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Employment and disability among young Australians and associations with psychological distress during the COVID-19 pandemic

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ABSTRACT

Background: Emerging global data indicates that the employment status and mental health of young people is being adversely impacted by the COVID-19 pandemic. However, little research has focused on young people with disabilities, despite their lower pre-pandemic employment rates and poorer mental health. We quantified the association between employment status and mental health among young Australians, and tested for effect modification by disability status.

Methods: Linear regression analysis of Wave 9 (October–December 2020) of the Longitudinal Study of Australian Children (LSAC) assessing the association between employment status (employed, unemployed) on psychological distress (Kessler-10) and including an interaction term for employment status and disability.

Results: The association between employment status and psychological distress differed by disability status. Young adults with disabilities had higher adjusted mean K10 scores indicating greater psychological distress both when they were employed (mean 22.99, 95% CI 21.41, 24.58) and unemployed (mean 29.19, 95% CI 25.36, 33.03) compared to their peers without disabilities (employed mean 18.72, 95% CI 17.75, 19.70; unemployed mean 20.45, 95% CI 18.60, 22.29).

Conclusion: Young Australians in general may benefit from additional supports to improve their employment and mental health outcomes. Young people with disabilities may particularly benefit from targeted supports to gain and maintain employment and improve mental health.

1. Introduction

The COVID-19 pandemic has had significant impacts on the mental health of young people across the globe. Research from the International Labour Organization estimated that one in two young people aged 18–29 years were possibly experiencing anxiety or depression in 2020 (International Labour Organization, 2020). The deleterious effects of COVID-19 on youth mental health have persisted: research from the Organisation for Economic Co-operation and Development in March 2021 shows young people aged 15–24 had a 30–80% higher prevalence of anxiety or depression symptoms than the general population in countries such as the United States, Belgium, and France (OECD, 2021).

Young people in Australia have likewise experienced poorer mental health throughout the pandemic, despite Australia's general success at limiting COVID-19 infections and deaths. In Australia, a third (29.9%) of younger adults aged 18–34 were experiencing high or very high psychological distress in June 2021 (Australian Bureau of Statistics, 2021a). The prevalence of psychological distress among 15-24 year-olds was predicted to reach nearly 50% in September 2021 (Atkinson et al., 2021).

While the causes of mental ill-health among young people are multifaceted, the economic repercussions of the pandemic have disproportionately affected the employment status of young people. Young workers have been more likely to lose their jobs due to the exposed nature of the industries they predominantly work in and due to the casualized and part-time nature of their employment arrangements (Atkins et al., 2020). Following initial national lockdown measures, the unemployment rate among young Australians aged 15–24 years reached 15.8% in May 2020, more than double the rate (4.6%) of the general working age population. Youth unemployment has remained high as of December 2021, with one in ten (9.4%) young people in the labour force unemployed (Australian Bureau of Statistics, 2021b).

Some groups of young people may be more likely to experience both poorer employment and mental health outcomes. Once such group is

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people with disabilities, who had lower employment rates and increased levels of poor mental health pre-pandemic compared to their peers without disabilities (Australian Institute of Health and Welfare, 2020). To our knowledge, no research to date has assessed how employment status is associated with the mental health of young people with disabilities during the pandemic. Exploring this relationship is crucial as international evidence shows that a greater proportion of people with disabilities became unemployed during the pandemic compared to people without disabilities (McLaren et al., 2020), and young people with disabilities have increased odds of poor mental health when they are unemployed (Shields et al., 2020).

This study uses data from the Longitudinal Study of Australian Children (LSAC) to describe the employment status and mental health of young Australians with and without disabilities during the COVID-19 pandemic and explores the association between employment status and mental health and whether this association is modified by disability status.

2. Methods

2.1. Study population

Data were drawn from Wave 9C1 among the K Cohort of LSAC, a nationally representative survey which began in 2004, when K Cohort participants were aged 4–5 years. Methods for LSAC have been described in more detail elsewhere (Soloff et al., 2005). Wave 9C1 was collected via online survey from October to December 2020, when participants were aged 20–21 years (Mohal et al., 2021). Of 3908 eligible participants, n = 1361 returned the survey; 84% with complete information on variables of interest (defined in section 2.3) were included in this analysis (n = 1148). Ethics approval was provided by the Australian Institute of Family Studies Ethics Committee (number 20-09).

2.2. Measures

Disability was ascertained by a single question, which asked if the participant had any conditions that had lasted, or were likely to last, for six months or more, with specific examples given such as sight problems not corrected by glasses, difficulty learning or understanding things, and mental illness. Disability status was coded as yes or no.

Current employment status was categorized as employed or unemployed and seeking employment.

The Kessler Psychological Distress Scale (K10) was used to measure psychological distress. Participants responded to ten items about negative emotional states in the previous four weeks, with response options ranging from 'none of the time' (score 1) to 'all of the time' (score 5) for a total score ranging from 10 to 50, with higher numbers reflecting greater psychological distress (Kessler et al., 2003). Score values of 16–21 indicate moderate distress, 22–29 high distress and 30–50 very high distress.

