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WISE Employment
empowerment through employment

IMPACT OF PART TIME WORK FOR PEOPLE WITH DISABILITY

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1. EXECUTIVE SUMMARY

It is generally well-established that work is important and can reduce reliance on government income supports and provide additional individual benefits in terms of health, wellbeing, social, economic, and financial inclusion.

Evidence suggests people who are employed and not looking to work more hours have better mental health than those in temporary work, are unemployed or underemployed. Arguably **work is even more important for people with disability, a group that are more likely to be in lower socio-economic groups and socially isolated.**

The Australian government invests significant financial resources into supporting people with disability in gaining employment. Of those in the labour force, a larger number of people with disability work part time. While some of this is likely to represent underemployment, for some people with disability this will be an active choice.

Given that people with disability are more likely to be in part time employment **it is important to investigate the potential benefits of part time employment for people with disability and the broader implications of this in terms of government costs.**

This project was designed to investigate the value of part-time (<30 hours per week) employment for individuals in the Disability Employment Service (DES) program. The research was undertaken by a consortium including University of New South Wales, University of Melbourne, and Monash University in partnership with WISE Employment.

In this project value is considered not just in terms of economic justifications of tax paid by individuals who are employed and welfare payments (e.g., disability pension), but also broader value across governments' health and social care supports as well as the wellbeing of people with disability and their carers.

The aim underpinning this research is explore what the economic impact is on whole-of-government services of DES participants being employed for under 30 hours per week. To address to this aim we explore the following questions:

1. What economic and other benefits are there to the federal government through the part-time employment of DES participants?
2. What benefits do DES participants experience through part-time employment?
3. What benefits do carers and family members of DES participants experience through DES participants' part-time employment?

The research project adopted a mixed method approach. The first stage involved focus groups with stakeholders to explore the kinds of impacts that part time work might have on DES participants. The second stage sought to quantify the impact of part-time employment in terms of other government services to the individual and provide a framework for future research in this area examining broader impacts across government.

Overall, our analysis shows that there is likely to be value in part time work in terms of improving the wellbeing of people with disability and potentially carers and this also comes with reduced costs in terms of healthcare and in particular mental health services.

The data shows that part time work can be a vehicle into full time work and increased hours for some people with disability brings with it additional reductions in government costs and improved wellbeing.

From the qualitative component of the research involving 25 DES participants and 8 DES consultants, respondents told us that part time work can have a positive impact on many areas of wellbeing. Well matched jobs can help build confidence, better engage with families and communities, increase social networks, improve financial stability, and ultimately enhance wellbeing.

There was an important distinction made between those who would seek part time work as a gateway to eventual full-time work and those who have capacity limitations that mean that full time work is not possible. Several limitations to current policies were also highlighted, such as the impact of mutual obligations when working part time.

Many of the observations regarding the positive impacts of part time work are supported in the quantitative data and which draw on broader populations than the qualitative component of the study.

We draw on data from three sources: data collected by WISE Employment, the Household, Income and Labour Dynamics in Australia survey (HILDA) (a longitudinal survey that collects data from more than 17,000 Australians each year) and the Multi-Agency Data Integration Project (MADIP) (a whole population data source which links census, survey and administrative data). We find that those who are unemployed have lower wellbeing scores than those who are employed, although there are no difference in wellbeing scores for full and part time employees. However, we did find slightly lower wellbeing for those in casual jobs.

All categories of working hours are associated with large beneficial mental health effects compared to being unemployed and these are more pronounced for people with disability compared to those without disability.

There is evidence that mental health improves incrementally with number of hours worked. However, there is no evidence of a statistically significant effect of part time employment on mental health for people aged 45 and over. We also found greater beneficial effects of part time employment on mental health for women with disability compared to men, but similar effects of full-time employment for men and women with disability. We also find differential impacts for those born overseas, with lower levels of secondary education and those living in regional and remote areas.

Survey data analysis also shows that there may be some mental health benefits for carers when people with disability are employed more than 15 hours per week, although we interpret these with care given the small sample size and more robust evidence here is needed.

The analysis of linked administrative data shows a gradual reduction in costs associated with healthcare services, mental health services and mental health scripts as the number of hours worked by someone with a disability increases.

If we apply the results of our analysis to the current caseload of DES participants and people with disability on jobactive, we estimate that if we moved them all from not working to working part-time hours (14-29 hrs per week) **there would be significant savings in terms of healthcare services (including mental health services) and mental health scripts totalling approximately A\$62.5 million with 676,000 fewer health care services used (including 108,000 fewer mental health services) and 212,000 fewer mental health scripts used.**

This equates to a saving of \$113 per person per year and a 7% reduction in government expenditure on health services.

There are a number of limitations to this analysis, based on the quantitative data we were able to access within the resource constraints of this project including issues such as the direct comparability of measures of disability between the three different data sources.

However, these findings do suggest that part time work does have beneficial impacts both for those seeking to work part time due to capacity limits and for those seeking part time work as a route to full time work. But it is important to note that an appropriate match between the individual and work is made. ***If people with disability are placed in poor quality jobs that are not aligned with their skills sets this might be detrimental to their mental health and may lead to exit from the labour force.***

Further work should be done to understand the types of jobs that lead to quality outcomes and which types of jobs lead to increased hours of time and the pathways that support this. The patterns noted in terms of mental health impacts for those aged over 45, for women in comparison to men, those born outside Australia, those with less than secondary education and those living in regional and remote areas would also merit further investigation to understand the drivers of these differences.

Finally expanding this analysis to incorporate a range of broader government services (e.g., justice) would also develop this work further.

2. GLOSSARY

ABI	Acquired Brain Injury
ATC	Anatomical Therapeutic Chemical
CALD	Culturally and Linguistically Diverse
DES	Disability Employment Services
DSP	Disability Support Pension
DOMINO	Data Over Multiple Individual Occurrences
HILDA	Household Income and Labour Dynamics in Australia survey
MADIP	Multi-Agency Integration Project
MBS	Medicare Benefits Schedule
MHI-5	Five-Item Mental Health Inventory
NDIS	National Disability Insurance Agency
NDS	Newstart Allowance
NT	Northern Territory
NSW	New South Wales
PBS	Prescription Benefits Schedule
PWI	Personal Wellbeing Index
QLD	Queensland
SA	South Australia
TAS	Tasmania
VIC	Victoria
WISE	WISE Employment

3. BACKGROUND

It is generally well established that work is important for people with and without disability. Work not only reduces reliance on government income supports but can also provide various additional benefits for an individual in terms of health, wellbeing, social, economic and financial inclusion; for example, work can have positive impacts on identity, self-efficacy, normality, financial support, socialisation, meaning after illness, quality of life, income, confidence, social network, and, community¹⁻⁶. Evidence suggests that people who are employed and not looking to work more hours have better mental health than those in temporary work, are unemployed or underemployed⁷⁻¹⁰. These benefits to the individual from working may also flow on to reduce other costs to government such as government funded health and social supports.

Arguably work is even more important for people with disability, a group that are more likely to be in lower socio-economic groups and socially isolated. However, levels of employment for people with disability are significantly lower than for non-disabled peers. In Australia, 53.5% of people with disability are employed compared with 84.1% of the wider population¹¹. The situation is not improving: in the last 10 years, employment of people with disability has decreased by 3% while the rest of the population is up 23%¹². Long-term unemployment might lead to physical and functional problems and create a vicious cycle of making it even more challenging to re-enter the workforce¹³.

Given the importance of work for people with disability, the Australian Federal and State governments invest significant resources in this area. For example, the Federal government spends \$800 million each year on Disability Employment Services (DES). These services involve placing people with disability into jobs, coaching for employers and funding adjustments for the workplace. Some individuals take part in these services on a voluntary basis, although many participants with disability do so under mutual obligations attached to their government income support whereby they are required to apply for a minimum number of jobs each week. The National Disability Insurance Scheme (NDIS) also has a focus on getting participants and their carers into work. Funding for employment supports may be included in a person's NDIS plan and this includes individual and group employment supports, employment related assessments and School Leaver Employment Supports.

Of those in the labour force, the proportion of people with disability working full-time is much lower than that of those without disability (28.3% vs 54.8%), while the proportion of people with disabilities working part-time (64.5% vs 31.2%) and those who were unemployed (10% vs 4.6%) were twice as high as that of people without disability¹¹. While some people with disability who are working part-time are likely underemployed there is also possibly a significant proportion who engage in part-time work as it suits their capabilities and needs. While evidence suggests that people with disability are more likely to be underemployed and that underemployment results in worse mental health outcomes for people with disability than others, we know little about the benefits of part-time work and how these benefits compare with those from full-time work⁹. Given that people with disability are more likely to be in part time employment it is important to investigate the potential benefits of part time employment for people with disability and the broader implications of this in terms of government costs.

This project was designed to investigate the value of part-time (<30 hours per week) employment for individuals in the Disability Employment Service (DES) program. Value here is being considered not just in terms of economic justifications of tax paid by individuals who are employed and welfare payments (e.g., disability pension), but also broader value across governments' health and social care supports as well as the wellbeing of people with disability and their carers. As such, the aim of this project was to capture potential impacts across different government services that may be reduced following a transition into part-time employment from unemployment. In addition to whole of government costs, we also seek to explore the value to the individual DES participants in terms of wellbeing.

The aim underpinning this research is to explore what the economic impact is on whole-of-government services of DES participants being employed for under 30 hours per week. To address this aim we explore the following questions:

1. What economic and other benefits are there to the federal government through the part-time employment of DES participants?
2. What benefits do DES participants experience through part-time employment?
3. What benefits do carers and family members of DES participants experience through DES participants' part-time employment?

Given the lack of existing evidence in this area (both in Australia and internationally), the project is exploratory in nature.

The research project adopts a mixed method approach. The project received ethics approval from the University of New South Wales Human Research Ethics Committee (HC210770) and all appropriate consents for the research were received. The first stage involved focus groups with a range of different stakeholders to explore the kinds of impacts that part time work might have on DES participants. The second stage of the research sought to quantify the impact of part-time employment in terms of some other government services and to the individual and provide a framework for future research in this area examining broader impacts across government.

Overall, our analysis shows that there is likely to be value in part time work in terms of improving the wellbeing of people with disability and potentially carers and this also comes with reduced costs in terms of healthcare and in particular mental health services. The data also shows that part time work can be a vehicle into full time work and increased hours for some people with disability brings with it additional reductions in government costs and also improved wellbeing.

This report is structured as follows. In the next section we provide an overview of the process we followed in undertaking the qualitative work and the data generated from focus groups with DES participants and DES consultants. We then move on to set out the quantitative analyses reporting from data from WISE Employment (WISE), the Household Income and Labour Dynamics in Australia survey and linked administrative data. In the final section we set out the main findings of the research and the limitations of the approach we adopted along with the implications of these for policy and practice and further research.

4. QUALITATIVE ANALYSIS

In this section we provide an overview of the qualitative component of the research. We provide an overview of the approach we took in collecting the data, before moving on to what we found from this data. As this section shows, participants outlined a number of positives of part time work, although this was qualified in terms of appropriate job matching and supports. We conclude this section by setting out a table that summarises the potential positives and negatives of part time work and the practice considerations of these observations.

How we collected data

Data for this phase of the research was collected through focus groups with WISE DES participants and consultants. Given COVID restrictions we held these online. The focus group discussion themes were developed based on the literature exploring the benefits of work for DES participants e.g. ^{1-6,14}, and in particular, the benefits of part time work ^{9,10,15-19}. DES participants were provided with a \$50 pre-paid voucher in thanks for their involvement in the research. DES consultants undertook the focus groups as part of their paid employment.

Focus groups were designed to be safe environments where the various participants could share their experiences. While the literature tells us that work can be beneficial it is also clear that work and applying for work can be stressful and anxiety inducing. As such, we did not seek to jump straight to individuals sharing their experiences but sought to stimulate the discussion using a scenario. Focus groups began with a short introduction by the researchers, including gaining and recording verbal consent. Next, the researchers introduced a “user profile” - a slide with a template of a “typical” DES participant. The workshop members were invited to choose a photo to represent this person, give them a name, age, and fill in some key details about them. The four completed profiles are provided in the findings. The researchers then invited workshop participants to imagine their fictional participant had been placed in a part time role, for example this might be a job in an office or in hospitality. The group determined which role the fictional participant would be placed and in then were asked to consider domains of the DES participant’s life - for example, family, friends, romance, leisure, home environment - and to reflect on how these might change at milestones of 1 month, three months, 6 months, and 12 months in part time work.

The fictional persona was used to start the discussion in a safe way around the impact that work might have for this individual. Once this fictional persona had been discussed, workshop participants were invited, if they felt comfortable, to share their own personal experiences of transitioning to part time work or supporting an individual to do this. Nearly all participants chose to share their own real experiences as well as reflecting on hypotheticals. The researchers asked probing questions throughout the process to get depth and detail in the groups’ responses.

The total sample size for the first phase of the project was 33. Specifically, this sample size comprised the following participant groups:

1. DES participants: 25 participants across 3 workshops
2. DES consultants: 8 participants in 1 workshop

In generating this sample our goal was to reach stakeholders across all states and territories, engaging individuals with a variety of impairments, and of different genders and ages. We also sought to ensure that at least one person in each group was from a culturally and linguistically diverse background.

The research team engaged with WISE to recruit participants to take part in the DES participant focus groups via their organisation mailing list. WISE did not know whether a person agreed to participate or not as the recruitment materials directed potential participants to contact the research team directly to register their interest in participating.

Once a potential DES participant indicated their interest in participating in the study, the researchers undertook a short screening process: a phone call to ensure that participants meet the key selection criteria, and to book them into a specific session via online calendar invitation. The workshops were run throughout November and December 2021. Each workshop took approximately 90 minutes to complete.

Qualitative analysis was conducted using simple thematic analysis to identify emergent patterns, themes and inter-relationships²⁰. Notes were taken during the focus groups and audio recordings were also made of the discussions. The coding process involved:

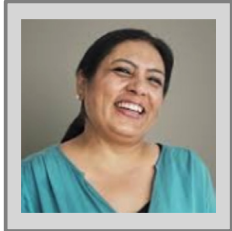
1. Reviewing the themes emergent in the focus groups
2. Comparing the data for similarities and differences
3. Grouping it into categories based on this comparison
4. Clustering data together, identifying associations between themes²¹.

