from the service. At follow-up, 24% of participants had found at least one job, and 68% had enrolled in a course. However, there were high drop-out rates from education programs (60%) and job retention was low (n=10 terminated/quit/other). In most cases terminations resulted from poor attendance. Only three participants maintained employment beyond the 12-month study period. Some participants incurred debts for dropping out of education programs that were likely to act as major barriers to a return to education.

Take home messages While this study lacks the methodological rigour of other IPS trails and RCTs (including no control group, retrospective collection of some data, and inconsistency in the delivery of IPS during the study), the results contribute to the body of knowledge in this field by demonstrating both the opportunities and challenges of using IPS in vulnerable young people with complex mental health and psychosocial problems. Employment outcomes were inferior to those reported in better-conducted trials with young people with early psychosis. However service system barriers may have contributed to these results, as some participants had difficultly transitioning from youth to adult services during the study, and others' participation was interrupted by incarceration. The IPS program was also likely not intensive enough to meet client needs as most participants only met their employment/education specialist once a month for 40 minutes. Finally, it is unclear how well the IPS program was integrated into clinical care and how intense the clinical care was.

Despite these limitations, this feasibility study demonstrated that the majority of young participants with complex needs wanted to participate in IPS, and remained engaged in the study. Moreover, the program had some success in improving educational enrolment and employment rates, although its effectiveness in retaining young people in their new roles was limited.

Adapting the individual placement support model with homeless young adults.

Ferguson, K. M., Xie, B., & Glynn, S. (2012) *Child Youth Care Forum*, 41(3), p.277-294.

This small, quasi-experimental pilot study compared the effectiveness of integrating IPS into clinical care versus standard employment agency services for homeless young adults with a mental illness. The interventions were delivered across two different homelessness services and allocation was determined according to which homeless service participants were attending, not random assignment. Participants (n=36) were aged 18-24 years and met criteria for a number of psychiatric disorders, including major depression (89%), substance abuse/dependence (64%), generalised anxiety (50%), mania (33%), post-traumatic stress disorder (PTSD; 33%), and alcohol abuse/dependence (25%). At baseline, the employment rate was relatively high for both the intervention and control condition participants (45% and 25% respectively). The groups also differed in that

participants in the control group were significantly older and more likely to be living on the streets than those in the intervention group. However participants in the interventions group were more likely to have a diagnosis of mania or PTSD.

Participants who received IPS were significantly more likely to have worked at some point during the study than those in the control group (85% vs. 37.5%). They were also more likely to be working at 10-month follow-up than those in the in the control group (66.7% vs. 25%), however this difference was not significant. Contrary to most IPS studies, these outcomes included both competitive and unpaid positions (e.g. voluntary internships). Employment rates during the study were measured and varied between 45-70% for the IPS group, and 19-31% for the control group for any month of the study. At 1-year follow-up, the IPS group had worked a significantly greater number of months (mean=5.2 months, SD=3.33) compared to the control group (mean = 2.19 months, SD = 2.97), however there were no differences between groups in weekly working hours or income. It should be noted that there was a high rate of attrition (i.e. number of clients lost to follow-up) during the trial that was unequal across groups (10% for IPS vs. 50% for control) and no attempt was made to account for missing data in the analyses.

Take home messages It is not possible to attribute the superior outcomes in the IPS group to the IPS intervention as the two groups differed in several important ways aside from group allocation (which was not random). This, along with the uneven rate of attrition, introduces a high risk of bias into the results. This study also included both competitive employment and unpaid positions in the outcomes, which likely accounts for the higher employment rates relative to most IPS studies. Finally, the fidelity of the IPS intervention was not assessed. Bearing these significant limitations in mind, this study nonetheless provides some preliminary support that IPS is a feasible and acceptable intervention for homeless young people with mental ill-health; like the previous study, a vulnerable population with complex needs. Furthermore, the IPS group had significantly better outcomes regarding their rates and duration of employment over the course of the study. These results are encouraging and highlight the need for more robust trials to be conducted with young people with a range of mental health problems.

Conclusions

In focusing on what might go wrong if a young person returns to work or study, allied and mental health professionals run the risk of failing to consider what might go wrong if they don't. **Young people with mental ill-health self-identify vocational recovery as one of their main treatment goals** (OYHRC, 2014) and if they are not adequately supported to work toward this goal, they may disengage from their clinical management (Killackey, Jackson, & McGorry, 2008). Even if young people do remain engaged in treatment, delaying or discouraging vocational engagement can have deleterious consequences in terms of increased self-stigma, social isolation, hopelessness, suicidality and chronic disability (Craig et al., 2014; OYHRC, 2014; Rinaldi et al., 2010). In addition to these personal burdens, failing to provide timely support to young people with mental ill-health to re-engage in the workforce or education has significant economic costs. A recent Australian report estimated that the cost of lost income due to unemployment among young men with a mental illness alone is $167.8m per annum, while the cost to the government for welfare benefits for this group is $62.1m p/annum (Degney et al., 2012).

Strong Evidence for IPS in Early Psychosis (for Employment, but not Educational Outcomes)

As this Research Bulletin shows, **there is increasingly compelling evidence that vocational assistance in the form of Individual Placement and Support (IPS), if implemented correctly (with model fidelity), is effective in improving competitive employment among young people with early psychosis**. Clients who participate in IPS are much more likely to retain employment, acquire employment and sustain employment than those who don't. Research consistently demonstrates high acceptance rates of IPS among eligible participants, and retention rates are generally high indicating that the program is acceptable to young people and meeting their needs. There is some evidence that IPS programs can assist in engaging and retaining young people's engagement with clinical services, which is valuable as young people are often ambivalent about engaging with mental health services (Gulliver, Griffiths & Christensen, 2010).

To-date there is little evidence to support the role of IPS in improving educational outcomes for young people with early psychosis. It is possible that the short duration of treatment in some trials (e.g. 6 months) has limited educational gains. As IPS was developed for adults with a focus on employment rather than education, ongoing work is needed to optimally adapt the program to support young people to meet their educational goals.

Limited Research on Vocational Interventions in Young People with Non-Psychotic Disorders

There is emerging research that IPS may be an effective intervention for young people with non-psychotic mental disorders, including those with complex psychosocial needs. However the evidence base in this area is lacking in both the volume and quality of studies. As people with psychosis typically experience worse vocational outcomes than those with other form of mental ill-health (e.g. depression, Sturm, Gresenz, Pacula, & Wells, 1999) there is promise that the benefits of IPS can be extended to a broader range of young people.

Where to from here? Future research opptunities

- High-quality RCTs are needed to evaluate IPS against other vocational interventions in young people with high-prevalence mental disorders, such as depression, anxiety and substance use;
- Such RCTs should ideally provide the full duration of IPS (12-month minimum), be delivered in early intervention settings, and focus on measuring employment and educational outcomes;
- Research should explore and evaluate adapting IPS to meet the educational needs and goals of young people (aged 12-25) with mental ill-health;
- Future RCTs of vocational and educational interventions should utilise longer follow-up periods (e.g. 18-months or more) to assess the longer-term impact of IPS;
- Research should evaluate the impact of IPS on mental health/symptomatic outcomes, in addition to vocational outcomes;
- The results of existing RCTs in young people with early psychosis should be replicated in early intervention centres that are not directly connected to research teams (i.e. real world, or effectiveness trials).

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