2.3. Statistical analysis

After considering descriptive characteristics of the sample, we fitted a linear regression model to estimate the association between employment status and psychological distress including an interaction term for employment status and disability. We controlled for gender, country of birth, and First Nations status in the adjusted model. Survey weights were used to account for the survey design and non-response. We used the margins command to calculate mean K10 scores for the disability and employment status groups of interest, holding all other variables at their reference value. All analysis was performed in Stata 16.0 (StataCorp, 2019).

3. Results

As shown in Table 1, 14.8% of the sample was unemployed and 23.1% of the sample reported a disability. Unadjusted mean K10 scores were higher among young people with disabilities (25.49, SD 9.40) compared to their peers without disabilities (20.20, SD 8.12), and among young people who were unemployed (mean 24.10, SD 9.67) compared to those who were employed (mean 20.96, SD 8.46).

Table 2 shows the mean adjusted K10 scores of the employment and disability status groupings (see Supplementary Table 1 for further information). The association between employment status and psychological distress differed by disability status. The mean adjusted K10 score among young people without disabilities who were in employment (the reference group) was 18.72 (95% CI 17.75, 19.70) corresponding to the moderate distress category of the K10 (Australian Bureau of Statistics, 2017). The adjusted mean K10 score among young people without disabilities who were unemployed was 20.45 (95% CI 18.60, 22.29); this confidence interval overlapped with values for their peers who were employed and likewise indicates moderate distress levels. Young adults with disabilities had higher mean adjusted K10 scores both when in employment (22.99, 95% CI 21.41, 24.58) and when unemployed (29.19, 95% CI 25.36, 33.03) indicating high levels of distress. The impact of unemployment among young people with disabilities was a 6.20 point (95% CI 2.26, 10.14) increase in mean K10 score.

4. Discussion

4.1. Principal findings

In this analysis of LSAC data we found that disability status modifies the relationship between employment status and psychological distress. Young people with disabilities had higher mean adjusted K10 scores compared to their peers without disabilities when both in and out of employment. The adjusted mean K10 scores of young people with disabilities who were unemployed were near the threshold of very high distress, while the adjusted mean scores of young people without disabilities when both employed and unemployed reflected moderate distress levels, indicating poor mental health among young people in general.

Table 1
Descriptive characteristics of analytic sample (n = 1148).

	Descriptive characteristics	
	n (%)	Mean K10 score (SD)
Employment status		
Employed	978 (85.2)	20.96 (8.46)
Unemployed	170 (14.8)	24.10 (9.67)
Disability status		
No disability	883 (76.9)	20.20 (8.12)
Disability	265 (23.1)	25.49 (9.40)
Labour force and disability status		
Employed and no disability	760 (66.2)	19.96 (8.04)
Employed and disability	218 (19.0)	24.43 (8.98)
Unemployed and no disability	123 (10.7)	21.68 (8.45)
Unemployed and disability	47 (4.1)	30.43 (9.86)
Gender		
Male	476 (41.5)	19.43 (7.77)
Female	672 (58.5)	22.84 (9.07)
Country of birth		
Australia	1124 (97.9)	21.41 (8.73)
Elsewhere	24 (2.1)	22 (8.17)
First Nations status		
Not Aboriginal or Torres Strait Islander	1135 (98.9)	21.45 (8.73)
Aboriginal and/or Torres Strait Islander	13 (1.1)	19.46 (7.26)
K10 distress groupings		
Low distress	341 (29.7)	12.58 (1.69)
Moderate	325 (28.3)	18.36 (1.61)
High	282 (24.6)	25.08 (2.32)
Very high	200 (17.4)	36.32 (5.47)

Table 2
Adjusted mean K10 psychological distress score for employment status and disability status groups (n = 1148).

	Employed (95% CI)	Unemployed (95% CI)	Impact of unemployment by disability status
No disability	18.72 (17.75, 19.70)	20.45 (18.60, 22.29)	1.72 (−0.24, 3.68)
Disability	22.99 (21.41, 24.58)	29.19 (25.36, 33.03)	6.20 (2.26, 10.14)

*Based on linear regression of the association between employment status and K10 psychological distress including an interaction term for employment status and disability status. Regression analysis was adjusted for gender, country of birth, and First Nations status.

4.2. Comparison with findings from related studies

While we are unaware of existing research assessing how employment status is associated with the mental health of young people with disabilities during the pandemic, some evidence suggests negative impacts of disability on employment and mental health among the general population. In the United Kingdom, people with disabilities were more likely to be working reduced hours than people without disabilities and experienced more financial stress, which has adverse impacts on mental wellbeing (Emerson et al., 2021). Research from the Netherlands found that individuals aged 18 years and over with work disabilities reported increased odds of anxiety and depression symptoms both before and at the beginning of the pandemic in March 2020 (van der Velden et al., 2020).