Having set out the background to the project and the approach we adopted, we now move on to set out our findings.

What we found

The following images show the fictional DES participant profiles that each of the four groups compiled. One observation in looking at these profiles is that all groups created profiles that represented acquired disability through workplace injuries and/or chronic health problems, rather than people who were born with disabilities. To ensure this did not skew the discussion, additional questions were asked in discussions around impairment types and whether similar work impacts and challenges would be encountered.

Figure 1: DES Participants, Workshop 1



Name: Sonia

Age: 45

Work history: Nurse

Why I'm at DES: Workplace accident - slipped over and now has chronic back pain

What's important to me:

1. Family - kids and partner
2. Caring and nurturing
3. Paying the bills - she's the breadwinner

My goals are:

1. Make sure her family's future is financially sustainable and they're raised well
2. Get a job she can do now where she can help people and care and nurture
3. World travel

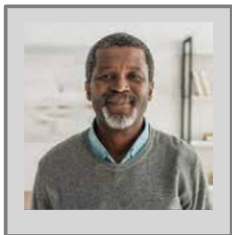
Things that frustrate me:

1. Long hours & difficult people in the workplace
2. She can't do as much as she could before because of her pain - no lifting - even though she can push through
3. Likes the fulfillment of work and missing it
4. Stigma around her accident and ableism

My main support comes from:

1. Family and friends
2. Work colleagues
3. GP
4. Social group she hangs out and does lego with

Figure 2: DES Participants, Workshop 2



Name: John

Age: 45

Work history: Warehousing - management; qualified electrician, has a forklift license

What's important to me:

1. Family - cool uncle, loves his nieces/nephew
2. Money - he has a mortgage
3. Health - some chronic pain problems

My goals are:

1. Having some PT or FT work
2. Financial security
3. Good family/work life balance

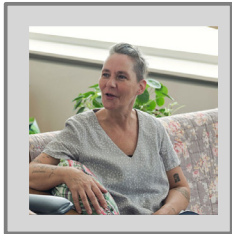
Things that frustrate me:

1. Discrimination in the workplace
2. People being late to work
3. Red tape involved

My main support comes from:

1. GP
2. Family - brother/sister
3. Employment service provider

Figure 3: DES Participants, Workshop 3



Name: Susan

Age: 40

Work history: Was a nurse, aged care

Why I'm at DES: Bad back from working a lot and stress through work. Also anxiety.

What's important to me:

1. Teenage kids
2. Grandkid
3. Paying the bills - she's the sole earner
4. Managing her medical / emotional issues

My goals are:

1. Wants / doesn't want work / can't work - depending on mutual obligations
2. Getting healthy - unfit after being at home unemployed for a long time
3. Work/life balance - involvement with family as she's used to

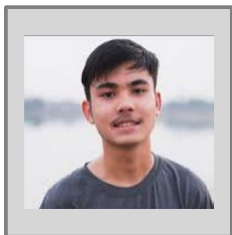
Things that frustrate me:

1. People trying to push her back into what she was doing previously when her disability doesn't allow her to do that
2. Fear / going into a new industry that she's not skilled for
3. Not getting enough support as single mum

My main support comes from:

1. DES consultant
2. Family
3. Friends, school mums
4. GPs, specialists

Figure 4: DES Consultants



Name: John

Age: 39

Work history: Hospitality - waitstaff, catering

Why I'm at DES: Injury to his ankle - hasn't worked for 6 months

What's important to me:

1. Independence - having money, learning new things
2. Identity - when you stop working, sense of self is shattered
3. Interacting with customers, social aspect
4. Family - no kids, lives with partner

My goals are:

1. Learn more things to feel independence
2. Heal from injury and recover & maintain healthy mentality - physical and mental health - get through anxiety and depression
3. Be able to live independently with his disability

Things that frustrate me:

1. He can't learn new skills as fast as other people - he's slow to learn
2. Stopped his momentum from his job, not doing anything
3. Workcover - being sent to appointments etc - frustrating

My main support comes from:

1. Partner & family
2. Friends
3. Disability support services e.g. support workers who clean/cook/home care
4. Psychiatrist/psychologist/ mental health workers

In the next sections we outline the key themes that emerged from the workshops in exploring these personas, namely: identity, balance and skill-building, financial, physical health, mental health, social, changing career goals, impact of disability and impact of age. The sample of participants was diverse across several parameters and brought together people with a variety of different backgrounds, experiences, and disabilities, so understanding the themes that carried across this sample is important to inform Phase 2 of the research. For some of the participants, part time work was a gateway to full time employment, but for others, it represented their whole capacity; for both groups, part time work was recognised by participants as valuable.

Identity

Gaining part time work was described by DES participants as having an impact on changing their identity. This started immediately and deepened as their careers progressed. At one month of employment, they described the start of a sense of rediscovery, reinvention of self, and pride in having employment, or even a change in passion and values. At three months, this rediscovery extended as the mastery of skills in their new job developed, leading to a sense of, *“I can do anything!”* that in turn realised a psychological shift whereby they were more willing to get out and try new things in the rest of their lives - including study, moving to a new industry, taking on more hours or even full-time work.

At three months of part time employment, participants also recognised pride in being able to be better role models for their kids as they can provide more financially and move away from reliance on Centrelink payments; as one participant noted, *“I feel like I’m contributing financially into the family and economy”* (DES Participant, Workshop 2). They described an increase in the respect they felt they gained through work, and the reduction of stigma they experienced at being unemployed. As time passes in part time employment, DES participants described a deeper connection with their sense of self and passion, connecting with their wants and needs, and experiencing a sense of empowerment. One participant described this as such:

Before becoming chronically ill I worked full time and had a lot of pride being independent. Being able to re-join the workforce has given me back that sense of self sufficiency. Mentally I want to be there, to support myself. Physically, my body is not there. It’s given me a great sense of self - I realised [by doing part time work] that I can do a bit more than I thought I could (DES Participant, Workshop 1).

DES consultants added that as this change occurs, they see participants begin to take more pride in their image and appearance, wearing better clothes and taking care of their hair and nails. Not only does this imply improved economic

participation with increased earning capacity and spending, but also a higher level of self-respect and confidence.

Another comment about identity saw two culturally and linguistically diverse DES participants noting that it takes time and energy to adapt to the Australian work culture, and that part time work allowed this to happen without burning out or negatively impacting mental health. Value could be contributed here in creating cultural integration methods and increasing social networks and stability through part time work.

Balance & skill-building

As DES participants secured part time work, they were able to achieve greater levels of balance, and increase their skills around organisation and time and energy management. One participant commented that:

It can be hard to navigate where to put boundaries about saying yes to responsibilities because you need to look after holistic health: it’s all about balancing private and professional life (DES Participant, Workshop 2).

These aspects (stability, balance, organisational skills), we note, are essential ingredients for a constructive work-life balance and add value in the sense that they increase potential to sustain employment across the long term.

DES participants noted that at one month of part time employment, they become more independent, networking and connecting with the outside world. This confidence stemmed from noticing they were able to adjust to a different sector of work - something that all participants commented was frequent, as some were unable to return to work in the same industry they had left - and notice they were gaining new skills and taking new opportunities. This upskilling and increase in connection are valuable to developing a strong career path and protective relationships that can lead to maintaining long term employment.

A common theme for DES participants, especially within the first month of employment, was regaining balance in all aspects of their lives after a period of having an abundance of time while unemployed. DES consultants noted lack of balance could sometimes be a cause of breakdown of employment, as participants struggled to get organised or equalise the different domains of their lives after adding work into the mix. One participant noted they jumped straight into full time work and although they loved the money and the job, they started disconnecting with their family because it was so challenging to attain balance. After going into part time work, they were able to develop skills that allowed them to balance their lives, and they later transitioned back to full time employment. Many participants felt that going from being unemployed to working full time would have been impossible for them:

Part time work helps with self-esteem, self-worth, identity: knowing I'm using my time productively, having motivation every day. Having a routine helps you get motivated for other things which means other little goals can feel more achievable. It makes you want to be more organised with your time - make time for cooking, shopping, bills, medical appointments (DES Participant, Workshop 1).

In this way, part time work is a bridge to full time employment, allowing individuals to develop important skills to maintain their health, lifestyle, and protective informal supportive networks.

Some DES participants noted part time work allowed them not just to get this balance right with their families, but also with study. Particularly for individuals who had recently developed a new impairment or found they could not continue within their job; study can be an important gateway into a new career route. A criticism of part time work in the current system is that some participants are still obliged to take part in mutual obligations if they have been assessed as capable of full-time work. But engaging in part time work and mutual obligations provided yet another component to juggle. For people managing a disability, a family, a job, and study, mutual obligations were extremely challenging - more challenging than for someone without a disability - and placed their employment and health at risk. There are important whole-of-life and whole-of-government learnings to be noted here about how systems can support long term employment through part time economic participation.

At three months of part time employment, workshop participants noted that employees were likely to be in a routine, providing better balance, and again, increased confidence that they can maintain work. Others noted that increased familiarity with aspects of the routine such as travel, colleagues, and shift times would support this settling in process. One benefit of part time (as opposed to casual or shift work or working for oneself) was that having a schedule set means employees know when their shifts are and can work on their social life again, organising themselves to have time to see their family and return to balance. Another benefit noted was that employees get annual and sick leave benefits. These benefits support the maintenance of health and wellbeing, which ultimately may reduce costs for relevant federal and state government-funded services.

At six months in part time work, consultants noted it is *"hard to break down and stop working"* due to an established routine. Several consultants agreed that *"When you tell them they've reached 6 months it can be a surprise because they're just going with the flow"* (DES Consultant). DES participants noted that at this point they feel a sense of security in their work - especially if they are still with the same employer, because it means *"they're getting somewhere"*, likely past a probation

period and feeling a greater sense of job security, and work/life balance feels easier. It is an interesting learning for the DES system that both these stakeholders agree on the importance of the 6-month outcome being a significant one in terms of maintenance of employment. At this 6-month mark in general we heard that people had established a routine and for many this meant they were more psychologically settled. But not everyone experiences part time work in the same positive way.

Some negative possibilities of part time work were also noted in the focus groups. One participant commented that dedication to a routine might make someone take on more hours, which, although would produce more money, could mean they would be more tired and notice other things slide, such as self-care or childcare. Another workshop participant commented that *"work tends to take over when you're diligent"* (DES Participant, Workshop 2) maybe seeking approval, people pleasing or desire to progress in the role - and everything else can fall to the wayside in the desire to seek bonuses, appreciation, and rewards. This demonstrates the delicate balance required to support DES participants to gain important life skills. These comments further show that part time work might be a protective factor for DES participants in maintaining balance at least initially on returning to employment.

Changing career goals

At the same time as participants built skills about life and employment and increased their confidence and sense of identity, they had ideas about new career goals through their experiences with part time work. This theme is about learning through part time work what is a good match and what is not and leveraging DES-matched jobs into more sustainable employment outcomes.

By three to six months in part time work, workshop participants thought employees might have passed their probation period and built enough confidence to consider a different employer or job - one that pays more, or has more options for using their skills, or is in a different industry. A great case study came from one DES participant:

I was working at a women's shelter just because I needed something, so it was just part time. Now I've been there for a year. It's not the right fit but it's great for my CV, there's a great team. Now I'm looking for other work. This job is challenging and can be harrowing so I'm feeling proud that I've stuck at it for a year. I've been reflecting on my skills and confidence that have increased. I've had a few slip-ups, but I have worked through it. WISE now trying to get more permanent work for me (DES Participant, Workshop 3).

One workshop participant described *"Part time work as a springboard to other work - it can be easy to fear the next thing because you've got something and you don't want to let it go"* (DES Participant, Workshop 2). A DES Consultant shared,

“Employees might want to be supported to move to the next stage. It’s hard to go from nothing to full time - so part time is a good, staged return.”

Workshop participants felt that through a few months in part time work, their skills and confidence in the job would have improved, and this might have made them realise they could do a different job. They might also be receiving more suitable support from managers or co-workers as they get to know one another better. As one workshop participant said, *“If they all think he can do more, they’d know what that looks like”* (DES Participant, Workshop 2). One consultant said,

After 6 months they start thinking, oh I could actually potentially do full time because they’ve done 6 months of part time. If they’re coping - usually they are - this is where they’re thinking about it. Balance is not jumping in full time, maybe stepping up with a few extra hours (DES Consultant).

Employees might want more responsibility or more hours, to get promoted or upskill with further qualifications, professional development, and better pay. The networks they have built might have given them the ability to reach new positions more easily or consider returning to study. One workshop participant noted, *“I’m doing some study I never thought I’d be interested in - my interests are forever changing. You don’t need to stay in a job just because you have those skills. Change creates growth”* (DES Participant, Workshop 3). This is an example of part time work leading to further study and qualifications, a new career or more hours.

Another individual illustrated the potential for a well-managed staged return to work to lead to long term employment outcomes.

It gives me a sense of satisfaction at completing something because it takes me a long time to pick things up and retain information so it can be overwhelming to start new. The last job I had, I stuck it out for 6 months, then I pushed myself to do it for a year because it looks better on my CV. I ended up being there for 15 years! I just need to push myself and stop being scared and running away - rather to stick it out and learn. I am so proud of myself for doing that (DES Participant, Workshop 3).

It is also worth noting here that participants felt contract and temporary work can be challenging as it requires the employee to learn new skills repeatedly.

Others might have given their job a go for six months and found it was working so well, for example, their pain and being on their feet might be having a strain on them, and if adjustments are not able to be made then they might resign. They might have become complacent and are doing the bare minimum through boredom, or though feeling unqualified to progress. Consultants and DES participants both noted that employees

might realise they are in the wrong job or that they need new challenges. There was also discussion about changing values and priorities at this point. *“Getting to a year is a massive positive, a huge achievement. It builds new goals for employees too - i.e., goal one was getting a job, and now it’s time to move the goalposts to benefit health and mental or physical wellbeing as well”* (DES Consultant). This illustrates that the staged approach is important to view holistically, and to consider how the DES system can consider how well the first part time job placement can be leveraged into more suitable long term part time or other work.

There was a view expressed by consultants that the longer the time out of work, the longer it takes DES participants to get back to the rhythm and change their mindset and activities into the being employed. DES consultants spoke about the challenges involved in breaking a cycle of unemployment. Returning to work involves a number of changes to daily life, which can pose practical challenges. But as DES participants also indicated it also involves needing confidence to undertake, demonstrating how important it is that DES consultants are well trained to offer appropriate motivational coaching as well as job support.

Some consultants expressed the belief that in supporting individuals to return to work after an extended period, what was important is breaking existing patterns. Part time work can be a helpful way to do this. Consultants also suggested that 3 months of sustained employment is needed to change daily patterns and expectations and build confidence. But in focusing on changing these patterns, some participants felt that the quality of job matching could sometimes suffer. Some DES participants reported that their consultants were at times *“not creative enough at getting job options”* (DES participant, Workshop 2). This belief may also be a reflection of the way the system incentives operate at present. DES services are rewarded for placing participants into work and this is not necessarily contingent on the quality of the match, which is arguably more important for people with disability. One participant stated,

I can’t just do any job. It needs to work for me and cater for my specific disabilities. The employer needs to understand that I’m slow plus how to support me succeeding. WISE understands my needs, but I also have to look for so many jobs - they should be looking for jobs for us that cater for us. I can’t just go into any other job, and I need support to maintain it, not just external allied health, but I need hand holding to start the job well (DES Participant, Workshop 3).

Others reflected on the impact of bad matches:

I'm not sure why I'm working where I am because it doesn't feel like the right place. I've gone from being able to be autonomous as a younger person, to being treated like a 15-year-old and micromanaged in other work to the point where I want to quit. I feel annoyed when I work with people who are less competent than me, but I can't say I'm really experienced even though I've only been here 5 minutes. I have qualifications above and beyond what others have - but others get given positions over me (DES Participant, Workshop 1).

And another,

After I found a part time job, it's very often not really in my study area. In China, I've got secondary school teaching qualifications, but they're not recognised in Australia - I would need to do a master's degree or repeat my bachelors. Considering my age, I don't really want to. I often feel I'm overqualified, even though I don't have a qualification in Australia - I worked as a cleaner, removalist, tourism - all not related to my study. I've done a Master of integrity and translation (DES Participant, Workshop 2).

DES participants often found they were doing the same work as they were before but not getting the same recognition or remuneration because it was a different title, or because of the way they had come into the role and being labelled as having a disability. However, part time work can help participants realise they might be able to return to their previous career in a different role. This has the potential to increase earning potential quickly and create economic value for all stakeholders.

In fact, participants noted that leaving a job can feel like leaving skills behind, but they are not gone, rather, they just need to be accessed again in a different way. DES consultants can help here. One consultant shared a story: *"I had a client with lots of nursing experience, but also lots of trauma so she couldn't go back into it. I had to try to think about how to get her work that was related to her skills. She had an impressive resume. So, she went into the beauty field. She got SO excited and wanted to study. It had never crossed her mind that she might still be able to use her knowledge and skills."* This demonstrates the powerful outcomes that can be gained from well trained, creative DES consultants and the value of investing in the workforce.

Financial

Unsurprisingly, part time work has financial impacts for employees. At one month of part time work, individuals have had at least one payroll cycle and are seeing consistent money coming in. This means they can start planning to pay off debts or cover medical bills if there is a chronic health issue or

disability-related costs. This is already value-creating for the government. It reduces the personal financial risk of vulnerable people creating more stability over time and less likelihood of relying on pensions, as well as paying off Commonwealth- or State-covered debt.

For those with acquired disability there were several comments about seeing less money coming in through payroll than before, either because of reduced hours or reduced pay rate or both. Participants noted this can be disappointing and discouraging, being a proxy for not being appreciated or having expertise recognised. It also led to having to think carefully about every dollar spent:

Financially it's still a bit of a struggle being part time when you're used to full time. Even though I'd like to go and buy a few things for Christmas, for example, I can't, I'm living from pay to pay. Even just buying shampoo, I buy cheaper brands. Your lifestyle changes. I wasn't conscious of how I spent my money before but now I'm conscious of every dollar. You can't be so generous with your family at Christmas (DES Participant, Workshop 3).

Another person noted they would have to call and get extensions for bills, which they did not have to do before when working full time. This is a risk of part time work that full-time might fix - but it is also a consequence of the confluence of low-paying jobs and high-living costs in so many areas of Australian cities.

As time passes in work, DES participants noted they could probably afford to *"reward themselves with something nice"* (DES Participant, Workshop 2) or start saving after having paid off priority bills and debts. One person commented that this financial stability means they could afford to pay rent and live without constant worry, which increased confidence and flowed into other areas of life. Others commented that by the time 12 months had passed, an employee might take on some managerial responsibilities or have some kind of promotion that meant higher pay. These are protective factors that present value across whole-of-government and whole-of-life for not only the DES participant but any family members and dependents. It is not unique to part time work, but important to note that it can be attained by part time work.

There was discussion about living in metropolitan areas (especially Sydney) being a struggle on a part time salary, and the problem of having a disability and being unable to work full time making this hard to resolve. There was also a note that working part time did not make you a competitive candidate for a rental property, where others were able to offer either more money or several months upfront. Others noted that once you've taken a part time role, it can be hard to gain full time work, and this can be restrictive about potential earning when you're well. These are again problems of part time work in combination with high living costs.

Physical health

At the one month of part time work mark, a few workshop participants noted that work can be physically difficult because the body is not used to working. They noted a need to build resilience to generate energy from physical work, but towards the end of the month, they started to notice their fitness had increased. For others who moved into a less physically demanding job than they were previously working in they found that they were better able to manage their disability. They described sleep improving with a daytime routine, and especially with physical work. With the increased money coming in, participants said they could buy healthier food, which they felt also contributed to better health outcomes. These observations might potentially indicate lower medical costs for these individuals and their households and government-funded health services.

Consultants said part of their role was to check in with employees weekly for the first month, seeing what they need and “cheering them on”. One consultant noted that placing someone in full time work with the barriers of long-term unemployment and disability is emotionally and physically challenging. They described a participant whose first day was hard and was so sore after the first week they had to take time off and go part time, start slowly, and work up to full time. Other examples noted that by a three-month part time work mark if it was too demanding and not balanced, the participant could be experiencing burnout, chronic pain, or new health issues. As one participant said, “*I want to get back to being who I was before but it’s just not there*” (DES Participant, Workshop 3). This suggests that good placement matching and working towards balance through part time work has an important role to play in sustaining employment and saving Commonwealth healthcare costs - both in the short term and across a DES participant’s whole-of-life trajectory.

One DES participant shared they developed substance abuse to manage pain that came through working in a physical role, and that having more money available to them contributed to that habit and created a vicious cycle. They described two pathways - of going to Alcoholics Anonymous meetings and getting the habit under control, or of it blowing out and isolating them from their family. This participant said, “*When you’re unemployed you have time but no money for psychologists, and it’s the opposite when you’re working*” (DES Participant, Workshop 2). Furthermore, we already discussed issues relating to confidence and self-image in previous sections, which are obviously linked with psychological benefits and positive mental health outcomes. As one participant shared:

I have only just started back to work. I had anxiety and depression. I was seeing a psychologist. Also, WISE had me speaking with a lovely lady counsellor. I was looking after my Mum who is now in an aged care home. I was scared of going back to work. But now I am back I’m feeling very

good. I’m still tired but it’s getting better. I’m really glad I went back to work and lucky I got to go back with my old employer (DES Participant, Workshop 2).

Part time work can offer a staged approach to returning to work for people who need ongoing allied health support to become mentally healthy. We say more about the mental health impacts of part time work below.

All participants noted that if an employee made it to a six- or 12-month outcome, they would have had to develop good habits for managing chronic pain, build up certain levels of wellness over time and increase general physical wellbeing. As one participant explained:

Before I started working from home, I thought it would be amazing, but it turned out that it was physically and mentally harder than I thought it would be. It was a big transition. When you work in admin, you’re answering the phone, in zoom calls, all sitting down. I don’t have back problems, but I did get a sore back and legs. I realised I needed a routine for moving my body to prevent getting back problems. Someone like [the DES participant we’re discussing] who has back problems would have realised by the 3-month mark that she needs to walk or join a gym. Also, with kids it can be hard. The moving/sitting combination is important (DES Participant, Workshop 2).

This “combination” might include starting to go to the gym or regular exercise or being able to afford physiotherapy or massage. Consultants noted that DES providers can pay for these services under certain conditions. Having DES participants working towards good health and pain management outcomes is protective for employment and whole-of-life outcomes. Part time work allows slow re-entry and a better chance of setting up the right supportive services, technologies, and habits.

Full time work is just not possible for some people with disability. For example, one participant shared her story.

I’m recovering from cancer and my friends say I’m not coping with part time work. I’m in bed by 7pm because I’m so fatigued, but I would be homeless otherwise. I’m hoping I’ll get my energy and stamina back. It’s hard after having time off work and then coming back to it. I’m just coping with part time, I wouldn’t cope with full time. I struggle with concentration and focus. I have less fortitude than before I was out of work. Also, I’m getting older. My health just isn’t the same (DES Participant, Workshop 3).

For this participant and others, part time work has a positive economic impact as it subsidises the government pension and creates protective factors around sustainable housing options where there is no option to increase hours.

There was a belief amongst participants that the Centrelink system is not set up to support part time work but should be. The specific example that was provided was that mutual obligations still exist for people in permanent part time work.

The government needs to recognise that disabilities need to be addressed and the extra job finding on top of starting a new job or working requires lots of mental capacity and creates more anxiety. But I still can't pay rent because my part time job only covers so much, so the government subsidises the rest - but this is my limitation. Because of my disability, I just don't have infinite resources and energy (DES Participant, Workshop 3).

Where part time work is valued and valuable, mutual obligations might be re-examined to support its maintenance.

Mental health

The benefits and toll on mental health were discussed frequently in workshops. DES participants described that all the physical change and challenges can take a mental toll, but that work also provides a sense of purpose and a reason to wake up each morning. Others shared that incidental social contact gained through work was positive for their mental health.

Workshop participants described the mental health problems that could occur with changing industries because getting accustomed to working in a new environment can feel stressful. They described the first month as the *"peak of anxiety"*, with the potential to feel isolated in a new team and becoming aware of their skills gaps. As one participant explained:

I can be feeling positive but then get triggered and feel lousy about myself again, beating myself up again. I need a reminder to come out of it and look for external data and support. It can be a cycle especially for people with mental illness. We can jump to drastic conclusions or think of quitting. It can be a mental rollercoaster (DES Participant, Workshop 2).

This demonstrates the important role DES consultants and other informal supports can play in helping DES participants maintain work, especially at the early stages.

At the extreme end of work having negative impacts on mental health, workshop participants said some people could relapse into depression or anxiety at the three-month mark if the job is not a good fit - they might be bored, or not enjoying the environment or colleagues. This might lead to them taking unnecessary sick days. One described a feeling of, *"this sucks, I suck, I'm stuck, I'm broken, I can't get better enough"* (DES Participant, Workshop 2). Another said, *"My mental health improves with part time work provided it is the right fit for me"* (DES Participant, Workshop 2). At six months

of part time employment, there was also some conversation about becoming accustomed to a new normal and finding out whether the job works for the employee - for example, keeping up with learning new technology can be stressful and might be a deal breaker for the job long term. All this demonstrates the importance of good job placement matching for mental health and the sustainability of income for DES participants.

Social

Social outcomes are intertwined with the theme of balance. For example, DES participants noted that at one month of part time work, having less time to see friends and struggling with time management negatively impacts social and family life. One DES participant explained, *"I was never bored even though I was out of work - I had a lot of community connections. I pined for that after I started working because I felt isolated from the connections I'd made. I felt left out of some of the social groups"* (DES Participant, Workshop 2). These informal connections are strong protective factors for whole-of-life outcomes, and if participants had gone into full time instead of part time, they would have been more at risk at least initially.

However, the opposite also occurred where employees felt their social lives were improved by part time work:

I've struggled to make and maintain friendships and when I started working, I felt like there was a big improvement in my social life - it's easier to make friends when you're working side-by-side. I hear a lot of talk about it taking a toll, but I feel heaps better. I guess it comes down to the individual (DES Participant, Workshop 2).

In fact, the impact of having colleagues around could be both positive and negative for employees - they might be enjoying the culture, workplace and co-workers and feel supported by employers, making new friends; or alternatively they might be anxious about learning new things, worried about getting things wrong, working sporadic hours, all of which might be physically and mentally challenging. Again, the outcome of this is dependent on the good match in terms of job.

As time goes on in a part time jobs, these issues might become more extreme - either having new friends and a sense of familiarity and community or having problems with colleagues and feeling frustrated about it. Part time work can make these more extreme as well, creating a sense of isolation from other full-time colleagues. At the six-month of part time work mark, however, participants and consultants believed employees are likely to have reconnected with family and friends and develop new and better relationships with the stability they feel from reduced financial stress and a firmer sense of self.

As a year of part time work rolls around, participants described how they would take annual leave and time off for the employee to enjoy what they have created. One participant noted they

would have had a full year of holidays, birthdays and Christmas and that employees would have been able to buy things, feel like they were better able to provide and have some small luxuries. Others noted the increased social life that is likely to exist with the team, offering a sense of belonging which creates positive feelings, happiness, and wellbeing. All these relationships have the potential to be strong protective factors in terms of maintaining work, health and financial stability for the DES participant and their families. Once again, this is not unique to part time work, but it is positive that stakeholders believe it can be gained with fewer than full time hours.

Impact of age

A final theme that was noted in discussions with DES participants related to age and challenges that they had face in securing work. Several participants noted that they had encountered problems in seeking work due to ageism and that in many cases this was seen as more problematic than their disability. One person explained, “I reached a certain age and even though I was good at my job I was not promoted after that. I was wiped off.” In this remark they seem to be suggesting that their age stopped them from securing work and this belief was expressed by several other participants. As another

explained, “I applied for lots of roles but didn’t get them. You’re not told it’s your age but get the impression that’s what it is.”