While not examining disability, research from Australia among individuals aged 18 years or older found that losing work, including job loss, being employed but not working, and working fewer hours, was associated with increased odds of high psychological distress (Griffiths et al., 2021). Similarly, research among young adults aged 20–35 years in Israel found that unemployment was associated with increased psychological distress (Achdut & Refaeli, 2020). Taken together, these international results broadly align with the findings of the present study and suggest the need for further studies among young people, particularly young people with disabilities.

4.3. Limitations and strengths

There are several limitations of this analysis. All data is self-reported and the cross-sectional nature of the study precludes causal interpretations. Wave 9C1 of LSAC had a lower response rate than previous waves and participants who were from First Nations families, whose parents speak a language other than English at home, and whose mother did not complete year 12 were more likely to drop out of the study (Mohal et al., 2021). Further, the disability question included in Wave 9C1 did not permit disaggregation by disability type or severity. We were also unable to control for some confounders of the employment status and mental health relationship (e.g. year 12 completion), as they were unavailable in the Wave 9C1 data. Additionally, we excluded the group of young people (n = 112) who were not in the labour force in this analysis as three-quarters of this group (77%) were studying and would therefore not be the target recipients of an intervention to move young people into work. Finally, employment status was assessed at one time point only. Due to the cross-sectional nature of this study, we were unable to assess how complex patterns of unemployment, such as long-term unemployment or repeated spells of unemployment, are associated with distress levels among young people. Future research is needed using multiple waves of data in order to more fully explore labour force changes among this population and elucidate if and how the association between disability, employment, and distress differs before and during the pandemic.

Strengths of this study include the use of data from a nationally representative study. This is the first study to show the associations between unemployment and psychological distress among young people with disabilities during the pandemic, providing initial evidence for a need to provide additional supports for young people with disabilities. The findings of the present study could be further bolstered through additional analyses using longitudinal data and larger sample sizes.

4.4. Implications of the study

The effects of prolonged periods or repeated spells of unemployment during a young person's time of transition into the labour force can be devastating. Unemployment is predictive of current and future decreased mental health (Bartelink et al., 2019) as well as future unemployment (Buddelmeyer et al., 2010). Young people attempting to gain employment may be further hampered by the current economic climate, as demonstrated by research following the global financial crisis (GFC). In the decade following the GFC, young workers have faced increased competition for entry-level positions, have started their careers in poorer quality and part-time jobs (Borland & Coelli, 2021), and may face lower wages and poorer long-term career prospects (de Fontenay et al., 2020); all of which are likely to have ramifications on young people's current and future mental health.

Young people with disabilities, who face even greater barriers to gaining and maintaining employment (Lindsay et al., 2015), are likely to be particularly disadvantaged when looking for work and, as shown by data from the 2007–2009 recession, are likely to experience significant declines in their rate of employment (Kaye, 2010). This may result in young people with disabilities leaving the labour force all together.

Improving the employment outcomes of young people with and without disabilities is one feasible way to stabilize and improve the mental health of young people and ameliorate the lifelong scarring effects of unemployment. However, Australian Government responses to employment concerns during the pandemic have been criticized for excluding young workers, as young people were more likely to lose their jobs, be ineligible for the JobKeeper benefit (which was higher than JobSeeker (unemployment benefit)), and prematurely draw on their retirement savings (O'Keeffe et al., 2021). The government's scheme to boost hiring of young workers by providing businesses with subsidies (JobMaker) may incentivize businesses to hire several casual workers instead of a full-time employee, and has to date led to fewer jobs than initially projected (Daley et al., 2021). Given the unemployment rates experienced by young people, enhanced employment programs and improved government schemes and supports are needed to help young people into suitable, sustainable work.

4.5. Conclusions

These results are noteworthy as they have begun to quantify the relationship between employment status and mental health among young people with and without disabilities during the pandemic. Distress levels are elevated among young Australians with and without disabilities, although young people with disabilities may be experiencing much greater distress than other groups, especially when unemployed. It is critical that governments take concrete action to help young people, particularly young people with disabilities, to enter ongoing, quality employment and, in doing so, optimize mental health and future employment outcomes.

Ethical approval

LSAC is reviewed and approved by the Australian Institute of Family Studies Ethics Committee, which is a Human Research Ethics Committee registered with the National Health and Medical Research Council (NHMRC). Wave 9C1 application number 20-09, approved July 29,

2020.

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Author statement

Marissa Shields: Conceptualization, methodology, analysis, writing – original draft, writing – review and editing.

Matthew J Spittal: Conceptualization, methodology, writing – review and editing.

Stefanie Dimov: Writing – review and editing.

Anne Kavanagh: Writing – review and editing.

Tania L King: Conceptualization, methodology, writing – review and editing.

Availability of data

LSAC unit record files are held by the Australian Data Archive at the Australian National University. Access to data is free via a formal request and registration with the ADA. Individuals can register and request data at this website: https://dataverse.ada.edu.au/dataverse/ncld.

Patient approval for publication

Not required.

Declaration of competing interest

No conflict of interest to declare.

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Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ssmph.2022.101140.

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