Several participants expressed the belief that age was a factor in employment prospects, but others told us even where they had been appointed to roles they continued to face ageism. As one participant explained, “I think with your age (59), some people do not want to listen to your experiences and thoughts and how to do things a better way. No one wants to hear an old person.” Ageism in seeking and securing work may be a challenge that some DES participants face.

Summary of stage one findings

Having set out the key themes from the focus group discussions, we will now consolidate some of the main messages. Table 1 outlines the findings of this first stage of the research project. The first column highlights the positive impacts of part time work identified throughout the prose above; the second outlines the negative. It is worth noting that some of each of these positive and negative impacts might not be unique to part time work - they might also apply to full time. The third column outlines considerations for practice that have emerged from the data.

Table 1: Key messages from first stage of research

Positive value created by part time work	Negative impact created by part time work	Considerations for practice	Considerations for policy/ programs
<ul style="list-style-type: none"> • It is necessary staged process for return to work - part or full time • It is a gateway to study or return to previous career • It is a circuit breaker of mid-to-long term unemployment • It is a reasonable end for some people who can’t work full time • It introduces protective factors that contribute to whole-of-life and whole-of-government outcomes for entire families, e.g., informal social networks, physical and mental health outcomes • It reduces extraneous costs to government and reduces the risk of bad debt • It decreases financial vulnerability and stabilises housing • It subsidises medical and other costs through sick leave and increased cash flow for employees • It increases confidence, contribution, and positive feelings of identity • It creates balance, increasing wellbeing and the capacity for self- and family care 	<ul style="list-style-type: none"> • It can cause anxiety in participants to balance part time work with mutual obligations • Employment can be insecure - for example, being employed as a contractor • Ageism can be a problem in securing work • It can create negative cycles around stress management and self-medication • It can be hard to adapt to a new cultural context for CALD participants • It can create social isolation when most other employees are full time • Pay is lower than full time, even often in the same role as previously, due to reduced hours and reduced rates • Depression and anxiety can arise if the job is not well-matched to the participant’s needs, and can disincentivise securing full time work in the future 	<ul style="list-style-type: none"> • DES consultants should be best trained in motivational coaching to help break cycles of low confidence • DES consultants should be upskilled and given tools to support them to holistically assess and leverage participants’ skills, including considering returning to work in different roles • Job matching should be considered important and not just breaking cycles of unemployment • The first month of any placement is experienced as a peak time of anxiety so needs close support. • Employers, workplaces, and colleagues all need to be culturally and physically prepared for accepting a DES placement 	<ul style="list-style-type: none"> • Tax concessions should be given to people transitioning off the DSP into work. • Remove mutual obligations for DES participants in part time work as a route to full time work. • DES and NDIS-funded programs be incentivised to consider quality of job match. • Incentive and payment structures for DES and NDIS-funded employment services to provide intensive support in first month of employment. • The 6-month outcome seems to be the most significant in terms of being a marker of job sustainability so needs to be considered in incentives and payment design for DES and NDIS-funded employment services. • In designing incentive structures consideration needs to be given to incentivising more stable (e.g. non-casualised work) to help work/life balance. • Ageism should be tackled alongside ableism. A policy response might include concessions for employers contracting people aged over 45.

5. QUANTITATIVE ANALYSIS

In the quantitative analysis we first characterise the type of people who are engaged with Disability Employment Services by investigating the data WISE holds on its jobseekers. We then estimate the impact of different hours of employment on outcomes for people with a disability using Australian longitudinal survey data. And finally, we use linked administrative data to then estimate the impact of different hours of employment on outcomes for people with a disability.

5.1 Characteristics of WISE DES job seekers

It is important to understand the types of people that are accessing supports to find work. This section contains a description of the methods used to analyse the data and the results, including the data source used for the analysis, the variables, the analytic methods, and the results of the analyses, and recommendations for improving the data.

Description of WISE data

The characteristics of WISE job seekers were described using data provided by WISE Employment. The data are from two data sources:

1. DES outcomes data, collected to generate reports relating to job seekers' placement and outcomes. The sample consists of 14,562 WISE job seekers that were placed into employment between 1st July 2018 to 21st March 2022.
2. Personal Wellbeing Index data, collected annually from WISE participants (both employed and unemployed), with approximately 20% response rate. The analysis includes data from 2019, 2020 and 2021.

The data sources were linked to each other based on the clients' unique ID numbers.

Variables

Variables of interest included demographic characteristics (age group, gender, Indigenous status, culturally and linguistically diverse (CALD) background); state of residence; highest level of education; disability group; employment characteristics; and wellbeing.

Employment characteristics included:

- number of jobs that a job seeker had been placed in between 1st July 2018 and 21st March 2022 (constructed by summing the number of rows of data for each individual).

And relating to job seekers' first job they were placed in:

- time spent in DES before being placed in first job (vacancy referral date – referral date);
- time spent in first job (constructed using the 4-, 13-, 26- and 52-week outcomes);

- work hours of first job (constructed using the work type variable to identify full time, part time and casual employment, and for those in casual employment, using the employment benchmark to determine whether they were likely to be placed in full time (≥ 30 hours) or part time (< 30 hours) employment).

Wellbeing was measured using the Personal Wellbeing Index (PWI), a validated instrument to measure wellbeing across seven life domains including standard of living, health, achieving in life, relationships, safety, community-connectedness, and future security, each measured using a 11-item Likert scale (0-10). The items are averaged to generate an overall score and multiplied by 10 to achieve a range between 0 to 100, with higher scores representing greater wellbeing.

Analytic methods

We described the characteristics of the sample (WISE job seekers) using frequencies and percentages of the sample reporting each of the characteristics.

The wellbeing analysis used information from both data sources. The sample for the wellbeing analysis included people in the outcomes data source that responded to the wellbeing survey and people who responded to the wellbeing survey who reported that they were currently unemployed who were not included in the outcomes data source (as a comparison group). We described the overall wellbeing of the sample for 2019, 2020 and 2021 using mean PWI scores and standard deviation. We also described wellbeing according to categories of working hours. It should be noted that this is only descriptive as factors that may be related to wellbeing may also influence hours of work.

Characteristics of the sample

Table 2 describes the characteristics of the 14,562 WISE job seekers. In the sample, 22.7% were aged 15 to 25 years, 18.1% between 24 and 34 years, 17.5% between 35 and 44 years, 22.3% between 45 and 54 years, 18.6% between 55 and 64 years, and 0.8% were aged 65 years and older. Just over half of the sample (52.4%) were men, 4.8% were First Nations Australians, and 17.6% were from CALD backgrounds. Most of the sample were residents of New South Wales (26.5%) and Victoria (24.7%), and there were also WISE job seekers who resided in Queensland (17.4%), South Australia (21.9%), Tasmania (7.5%) and Northern Territory (2.0%). About half of the sample had completed tertiary education (Bachelor or higher 9.8%; diploma or certificate 41.2%), while 17.6% completed secondary education and 31.4% completed less than secondary education.

The most common disability group in the sample was psychosocial disability (47.1%), followed by physical disability (31.1%), intellectual or learning disability (6.9%), autism (5.0%), sensory or speech (2.7%), acquired brain injury (0.9%) or other or missing (6.3%).

Table 2. Characteristics of WISE DES job seekers: demographic, geographic, education and disability group

	n	%
Age group		
15-25	3,305	22.7
26-34	2,635	18.1
35-44	2,548	17.5
45-54	3,250	22.3
55-64	2,702	18.6
65+	122	0.8
Gender		
Women	6,933	47.6
Men	7,629	52.4
Indigenous status		
First Nations Australian	704	4.8
Non-Indigenous	13,858	95.2
CALD		
Yes	2,568	17.6
No	11,994	82.4
State of residence		
NSW	3,852	26.5
VIC	3,593	24.7
QLD	2,538	17.4
SA	3,191	21.9
TAS	1,093	7.5
NT	295	2.0
Highest level of education		
Bachelor or higher	1,420	9.8
Diploma or certificate	6,001	41.2
Secondary education	2,562	17.6
Did not complete secondary	4,579	31.4
Disability group		
Sensory or speech	388	2.7
Intellectual or learning	1,006	6.9
Autism	724	5.0
Physical	4,532	31.1
Psychosocial	6,856	47.1
ABI	136	0.9
Other/missing	920	6.3

Employment outcomes

Table 3 describes the employment outcomes of the 14,562 WISE job seekers who were placed in employment between 1st July 2018 and 21st March 2022. During this time period, 39.9% of the sample were placed into a single job, 28.9% had two placements, 16.3% had three placements, 8.1% had four placements, 3.9% had five placements and 2.9% had 6 or more placements.

Relating to the first job in which WISE job seekers were placed, 43.7% of the sample were placed into their job within three months of being referred to DES, 22.3% were placed within four to six months, 12.8% within seven to nine months, 7.2% within 10 to 12 months, and 14.1% were placed in a job more than 12 months after being referred to DES.

When placed into their first job, 37.3% of WISE job seekers were employed for less than four weeks (did not achieve the 4-week outcome), 16.0% were employed for four weeks or longer, 13.6% for 13 weeks or longer, 18.4% for 26 weeks or longer, and 14.8% achieved for 52 weeks or longer.

In terms of hours worked in the first job in which they were placed, 10.0% of the sample worked full time, 31.6% worked part time, 58.5% worked in casual jobs (3.8% likely to be full time, 54.7% likely to be part time).

Table 3. Employment outcomes of WISE job seekers who were placed into employment

	N	%
Number of jobs		
1	9224	39.9
2	6670	28.9
3	3771	16.3
4	1876	8.1
5	900	3.9
6+	659	2.9
Time to first job placement (months)		
0-3 months	6356	43.7
4-6 months	3248	22.3
7-9 months	1858	12.8
10-12 months	1050	7.2
13+ months	2050	14.1
Duration of employment of first job (weeks)		
<4 weeks	5422	37.3
4 weeks	2325	16.0
13 weeks	1977	13.6
26 weeks	2678	18.4
52 weeks	2149	14.8
Work hours for first job		
Full time	1449	10.0
Part time	4602	31.6
Casual (likely full time)	551	3.8
Casual (likely part time)	7957	54.7

Personal Wellbeing Index

The mean PWI score in the sample was 51.9 in 2019, 53.7 in 2020 and 54.3 in 2021.

Table 4 describes wellbeing scores according to current working hours and for people who reported being unemployed at the time of the survey. The results show that:

- wellbeing scores were lower on average for people who were unemployed compared to people who were employed;
- there was no difference in wellbeing between people employed full time and part time;
- there was some indication that wellbeing was slightly lower for people in casual jobs compared to non-casual jobs.

Table 4. Personal Wellbeing Index for categories of working hours in 2019, 2020 and 2021

	n	mean	SD	SE
2019				
Unemployed	1699	49.1	22.3	0.5
Full time	73	58.4	22.5	2.6
Part time	205	58.3	21.6	1.5
Casual (likely full time)	22	56.3	21.8	4.7
Casual (likely part time)	431	57.5	21.6	1.0
2020				
Unemployed	2060	50.7	20.8	0.5
Full time	73	63.7	21.2	2.5
Part time	206	62.9	18.8	1.3
Casual (likely full time)	31	60.8	20.9	3.8
Casual (likely part time)	443	61.1	20.9	1.0
2021				
Unemployed	1916	49.9	22.7	0.5
Full time	116	63.2	20.5	1.9
Part time	338	62.2	20.3	1.1
Casual (likely full time)	36	53.3	23.8	4.0
Casual (likely part time)	691	61.0	20.6	0.8

5.2 Impact of working hours on mental health

While the wellbeing analysis above provides some descriptive evidence on the wellbeing of those working particular hours it is difficult from this to be able estimate the extent to which employment itself results in better wellbeing. To better understand the causal impact of working hours on mental health and wellbeing longitudinal data is required. This section contains a description of the methods used to analyse longitudinal data and the results, including the data source used for the analysis, the variables, the analytic methods, and the results of the analyses, and a discussion of the findings.

Data source

The data used in this study was obtained from the Household, Income and Labour Dynamics in Australia (HILDA) Survey²². The HILDA survey is a longitudinal study established by the Melbourne Institute, which collects information from a broad range of topics including demographic, social, economic and health characteristics of individuals.

Analytic sample

The sample for this study included HILDA participants who participated in the survey between 2015 and 2019 (five annual waves), with the sample restricted to working aged (15-64 years) participants who were in the labour force (employed and unemployed).

We compared the impact of working hours on mental health between HILDA participants with and without disability. Disability was identified at every wave using a question asking participants if they had “any long-term health condition, impairment, or disability (from a list of 17 conditions) that restricts you in your everyday activities, and has lasted or is likely to last, for 6 months or more?”, a broad definition of disability which identified 29.2% of the sample to have a disability. We defined the sample of people with disability as people who reported disability in at least 60% of waves between 2015 and 2019. People without disability were those who reported disability in less than or equal to 20% of waves between 2015 and 2019 (i.e., 1 out of 5 waves or less). This resulted in a sample of 2,270 individuals with disability (7,208 observations over the 5 waves) and 10,943 individuals without disability (38,847 observations over the 5 waves).

We identified people who were household members of the disability sample, defined as people who lived in the same households as the disability sample, which resulted in a sample of 1,390 household members (3,538 observations over the 5 waves). Additionally, we identified household members

who were likely to be carers of the sample of people with disability, defined as household members who reported that were (1) carers of a member of their household, or (2) receiving a carer allowance. This resulted in a sample of 107 carers (153 observations over the 5 waves).

Variables

Mental health was assessed using the Five-Item Mental Health Inventory (MHI-5), a subscale from the Short Form (SF-36) Health Survey, which is an effective instrument for investigating depression, anxiety, and panic symptoms considering its high sensitivity and specificity among the general population^{23,24}. It assesses five items relating to mental health including nervousness, moody and feeling down (relating to depression and anxiety) and feeling calm and happy (relating to positive feelings) during the period of the previous 4 weeks, each scored using five response categories. Total raw scores were transformed into a 0-100 scale with higher scores representing better mental health.

The working hours variable was constructed based on responses to a question about the total working hours usually worked per week in all jobs. It was categorised as 0, 1-14 hours, 15-29 hours, and 30+ hours.

Analytic methods

We described the characteristics of the HILDA analytic sample using frequencies and percentages. We also summarised mental health scores for each category of working hours, using means and standard deviations.

We used linear fixed-effects regression models to examine the association between working hours and mental health. Fixed effects models are regression models attempt to estimate the causal effect of an exposure on an outcome by modelling the within-person variation in exposures and outcomes. In its simplest form, fixed effects regression estimates the difference in a person's outcome between two time points, one in which they were exposed and one in which they were unexposed. This approach can be extended to multiple waves of data, comparing mean outcome measurements in waves in which a person was exposed and waves in which they were unexposed. Each individual acts as their own control, thereby controlling for characteristics of the individual which do not vary with time²⁵. However, some bias in the causal estimates may remain if time-varying factors influence both the exposure and the outcome. Coefficients generated from these models describe estimated mean differences in mental health scores when participants were working 1-14, 15-29, or 30 or more hours per week compared to 0 hours per week.

Analysis 1: impact of people with disability’s working hours on their mental health

We firstly assessed differences in the association between working hours and mental health for people with and without disability by conducting likelihood ratio tests to test for a statistical interaction between working hours and disability status.

We present the overall effects of working hours on mental health for people with and without disability, and present the results disaggregate by: age group, sex, country of birth, education, and remoteness.

Analysis 2: impact of people with disability’s working hours on household members’ mental health

We also conducted an analysis examining the impact of the participants with disability’s working hours on the mental health of their household members and carers. For this analysis, we examined households with a single person with disability due to limitations in the statistical methods. The sample size consisted of 1,390 household members (3,538 observations) and 107 carers (153 observations).

Results

Table 5 describes the characteristics of the sample by disability status. People with disability were older than those without disability, more likely to have been born in Australia, and had lower levels of education.

Table 5. Characteristics of the HILDA sample by disability status

	No disability (n=10,943)		Disability (n=2,270)	
	n	%	n	%
Age group				
15-24	3,085	28.2	483	21.2
25-44	4,845	44.3	792	34.9
45-64	3,013	27.5	995	43.8
Sex				
Female	5,508	50.3	1,096	48.3
Male	5,435	49.7	1,174	51.7
Country of birth				
Australia	8,876	81.1	1,936	85.3
Other English-speaking country	838	7.7	174	7.7
Other	1,229	11.2	160	7.1
Remoteness				
Major City	7,707	70.4	1,465	64.5
Regional/remote	3,236	29.6	805	35.5
Highest level of education				
Bachelor or higher	3,276	29.9	484	21.3
Diploma or certificate	3,400	31.1	857	37.8
Secondary education	2,052	18.8	340	15.0
Less than secondary	2,215	20.2	589	26.0

Table 6 presents the distribution of working hours in all waves of the sample and mean MHI scores for people with and without disability. There were substantial differences in the distribution of working hours between people with and without disability, with people with disability working fewer hours per week but being more likely to work part-time hours. For example, people with disability reported working 30 or more hours per week in approximately 60% of observations compared to 72.3% for people without disability and reported working 0 hours per week (or unemployed) in 11.2% of observations compared to 4.9% for people without disability.

There were considerable differences in mean mental health scores for people with and without disability and by categories of working hours. Mental health scores were lower for people with disability compared to people without disability for all categories of working hours and there was a trend of increasing mental health with increasing hours worked for both groups.

Table 6. Mental health score by categories of working hours

	No disability (n=38,847 obs)		Disability (n=7,208 obs)	
	n (%)	Mean (SD)	n (%)	Mean (SD)
0 hours	1,897 (4.9%)	67.9 (18.5)	808 (11.2%)	56.8 (21.2)
1-14 hours	3,035 (7.8%)	73.6 (16.1)	647 (9.0%)	62.7 (20.3)
15-29 hours	5,848 (15.1%)	74.5 (15.5)	1,364 (18.9%)	63.6 (19.9)
30+ hours	28,067 (72.3%)	75.8 (15.3)	4,389 (60.9%)	68.4 (18.8)

Analysis 1: impact of people with disability’s working hours on their mental health

The results of the fixed-effects regression models describing the impact of working hours on mental health for people with and without disability are presented in Table 7.

For people with disability, all categories of working hours were associated with large beneficial mental health effects (estimated mean differences in mental health scores of 3- to 6-points) compared to when they were unemployed. There was evidence of increasing mental health effects with increasing number of hours worked.

Table 7. Estimated mean difference in mental health score for categories of working hours compared to being unemployed for people with and without disability

	No disability Coef. (95% CI)	Disability Coef. (95% CI)
Sample overall		
0 hours	0	0
1-14 hours	1.0 (0.0, 1.9)	2.6 (0.8, 4.5)
15-29 hours	1.1 (0.3, 2.0)	4.5 (2.8, 6.1)
30+ hours	1.4 (0.6, 2.2)	6.0 (4.4, 7.6)

For the disaggregated analyses by age group, sex, country of birth, highest level of education, and remoteness, the most notable findings were:

- Large beneficial effects of all categories of working hours on mental health compared to being unemployed for people with disability aged 15 to 44 years (Table 8), but no evidence of a statistically significant effect of part time employment on mental health for people with disability aged 45 years and older;
- Larger beneficial effects of part-time employment on mental health for women with disability compared to men (Table 9), but similar effects of full-time employment for males and females with disability;
- Large beneficial mental health effects of all categories of working hours for people with disability born in Australia (Table 10); whereas there were no effects associated with working hours for those born in other countries;
- Beneficial effects of part-time employment were largest for people with disability with less than secondary education, for whom there were large beneficial effects on mental health of all categories of working hours compared to being unemployed (Table 11);
- Beneficial effects of part-time work were evident for people with disability living in cities but not for those living in regional and remote areas (Table 12).

Table 8. Estimated mean difference in mental health score for categories of working hours compared to being unemployed, by age group

	No disability Coef. (95% CI)	Disability Coef. (95% CI)
15-24 yrs		
0 hours	0	0
1-14 hours	-0.3 (-1.8, 1.2)	3.2 (-0.5, 6.8)
15-29 hours	-0.5 (-1.9, 1.0)	7.5 (4.0, 11.1)
30+ hours	-0.3 (-1.7, 1.2)	6.0 (2.5, 9.4)
25-44 yrs		
0 hours	0	0
1-14 hours	1.9 (0.2, 3.7)	5.4 (2.1, 8.8)
15-29 hours	2.1 (0.7, 3.6)	4.5 (1.9, 7.1)
30+ hours	2.3 (0.9, 3.6)	7.9 (5.4, 10.4)
45-64 yrs		
0 hours	0	0
1-14 hours	3.1 (0.9, 5.3)	-0.5 (-3.5, 2.5)
15-29 hours	3.2 (1.4, 5.0)	2.0 (-0.7, 4.7)
30+ hours	3.3 (1.6, 5.0)	3.4 (0.8, 6.0)

Table 9. Estimated mean difference in mental health score for categories of working hours compared to being unemployed, by sex

	No disability Coef. (95% CI)	Disability Coef. (95% CI)
Female		
0 hours	0	0
1-14 hours	0.4 (-1.0, 1.7)	4.8 (2.3, 7.3)
15-29 hours	1.0 (-0.2, 2.2)	5.3 (3.0, 7.6)
30+ hours	1.4 (0.1, 2.6)	6.4 (4.1, 8.8)
Male		
0 hours	0	0
1-14 hours	2.0 (0.6, 3.4)	-1.2 (-4.1, 1.7)
15-29 hours	1.3 (0.0, 2.5)	3.7 (1.2, 6.1)
30+ hours	1.4 (0.3, 2.5)	5.6 (3.5, 7.8)

Table 10. Estimated mean difference in mental health score for categories of working hours compared to being unemployed, by country of birth

	No disability Coef. (95% CI)	Disability Coef. (95% CI)
Australia		
0 hours	0	0
1-14 hours	0.6 (-0.5, 1.6)	3.4 (1.4, 5.4)
15-29 hours	0.9 (0.0, 1.9)	5.0 (3.3, 6.8)
30+ hours	1.0 (0.1, 1.9)	6.6 (4.9, 8.3)
Other English-speaking country		
0 hours	0	0
1-14 hours	3.5 (-0.5, 7.4)	-1.2 (-8.0, 5.5)
15-29 hours	2.5 (-0.9, 5.8)	2.4 (-3.7, 8.6)
30+ hours	3.6 (0.5, 6.7)	1.0 (-4.8, 6.8)
Other		
0 hours	0	0
1-14 hours	4.1 (0.6, 7.5)	-8.6 (-18.2, 1.1)
15-29 hours	2.0 (-0.7, 4.7)	-4.1 (-12.0, 3.8)
30+ hours	2.9 (0.4, 5.4)	1.8 (-5.7, 9.4)

Table 11. Estimated mean difference in mental health score for categories of working hours compared to being unemployed, by highest level of education

	No disability Coef. (95% CI)	Disability Coef. (95% CI)
Bachelor or higher		
0 hours	0	0
1-14 hours	1.4 (-0.6, 3.5)	-0.4 (-4.4, 3.6)
15-29 hours	2.3 (0.5, 4.0)	1.9 (-1.7, 5.5)
30+ hours	2.7 (1.1, 4.4)	3.7 (0.3, 7.1)
Diploma or certificate		
0 hours	0	0
1-14 hours	2.5 (0.4, 4.6)	1.0 (-2.5, 4.4)
15-29 hours	1.4 (-0.3, 3.1)	4.1 (1.1, 7.1)
30+ hours	1.4 (-0.2, 3.0)	4.9 (2.0, 7.7)
Secondary education		
0 hours	0	0
1-14 hours	1.5 (-0.7, 3.6)	0.3 (-4.8, 5.4)
15-29 hours	0.9 (-1.0, 2.8)	0.6 (-3.5, 4.8)
30+ hours	0.4 (-1.5, 2.3)	2.9 (-1.2, 6.9)
Less than secondary		
0 hours	0	0
1-14 hours	1.1 (-0.9, 3.1)	5.9 (2.0, 9.8)
15-29 hours	0.6 (-1.5, 2.6)	6.2 (2.8, 9.6)
30+ hours	1.6 (-0.4, 3.6)	8.5 (5.1, 11.9)

Table 12. Estimated mean difference in mental health score for categories of working hours compared to being unemployed, by remoteness

	No disability Coef. (95% CI)	Disability Coef. (95% CI)
Cities		
0 hours	0	0
1-14 hours	1.1 (0.0, 2.3)	3.2 (0.8, 5.6)
15-29 hours	1.2 (0.1, 2.2)	6.0 (3.9, 8.1)
30+ hours	1.7 (0.7, 2.7)	6.8 (4.8, 8.8)
Regional or remote		
0 hours	0	0
1-14 hours	1.3 (-0.5, 3.1)	1.4 (-1.7, 4.4)
15-29 hours	1.8 (0.2, 3.5)	1.7 (-1.0, 4.4)
30+ hours	1.3 (-0.3, 2.9)	4.4 (1.6, 7.1)

Analysis 2: impact of people with disability’s working hours on household members’ mental health

The results of the fixed-effects regression models describing the impact of people with disability’s working hours on mental health of household members and carers are presented in Table 13.

There was no evidence of a statistically significant effect of people with disability’s working hours on the mental health of their household members.

For household members who were carers, the results also do not provide evidence of a statistically significant effect, but the point estimate provide some suggestion that there may be beneficial effects for carers when people with disability are employed 15 to 29 hours and 30 hours and more compared to being unemployed. Given, the estimates were based on a small sample the effect estimates have very wide confidence intervals, and these effects should be interpreted with caution.

Table 13. Estimated mean difference in mental health score for household members of people with disability and carers associated with changes in working hours for people with disability

	n	Mean (SD)
Household members of the disability sample		
0 hours	273	0
1-14 hours	326	-0.4 (-3.4, 2.6)
15-29 hours	670	-0.1 (-2.9, 2.6)
30+ hours	2,269	-0.1 (-2.8, 2.5)
Carers of the disability sample		
0 hours	14	0
1-14 hours	30	0.1 (-15.3, 15.6)
15-29 hours	32	6.4 (-11.6, 24.5)
30+ hours	77	6.9 (-7.6, 21.5)

Key findings on working hours and mental health

Consistent with previous studies, this analysis showed that the beneficial impact of employment on mental health was more apparent for people with disability compared to people without disability.

For people with disability aged 15 to 44 years, there was evidence of large, clinically meaningful differences in mental health scores when people with disability were in part-time employment compared to being unemployed, with differences of similar magnitude to full-time work. **The findings highlight the likely beneficial effects of part-time employment on mental health for people with disability aged 15 to 44 years.**

This study also provides some suggestion of a potential beneficial impact of increased working hours on the mental health of carers of people with disability, but a larger study is needed to provide more robust evidence.

5.3 Impact of working hours on healthcare use

In this section we sought to explore the impact of working hours on use of health care services using linked administrative data from the Multi-Agency Data Integration Project (MADIP) described below. This section contains a description of the data used for the analysis, the analytic methods, the results of the analyses, and a discussion of the findings.

Data

The data sourced for this analysis comes from MADIP, a linked dataset created and managed by the Australian Bureau of Statistics, which brings together information on a wide range of characteristics including population demographics, health and employment, for the Australian population over time. The MADIP product contains a myriad of administrative datasets including the Australian Censuses, social security payments and hours worked (via Department of Social Services Data Over Multiple Individual Occurrences, 'DOMINO'), tax records, death records, and Medicare records (medical services¹ and prescription medicines).

For the purpose of this analysis, we selected individuals reporting a disability at the time of the 2011 Census and linkable with MADIP as our base case sample. The 2011 Census was selected to ensure that a cohort could be followed for a sufficiently long period of time (i.e., from 2011 up until 2019). In this sense, we were able to frequently observe when people moved on and off payments as well as how working changed. This identified a sample of 781,344 individuals. The Census uses a "Core Activity Need for Assistance" question module to identify people "needing help or assistance in one or more of the three core activity areas of self-care, mobility and communication, because of a long-term health condition (lasting six months or more), a disability (lasting six months or more)². It identifies people with a profound or severe core activity limitation, defined as people with a disability who need assistance in their everyday lives with at least one of the core activities of self-care, body movements or communication³. In the 2011 Census, 4.9% of the Australian population were identified as having a profound or severe core activity limitation⁴.

This sample was then linked to longitudinal information on social security payments, provided through DOMINO, as well as healthcare use, provided through Medicare. The DOMINO data provides information on the types of benefit provided to individuals, as well as exact start and stop dates for these payments, for all individuals from 2006 through until the end of 2020. For those receiving payments that necessitated reporting on hours worked, the DOMINO dataset also provides information on the number of hours benefit recipients worked in a given fortnight. The Medicare records run from January 2011 to December 2020 and provide exact dates for each service received and script dispensed under the Medicare Benefits Schedule (MBS) and the Prescription Benefits Schedule (PBS) respectively. The number of services/scripts as well as the government contribution and the patient out-of-pocket costs are also provided.

From the base case sample, those that appeared in DOMINO who received either disability support pension (DSP) or Newstart allowance (NSA), between 2011 and 2019, were included in the analysis. **This gave a final sample of 285,136 people who had reported a core activity limitation and ever received a DSP/NSA payment between 2011-2019 and were linkable in MADIP, 94% (n=268,209) of whom were living in private dwellings at the time of the 2011 Census.**

We also identified a sample of people who were household members of those in our disability sample living in private dwellings, defined as people who were living in the same household at the time of the 2011 Census. The sample included those identified as household members at the time of the 2011 Census and was restricted to households where only one family member was ever on a DSP/NSA payment. This resulted in final sample of 331,737 household members.

1 Medical services in Medicare records include all out-of-hospital services as well as inpatient procedures for private patients which are eligible for government benefit, as stipulated through the Medicare Benefits Schedule.

2 Australian Bureau of Statistics, 2901.0 - Census of Population and Housing: Census Dictionary, 2016 2016, ABS: Canberra (AU). Cat no. 2901.0 <https://www.abs.gov.au/ausstats/abs@.nsf/mf/2901.0>

3 ABS, 2018. 'ABS Sources of Disability Information, 2012 - 2016' Cat no. 4431.0.55.002 <https://www.abs.gov.au/ausstats/abs@.nsf/mf/4431.0.55.002>

4 ABS Table Builder <https://www.abs.gov.au/statistics/microdata-tablebuilder/tablebuilder>

Variables

The data was aggregated up to the quarter-year level, categorising the data into 36 distinct quarters between 2011 Quarter 1 and 2019 Quarter 4.

Three outcomes were examined:

1. Utilisation of healthcare services per quarter, defined as all Medicare subsidised out-of-hospital services;
2. Utilisation of mental healthcare services per quarter, defined as out-of-hospital mental health services, identified using MBS item numbers (available in Appendix);
3. Prescription of mental health scripts per quarter, based on Anatomical Therapeutic Chemical (ATC) codes pertaining to antidepressants and anxiolytics.

In addition, for each outcome, the government contribution, or benefit paid (in AUD \$), per quarter was calculated.

The working hours variable was constructed based on DOMINO data reporting the total working hours worked per fortnight in all jobs. Those who were receiving benefits at the time but were missing recorded hours were assumed to have worked 0 hours in the past fortnight⁵. The average number of hours worked each week was then calculated and averaged for each quarter year. Finally, the average weekly number of hours across each quarter was categorised as 0 hours, 1-14 hours, 15-29 hours, and 30+ hours.

Analytic methods

We first described the characteristics of the sample of individuals that reported a core activity limitation in the 2011 census by whether they were ever observed to receive DSP/NSA during the observation window (quarter 1 2011 – quarter 4 2019). In order to better explore household differences, these descriptive characteristics excluded the 6% of individuals that were not living in private dwellings.

Next, we set out to estimate the impact of working hours on healthcare use. This is challenging because individuals with health problems and thus high healthcare costs may also find it hard to work. To address this, we applied linear fixed-effects regression models to examine the association between working hours and healthcare outcomes in the following quarter. A lagged effect (examining the effect in the following quarter) was examined to establish the temporal sequence between the exposure and outcome that is of interest in the current study. This approach was used to attempt to reduce reverse causality and better isolate the causal effect of working hours on future healthcare use. Using a fixed effects model also removes time invariant factors that may be correlated with

both hours worked and healthcare use. Coefficients generated from these models describe how, on average, outcomes (healthcare use, government costs) change when participants were working 1-14, 15-29, or 30 or more hours per week compared to working 0 hours per week.

Heterogeneity analyses were then conducted to see how the associations between working hours and mental healthcare use and mental health scripts varied by age group (15-24; 25-44; 45+ years), sex, remoteness, educational attainment (high school or less; diploma/certificate; university degree), and limited English proficiency.

We also explored the impact of working hours on the healthcare outcomes among other household members.

Finally, to summarise the population-level impact of these results, we used the results of the regression models to predict the net **annual** effect of transitioning from unemployment to working part time or full time for people who reported a core activity limitation in 2011 and were unemployed [and looking for part time (n=3,417) or full-time work (n=4,931)].

Results

Descriptive statistics

Table 14 describes the characteristics of the MADIP sample that reported a core activity limitation in the 2011 Census. Compared to those who never received DSP/NSA throughout 2011-2019, those who had received a DSP/NSA payment were younger (mean 44.3 vs 64.3 years), more likely to be male, and have lower levels of educational attainment. Those who had received a DSP/NSA payment also had more people in their households as well as more household members that ever had received a DSP/NSA payment. The majority of those with a core activity limitation were not participating in the labour force, with slightly higher rates of workforce participation observed among the DSP/NSA recipients. The proportion of the sample living in remote areas was similar across both groups whereas Limited English Proficiency was slightly higher among those who hadn't received DSP/NSA. Among those who had received a payment, the majority, 93%, had received DSP, compared to only 12% that had received NSA (with some people receiving both during the observation window).

5 Those who do not work do not need to report their hours. This assumption has been verified with the Department of Social Services.

The average use of out-of-hospital services was higher among those who had never received a DSP/NSA payment, however out-of-hospital use of mental healthcare services was substantially higher among DSP/NSA recipients. Similarly, overall government costs for out-of-hospital services and scripts were slightly higher for those who had not received DSP/NSA, whereas government costs for mental health services and scripts were higher among DSP/NSA recipients.

Table 14. Characteristics of those reporting a core activity limitation by whether they received DSP/NSA during 2011-2019*

	No government payment (n=403,546)		DSP/NSA payment (n=268,209)	
	Mean (SD) / Prop.	Freq.	Mean (SD) / Prop.	Freq.
No. in household**	2.27 (1.21)	-	2.62 (1.33)	-
No. in household with core activity limitation**	1.22 (0.49)	-	1.28 (0.66)	-
No. family members ever received DSP/NSA***	0.05 (0.25)	-	1.20 (0.57)	-
Ever DSP	-	-	0.93	249,434
Ever New Start Allowance	-	-	0.12	32,185
Age**	67.32 (24.79)	-	44.25 (16.21)	-
Age group (years)**				
Less 25	0.12	48,896	0.17	46,478
25-45	0.03	116,48	0.25	65,963
45 and above	0.85	343,002	0.58	155,768
Female**	0.55	221,950	0.47	126,058
Provided unpaid care to someone with a disability**	0.10	40,355	0.11	29,503
Educational attainment**				
High school or less	0.71	213,431	0.74	163,251
Diploma or certificate	0.20	59,421	0.20	44,247
University degree	0.09	28,316	0.06	14,408
Labour force status**				
Employed full time	0.03	9,448	0.03	6,473
Employed part time	0.03	9,512	0.08	20,043
Employed away from work	0.01	3,732	0.01	3,714
Unemployed looking for full time work	0.00	522	0.01	2,895
Unemployed looking for part time work	0.00	790	0.02	4,141
Not in labour force	0.93	325,986	0.85	212,076
Limited English Proficiency**	0.13	52,461	0.08	21,457
In Medicare records	0.95	383,369	0.99	265,527
Living in remote area**	0.01	4,035	0.01	2,682
Died between 2011-2019	0.46	185,631	0.11	29,503
Outcomes (quarter average between 2011-2019)				
Hours worked	-	-	4.97 (17.87)	-
No. MBS services used	12.34 (10.04)	-	9.83 (8.18)	-
No. mental health services used	0.09 (0.34)	-	0.29 (0.74)	-
Benefit paid all MBS services	476.50 (389.76)	-	416.55 (366.24)	-
Benefit paid mental health services	9.48 (43.18)	-	31.39 (98.65)	-
No. mental health scripts filled	0.96 (1.56)	-	1.35 (2.09)	-
Benefit paid mental health scripts	8.13 (17.54)	-	12.17 (23.15)	-

* Excluding 109,589 individuals who were living in non-private dwellings

** All based on responses in 2011 Census *** Includes sample on DSP/NSA as well as their family members.

Regression analysis

The results of the fixed-effects regression models for healthcare use are presented in Table 15. These results show how healthcare use per quarter changes, on average, when an individual moves from working 0 hours per week to 1-14 hours, 15-29 hours, or 30 or more hours per week. Compared to being unemployed, working 1-14 hours was associated with a 0.6%, 4.4%, and 4.0% reduction in the use of healthcare services, mental healthcare services, and mental health scripts respectively. The magnitude of reduction in healthcare was also greater among those who worked 15 to 29 hours per week or 30 or more hours per week, for all three healthcare use outcomes. However, of note, compared to working 0 hours, the effect sizes for those 15 to 29 hours per week or 30 or more hours per week were similar for healthcare use and mental healthcare use; respectively associated with a 3.2% and 3.1% reduction in the use of healthcare services, and a 16.4% and 15.7% reduction in the use of mental healthcare services. For mental health scripts, as the number of hours worked increased, there was a progressive decrease in the use of mental health scripts, with working 15 to 29 hours and 30 or more hours associated with a 6.5% and 9.0% decrease respectively.

For the analysis of government costs (Table 16), we found evidence of a progressive reduction in government costs as working hours increased across all outcomes. Costs for overall healthcare services reduced by 3.8%, 6.9%, and 11.2% as individuals transitioned to working 1-14 hours, 15-29 hours, and 30 or more hours respectively. Similarly, more working hours were associated with reduced mental healthcare service costs (5.4%, 16.7%, 17.3% reduction in mental healthcare costs for 1-14 hours, 15-29 hours, and 30 or more hours respectively) and mental health scripts costs (0.9%, 3.9%, 5.5% reduction in mental healthcare costs for 1-14 hours, 15-29 hours, and 30 or more hours respectively).

The heterogeneity analyses, presented in Figure 5, show how the associations between working hours and use of mental health services and scripts vary across different subgroups. Compared to the estimates generated from the overall sample analysis, the associations between working hours and use of mental health services and scripts were fairly similar by educational attainment (Figure 5a), albeit with a larger reduction in mental health scripts observed among those holding a university degree who transitioned into working 30 or more hours. Differences across age groups indicates that the associations between working hours and reduced use of mental health scripts were of greater magnitude for people aged 25-44 years and 45 years and above (Figure 5b) and of smaller magnitude for those aged younger than 25 years. The trends in use of mental health services by working hours were relatively similar across all age groups. The relationship between working hours and use of mental healthcare and scripts was of smaller magnitude among those with Limited English Proficiency and those living in remote areas (Figure 5c), though there was a large degree of uncertainty in the estimates due to smaller sample sizes in these subgroups. Finally, the trends of increased working hours and reduced mental healthcare use were similar among males and females, albeit with males experiencing a slightly larger reduction in mental health scripts associated with increased working hours.

The heterogeneity analyses, presented in Figure 6, show how the associations between working hours and the government costs for mental health services and scripts vary across different subgroups. Generally, there was little evidence of variation in the associations between working hours and government mental health expenditure across different subgroups, albeit with the reduction in costs for mental health script costs being slightly larger for males vs females (Figure 6c). The associations between working hours and reductions in mental health costs were also less pronounced for those aged 45 years and above.

Finally, the regression analyses results exploring whether other household members' healthcare use and costs changed when individuals in the analytic sample increased their working hours is presented in Tables 17 and 18 respectively. We found that increased working hours was not associated with consistent differences in other household members' healthcare use nor government costs. As working hours increased to 15-29 hours per week or 30 or more hours per week among DSP/NSA recipients, if anything, their household members used slightly more healthcare services and scripts. In particular, working 30 or more hours per week among DSP/NSA recipients was associated with an increase in mental healthcare use and costs among other household members (a 7.9% and 6.8% increase respectively). Interestingly, as working hours among DSP/NSA recipients increased, use of mental health scripts of household members increased while costs for mental health scripts for the government reduced.

Population level impacts

In February/March 2022, there were 309,474 individuals on Disability Employment Services and 242,484 people with disability on jobactive. Based on the estimates from our regression models, we generated estimates of the total impact of increasing their working hours on healthcare use and costs (Table 19). For example, if these 551,958 individuals transitioned from working 0 hours to working on average 15-29 hours per week, in the following year, there would be:

- **675,597 fewer healthcare services** used, associated with a **reduction of \$61,477,083 per year** in government expenditure on healthcare services;
 - **This included 108,184 fewer mental health services** used, associated with a **reduction of \$12,390,354 per year** in government expenditure on mental health services;
- and
- **211,952 fewer mental health scripts** filled, associated with a **reduction of \$1,103,916 per year** in government expenditure towards mental health scripts.

Table 19. Projected annual reduction in number of services/scripts used and associated government expenditure for unemployed individuals with core activity limitations looking for part time / full time work

	Reduction in utilisation of healthcare services (government cost saving)	Reduction in utilisation of mental healthcare (government cost saving)	Reduction in mental health scripts (government cost saving)
1 to 14 hours per week	121,431 fewer services (\$33,307,354)	28,702 fewer mental health services (\$3,965,267)	132,470 fewer mental health scripts (\$238,446)
15 to 29 hours per week	675,597 fewer services (\$61,477,083)	108,184 fewer mental health services (\$12,390,354)	211,952 fewer mental health scripts (\$1,103,916)
30 or more hours per week	653,519 fewer services (\$99,354,648)	103,769 fewer mental health services (\$12,898,155)	298,058 fewer mental health scripts (\$1,545,483)

Notes: Based on national level caseload in February/March 2022. Note that the reduction in utilisation of healthcare services includes the reduction in mental healthcare.

Using these population-level estimates, the net reduction in healthcare and government costs associated with increased working hours can also be calculated incrementally. For example, if we assumed that these 551,958 individuals were already working on average 1-14 hours per week and then transitioned working 15-29 hours per week, the following year would see:

- **554,166 fewer healthcare services** used (i.e., 675,597-121,431) and a **reduction of \$28,168,728** in government expenditure (i.e., \$61,477,083-\$33,307,354) on healthcare services;
- **79,482 fewer mental health services** (i.e., 108,184-28,702) used, associated with a **reduction of \$8,425,087** (i.e., 12,390,354-3,965,267) in government expenditure on mental health services; and
- **79,482 fewer mental health scripts** (i.e., 211,952-132,470) filled, associated with a **reduction of \$865,470** (1,545,483-1,103,916) in government expenditure towards mental health scripts.

These figures demonstrate the potential population-wide value in terms of reduced government health expenditure of moving people into part-time employment. On the basis of these estimates, there could be savings of \$113 per person per year, representing a 7% reduction in government expenditure on health services.

Key findings linked administrative data

Increased working hours were consistently associated with a reduction in the use, and government costs associated with, mental healthcare services and scripts among people with disability receiving NSA/DSP. In this analysis, we found evidence of the considerable effects for mental healthcare use (and costs) which suggested that working part time (15-29 hours) and full time (30+ hours) were associated with approximately a 15% reduction in use of mental health services, and similar magnitude for working part time (15-29 hours per week) and full time (30+ hours). There was evidence of beneficial effects of smaller magnitude for mental health scripts, with evidence of progressive increasing beneficial effects with increasing working hours. **In summary, the analysis provides evidence of substantial beneficial impacts of both part-time and full-time employment for people with severe disability on their healthcare use, use of mental health services, and mental health scripts, including large impacts to government expenditure.** These findings align with the previous analysis that indicated part-time employment had a positive impact on mental health among those living with a disability.

The reductions in mental health scripts were particularly pronounced among males versus females and those 25 years and over. There was inconsistent evidence of an impact of increased working hours for people with disability (and receiving DSP/NSA) on the healthcare use of other household members and, if anything, slight indication that more working hours was associated with higher use of mental healthcare services and scripts among household members. It is possible that reducing hours dedicated to caring for people with disability may free up time for carers in the household to seek healthcare services. However, limitations in the data warrant further analyses to understand the impact of increased working hours on the carers of people with disability. For instance, the analysis is based on disability status and household structure in 2011 and, ergo, is assumed to be constant over the following 8 years (i.e., 2011-2019). Further work should explore contemporaneous changes in outcomes among individuals who are confirmed carers at the time that DSP/NSA recipients increase their working hours. Combining longitudinal survey data with administrative records on healthcare use will be vital to adequately disentangle broader household effects.

Table 15. Estimated mean difference in healthcare use per quarter for categories of working hours compared to being unemployed

	Utilisation of healthcare services		Utilisation of mental healthcare		Mental health scripts filled	
	[95% CI]	% change relative to mean (=9.7)	[95% CI]	% change relative to mean (=0.3)	[95% CI]	% change relative to mean (=1.5)
Unemployed (0 hours per week)	Ref	Ref	Ref	Ref	Ref	Ref
1 to 14 hours per week	-0.055** [-0.093,-0.017]	-0.6 [-1,-0.2]	-0.013*** [-0.017,-0.009]	-4.4 [-5.7,-3.0]	-0.060*** [-0.067,-0.054]	-4.0 [-4.5,-3.6]
15 to 29 hours per week	-0.306*** [-0.362,-0.249]	-3.2 [-3.8,-2.6]	-0.049*** [-0.055,-0.043]	-16.4 [-18.4,-14.4]	-0.096*** [-0.106,-0.086]	-6.5 [-7.1,-5.8]
30 or more hours per week	-0.296*** [-0.389,-0.204]	-3.1 [-4.1,-2.2]	-0.047*** [-0.057,-0.037]	-15.7 [-19,-12.4]	-0.135*** [-0.150,-0.119]	-9.0 [-10,-8]

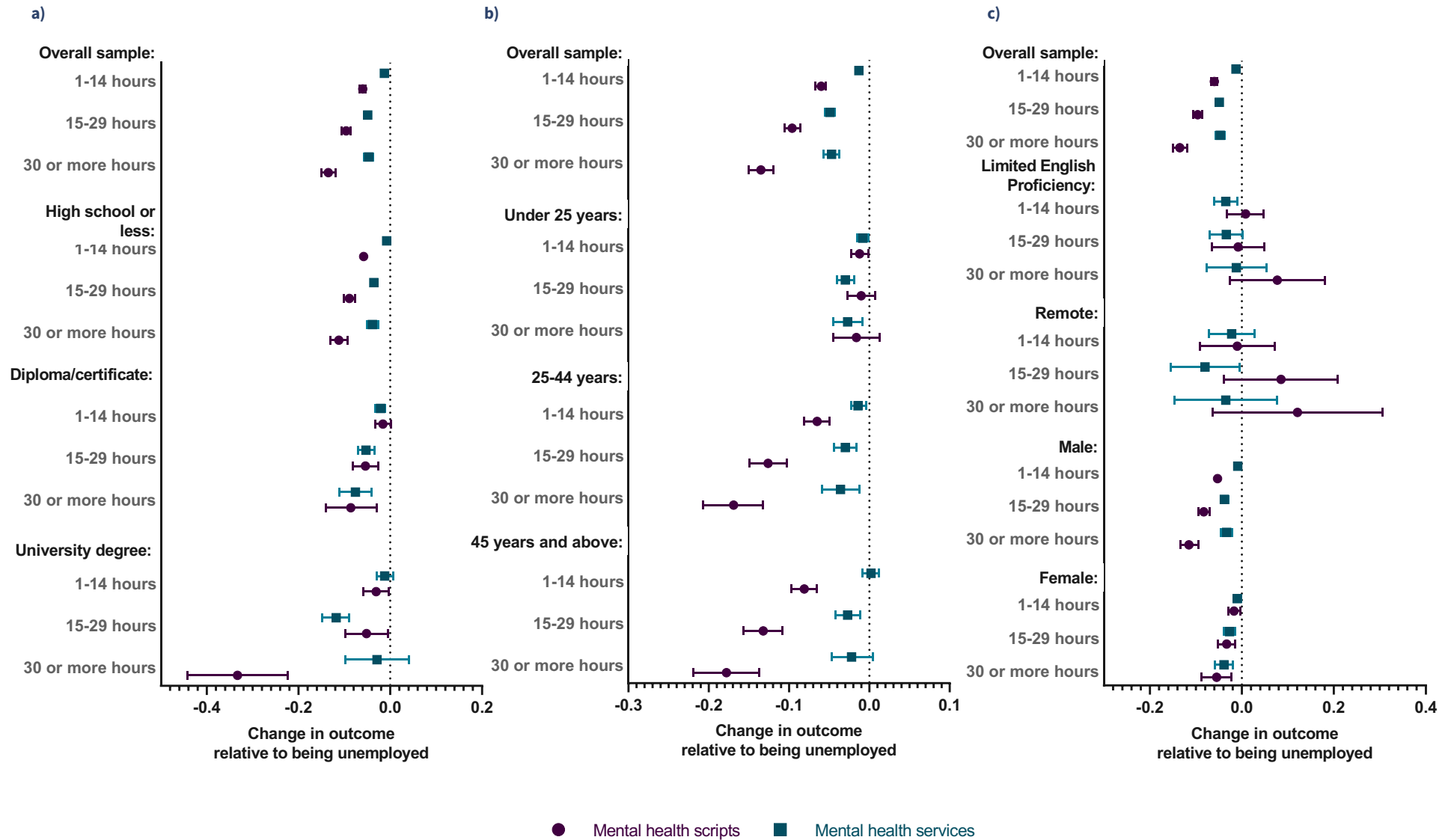
Notes: Means provided for each outcome correspond to sample included in each fixed effects regression analysis; i.e., populations that were receiving DSP/NSA payment in each quarter analysed. Levels of significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table 16. Estimated mean difference in government healthcare costs per quarter for categories of working hours compared to being unemployed

	Government costs – healthcare services		Government costs – mental healthcare		Government costs – Mental health scripts	
	[95% CI]	% change relative to mean (=404.4)	[95% CI]	% change relative to mean (=33.8)	[95% CI]	% change relative to mean (=12.9)
Unemployed (0 hours per week)	Ref	Ref	Ref	Ref	Ref	Ref
1 to 14 hours per week	-15.086*** [-17.191,-12.980]	-3.8 [-4.3,-3.3]	-1.796*** [-2.264,-1.328]	-5.4 [-6.7,-4.0]	-0.108 [-0.236,0.020]	-0.9 [-1.9,0.2]
15 to 29 hours per week	-27.845*** [-31.001,-24.688]	-6.9 [-7.7,-6.2]	-5.612*** [-6.314,-4.910]	-16.7 [-18.7,-14.6]	-0.500*** [-0.688,-0.311]	-3.9 [-5.4,-2.5]
30 or more hours per week	-45.001*** [-50.145,-39.857]	-11.2 [-12.4,-9.9]	-5.842*** [-6.987,-4.698]	-17.3 [-20.7,-13.9]	-0.700*** [-0.998,-0.402]	-5.5 [-7.8,-3.2]

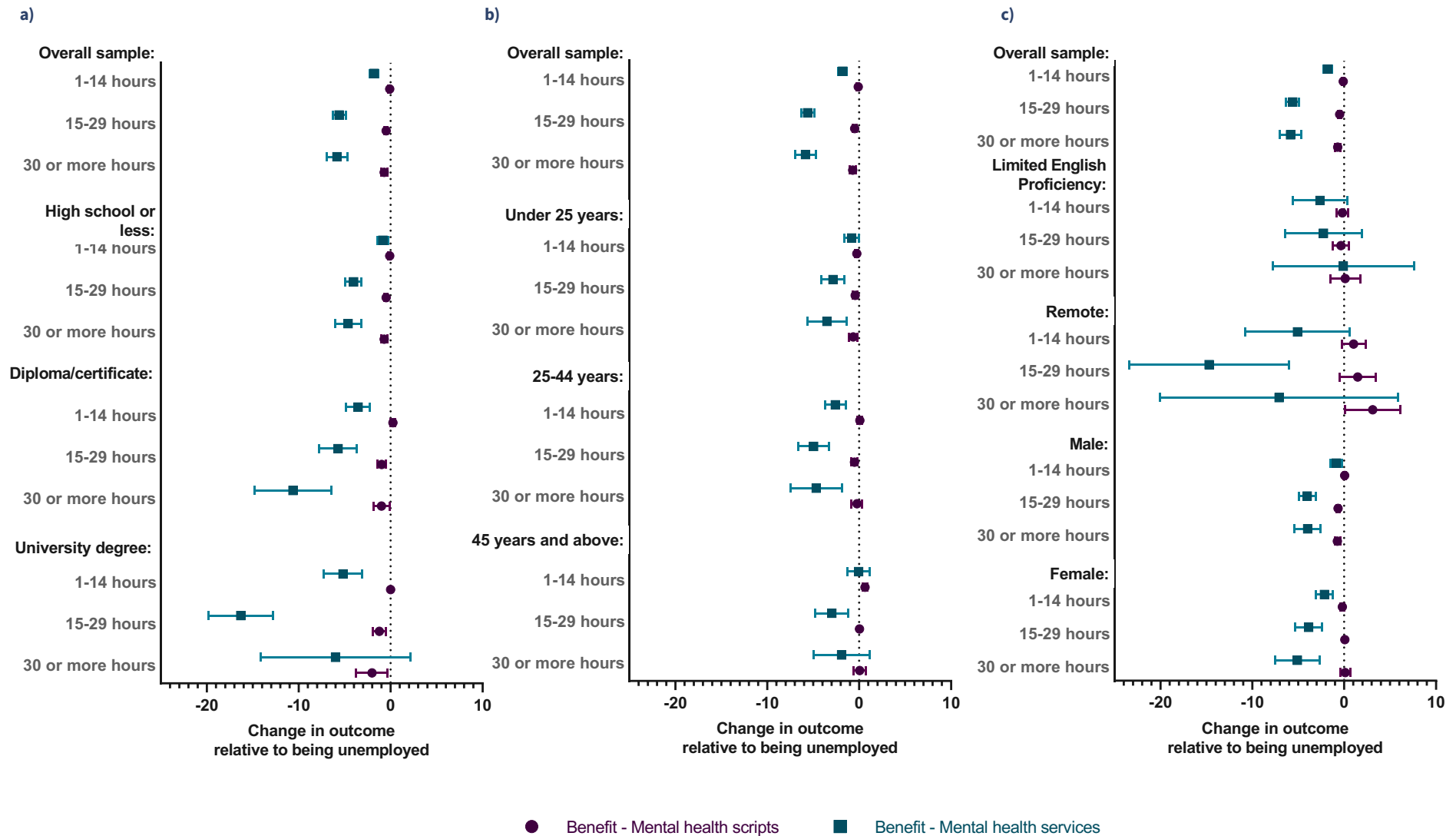
Notes: Means provided for each outcome correspond to sample included in each fixed effects regression analysis; i.e., populations that were receiving DSP/NSA payment in each quarter analysed. Levels of significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Figure 4. Heterogeneity analysis for use of mental health scripts and services by a) educational attainment, b) age group, and c) Limited English Proficiency, Remoteness, and Sex.



Notes: Point estimates represent mean difference in use per quarter of mental health scripts/services for categories of working hours compared to being unemployed. Average results for entire sample population included at the top of each panel to facilitate interpretation of coefficients among different subgroups and across different scales. Please see Appendix for full regression analysis results.

Figure 5. Heterogeneity analysis for government costs towards mental health scripts and services by a) educational attainment, b) age group, and c) Limited English Proficiency, Remoteness, and Sex.



Notes: Point estimates represent mean difference in benefit paid per quarter towards mental health scripts/services for categories of working hours compared to being unemployed. Average results for entire sample population included at the top of each panel to facilitate interpretation of coefficients among different subgroups. Please see Appendix for full regression analysis results.

Table 17. Estimated mean difference in healthcare use per quarter for household members for categories of DSP/NSA recipients' working hours compared to being unemployed

	Utilisation of healthcare services		Utilisation of mental healthcare		Mental health scripts filled	
	[95% CI]	% change of relative to mean (=4.38)	[95% CI]	% change of relative to mean (=0.14)	[95% CI]	% change of relative to mean (=0.45)
Unemployed (0 hours per week)	Ref	Ref	Ref	Ref	Ref	Ref
1 to 14 hours per week	0.004 [-0.016,0.025]	0.1 [-0.4,0.6]	0.001 [-0.002,0.003]	0.8 [-1.5,2.2]	-0.004* [-0.007,-0.001]	-0.9 [-1.6,-0.3]
15 to 29 hours per week	0.101*** [0.069,0.132]	2.4 [1.6,3.1]	0.003 [-0.001,0.006]	2.2 [-0.8,4.3]	0.015*** [0.011,0.020]	3.4 [2.5,4.5]
30 or more hours per week	0.044 [-0.009,0.098]	1.1 [-0.3,2.3]	0.011** [0.004,0.018]	7.9 [2.9,12.9]	0.009* [0.001,0.017]	2.0 [0.3,3.8]

Notes: Means provided for each outcome correspond to sample included in each fixed effects regression analysis. Restricted to households that had only one individual receiving DSP/NSA payment in each quarter analysed (outcomes for individuals receiving the DSP/NSA are not included). Levels of significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

Table 18. Estimated mean difference in government costs for household members given categories of DSP/NSA recipients' working hours compared to being unemployed

	Government costs – healthcare services		Government costs – mental healthcare		Government costs – mental health scripts	
	[95% CI]	% change of relative to mean (=231.24)	[95% CI]	% change of relative to mean (=14.15)	[95% CI]	% change of relative to mean (=3.62)
Unemployed (0 hours per week)	Ref	Ref	Ref	Ref	Ref	Ref
1 to 14 hours per week	-0.467 [-2.046,1.112]	-0.3 [-0.9,0.5]	0.043 [-0.256,0.341]	0.4 [-1.9,2.5]	-0.077*** [-0.122,-0.032]	-2.2 [-3.4,-0.9]
15 to 29 hours per week	6.207*** [3.831,8.582]	2.7 [1.7,3.8]	0.248 [-0.201,0.697]	1.8 [-1.5,5]	-0.204*** [-0.272,-0.136]	-5.7 [-7.6,-3.8]
30 or more hours per week	1.142 [-2.947,5.230]	0.5 [-1.3,2.3]	0.953* [0.180,1.725]	6.8 [1.3,12.2]	-0.235*** [-0.352,-0.118]	-6.5 [-9.8,-3.3]

Notes: Means provided for each outcome correspond to sample included in each fixed effects regression analysis. Restricted to households that had only one individual receiving DSP/NSA payment in each quarter analysed (outcomes for individuals receiving the DSP/NSA are not included). Levels of significance: *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

6. DISCUSSION

In this section, we highlight the main findings, discuss the strengths and limitations of the analysis, consider the implications of the results in terms of policy and practice, and suggest further research.

Main findings

Across this multi-method study there are a number of common themes. We recap the key findings from the different stages of the research here and then the themes that are consistent across these.

From the qualitative component of the research, respondents told us that part time work can have a positive impact on many areas of wellbeing. Well matched jobs can help build confidence, better engage with families and communities, increase social networks, improve financial stability and ultimately enhance wellbeing. There was an important distinction made between those who would seek part time work as a gateway to eventual full-time work and those who have capacity limitations that mean that full time work is not possible.

Regardless of the driver for engaging in part time work, the importance of ensuring that job matches are effective was raised by most of our DES participants. While DES consultants felt that what was important is just breaking the cycle of unemployment (echoing the ways system incentive structures around mutual obligation and a need to accept any reasonable job offer), DES participants stressed the importance of ensuring that job matches are effective if they are to have a positive impact. This is important because there is strong evidence that poor quality jobs are also associated with poorer mental health²⁶. Furthermore, Australian research has demonstrated that people with disability are more likely to be in jobs that are of poor quality (e.g., high demands, low control, unfair pay)²⁷⁻²⁹ and that these jobs can be even more detrimental to the mental health of people with disability than non-disabled people³⁰ and are associated with exit from the workforce for people with disability²⁸⁻³¹. Missing from this literature is whether the poor psychosocial job quality people report is associated with poor job matching.

Once placed in a job, the first few months can be highly stressful as individuals start to acclimatise to this new working life. Careful support is required over the first months of any role to ensure that individuals are able to stay in these roles. Once an individual has been in employment for around six months then it is less likely that these arrangements will break down.

Many of the observations regarding the positive impacts of part time work are supported in the quantitative data. The data generated from WISE demonstrates that those who are unemployed have lower wellbeing scores than those who are employed, although there are no difference in wellbeing scores

for full and part time employees. However, we did find slightly lower wellbeing for those in casual jobs.

HILDA data analysis shows that all categories of working hours are associated with large beneficial mental health effects compared to being unemployed and these are more pronounced for people with disability compared to those without disability. There is evidence that mental health effects increase with number of hours worked. However, there is no evidence of a statistically significant effect of part time employment on mental health for people aged 45 and over. However, this analysis does not control for job quality and it may be that for some age groups the quality of part time jobs may be poorer than other age groups. We also found greater beneficial effects of part time employment on mental health for women with disability compared to men, but similar effects of full-time employment for men and women with disability. This may be due to the fact that women with disability prefer part-time roles so they can also provide care for children as well while more men would prefer to be working longer hours. We also find differential impacts for those born overseas, with lower levels of secondary education and those living in regional and remote areas.

HILDA data analysis also shows that there may be some mental health benefits for carers when people with disability are employed more than 15 hours per week, although we interpret these with care given the small sample size and more robust evidence here is needed.

The analysis of linked administrative data shows a gradual reduction in costs associated with healthcare services, mental health services and mental health scripts as the number of hours worked increases. If we apply the results of our analysis to the current caseload of DES participants and people with disability on jobactive we estimate that if we moved them all from not working to working part-time hours (14-29 hr per week) there would be significant savings in terms of healthcare services (including mental health services) and mental health scripts totalling approximately \$62.5 million with 676,000 fewer health care services used and 212,000 fewer mental health scripts used. Again, this analysis does not control for job quality or whether those working part-time wanted to work additional hours (i.e. were underemployed).

In contrast to the HILDA analysis, the MADIP analysis shows a slight indication that working more hours might lead to a slightly higher use of mental health services in scripts among other household members. There are noted limitations in this analysis though meaning these results are not conclusive.

Overall, our analysis shows that there is likely to be value in part time work in terms of improving the wellbeing of people with disability and potentially carers and this also comes with reduced costs in terms of healthcare and in particular mental health services. The data also shows that part time work can

also be a vehicle into full time work and increased hours for some people with disability brings with it additional reductions in government costs and also improved wellbeing.

Limitations

While this is the most comprehensive analysis to date on the benefits (or not) of part-time employment for people with disability in Australia, there are a number of limitations and areas where further research is needed.

In the qualitative study we engaged a small sample and tried to manage for a number of variables in terms of culturally and linguistically diverse people and people from regional and rural areas. However, given the patterns identified in this research it may be that these groups are underrepresented overall. Only 8 DES consultants were engaged and it may be beneficial to explore these issues with this group more broadly.

The quantitative analyses also have a number of limitations. In terms of the WISE data, there were limitations in some of the variables used in this analysis and the coverage of the sample. The working hours variable was derived from a variable that specified whether WISE participants had been employed in full-time, part-time or casual jobs. However, for those in casual jobs, we do not have any information about working hours. With more than half of the sample employed in casual jobs, it would be beneficial to have data specifying the average number of hours that participants are working in these casual jobs. The response rate to the wellbeing survey is currently about 20%, which limits the sample size and the generalisability of the findings. Monitoring wellbeing over time is important and we recommend offering incentives to participate in the survey to attempt to increase the response rate and increasing the representativeness of the sample.

The variable describing the duration of employment was constructed from the outcome data, using the 4-, 13-, 26-, and 52- week outcome data. However, some job seekers may have been employed at these time points but may have failed to achieve the outcomes for other reasons (such as working fewer hours than their benchmark). Therefore, a better variable describing duration of employment would be beneficial. The 'time in placement' variable was inaccurate so we could not be used. The response to the survey on personal wellbeing was only 20% which means the results may be biased.

In the survey (HILDA) and linked administrative (MADIP) analyses we used fixed effects regression which enabled us to control for confounding due to other factors, which means we think the results are likely to be less biased. However, the results of the HILDA and MADIP analyses are not directly comparable. The

measure of disability in HILDA is broad and was reported by 29% of the sample whereas the Census definition only includes people with severe or profound core activity limitations – 5% of the working age population. Neither of these definitions fully capture people with disability in the DES and jobactive populations. Also, the quantitative analysis did not distinguish between other job aspects which may have influenced their impact on outcomes include job quality and whether those working part-time were still underemployed (looking to work longer hours). Getting people into high quality part-time work which matches their capabilities may have even greater value.

Practice / policy implications

Given our finding around the difference between those seeking part time work as an end in itself and those seeking part time work as a vehicle to full time work, these different drivers will require different pathways. For example, if having been assessed as capable of full time, an individual engages in part time work as a vehicle to full time work then mutual obligation requirements can be an additional stressor that leads to the breakdown of employment.

What is clear in the case of both pathways is that careful job matching is required, although DES consultants felt less strongly about this and the broader system does not incentivise this. This may be an area that requires some further guidance and training as placing people in poor quality jobs may be more detrimental than beneficial and may lead to exit from the labour force. There may also need to be system changes around mutual obligations and the requirement to accept any reasonable job offer. DES participants who take on part time work may require some intensive support for the first few months and up to around six months to ensure that they are able to remain engaged in roles long-term.

Certainly, there are important implications in terms of thinking through brokerage processes in engaging people in part time jobs and the kinds of incentives that offered to employment organisations to get people into part-time and full-time work but also to sustain that work over time and even potentially increase hours. Thought needs to be given to how governments can better incentivise, through both financial and non-financial mechanisms, part time work for people with disability through both DES and the NDIS. Providers also need to be incentivised to consider how they will transition people with disability from part time work into greater numbers of hours over time. At present many of the incentives providers face are rather 'blunt' in nature relating to whether individuals are engaged in work, but these are not necessarily encouraged to think through client-wellbeing and whether and how work might play a role in improving this. Re-orienting the

system to consider how we think about value beyond simply the economic value of part time work in terms of taxable income and to how work plays a role in the reduction of whole of government costs is a significant change, but one that potentially offers better outcomes for the broader system and people with disability and their and their household wellbeing.

Further research and data improvements

As we have outlined in our findings, it is clear that part time work can deliver a range of positive impacts, but that this is likely contingent on careful job matching. One area for further research is to drill down further into the quantitative data and undertake further qualitative enquiry to understand what types of jobs lead to quality outcomes. Similarly, more work to understand the types of jobs that lead to increased hours over time and what these pathways look like would be of benefit. Further research could be done to understand the benefits of part-time work for participants whose preference is for part-time work compared with those who would prefer more hours or full-time work or part-time work that matches their capabilities.

Analysis of the WISE data showed some interesting patterns in terms of casual work and it would be worth interrogating these issues further.

The HILDA data analysis shows some interesting patterns in terms of mental health impacts for those aged over 45, for women in comparison to men, those born outside Australia, those with less than secondary education and those living in regional and remote areas. These would merit further investigation to understand the factors for these differences.

Further investigation would also be warranted into the impacts of part time work for people with disability in terms of carers. The HILDA and MADIP data show slightly different trends here.

Our analysis looked at a relatively narrow range of government costs and it would be beneficial to widen this to include costs to other mainstream services such as justice and housing and homelessness services along with future use of DES services.

One of the challenges in doing this work is the quality of the data. If DES and jobactive data were incorporated into MADIP with more detail on the types of jobs and hours of work it would be possible to directly estimate the benefits of part-time

work in this population. However, it is also worth considering extending information collected in the DES and jobactive data including information that captures how well jobs match participant skills sets, and preferences for part and full-time work. We recommend that information from DES and jobactive participants continues to be collected to capture experiences in the workplace including psychosocial working conditions.

There is an urgent need to improve comprehensiveness and quality of data to better understand the relationships between employment and other outcomes among people with disability. One way to do this is through data collected from employment service providers as WISE has done. In doing this attention needs to be given to data quality; for example, the working hours variable was derived from a variable that specified whether WISE participants had been employed in full-time, part-time or casual jobs. However, for those in casual jobs, we do not have any information about working hours. With more than half of the sample employed in casual jobs, it would be beneficial to have data specifying the average number of hours that participants are working in these casual jobs.

The variable describing the duration of employment was constructed from the outcome data, using the 4-, 13-, 26-, and 52- week outcome data. However, some job seekers may have been employed at these time points but may have failed to achieve the outcomes for other reasons (such as working fewer hours than their benchmark). Therefore, a better variable describing duration of employment would be beneficial. The 'time in placement' variable was inaccurate so could not be used. We also recommend that additional data is collected on:

- Job satisfaction
- Psychosocial working conditions
- Impact of employment on financial circumstances
- Experience of underemployment and overemployment (hours worked relative to their desired working capacity).
- Information about whether the jobs people are placed in match their skills and expertise

We also recommend that incentives are offered to participate in the wellbeing survey to increase the response rate and likely obtain a more representative sample.

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