*Part 3* Health and Education



# Youth transitions after high school

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Is Australia doing enough to support successful transitions for young adults? This chapter explores where Australia stands relative to other countries on employment rates for young adults and reports on the core issues that can impact successful transitions into gainful employment. The authors discuss their ongoing work to design a mechanism that will support community place-based initiatives to support successful high school completion and a transition into further education or training that will lead to strong employment opportunities for young adults.

# INTRODUCTION

Teenagers approaching the end of high school must choose a pathway for the next phase of their life. This transition period is critical in shaping one's future: choices made will impact education and employment pathways, both of which can have long-lasting consequences. In an ideal world, such crucial decisions would be made free of barriers and with full consideration of available options. Unfortunately, many teenagers face a variety of disadvantages that can impact their choices and opportunities.

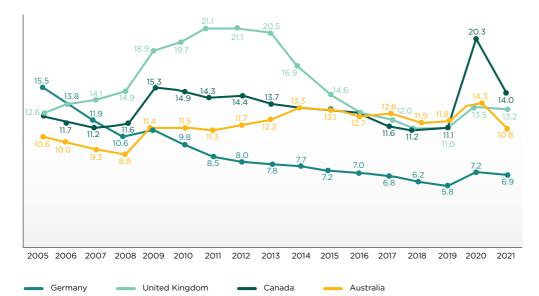
A strong Australian economy should support economic opportunities for young adults. As in many countries, however, young adults in Australia typically face relatively high unemployment rates. Figure 1 depicts the youth unemployment rates for Australia, Canada, the United Kingdom and Germany between 2005 and 2021. Leading up to the COVID-19 pandemic, the unemployment rate for Australian youth was close to 12 percent. Like all countries, this rate increased in 2020 and returned to pre-pandemic rates in 2021. While not the highest for the countries depicted, the youth unemployment rate has remained high in Australia in the last decade. Therefore, we should be concerned that we are not doing enough to support successful transitions.

What does a successful transition look like? Who is responsible for ensuring high school students are provided with opportunities for success? Are we providing the right curriculum and support during high school? Are students pursuing additional training and/or education to meet their interests and abilities, and are there enough of these opportunities available in disadvantaged regions? Are employers providing sufficient opportunities to help place young adults on a trajectory for long-term success? These are all questions we should be raising as we try to shape and enhance policy and practice to improve employment opportunities for young adults.

This chapter provides an overview of the transition from high school to later pathways by Australian youth and highlights several factors associated with (un)successful transitions based on studies conducted in Australia. We also present ongoing work at the Melbourne Institute that is geared to inform the landscape for youth employment. This work will provide policy-makers and service providers with tools to keep track of the evolving state of youth disadvantage across Australia and guide interventions related to training and employment opportunities, and will promote successful transitions of young adults after school.

### Figure 1.

Youth unemployment rate, 2005 to 2021.



Notes: Youth refers to persons aged 15 to 24 in Canada, Germany and Australia and persons aged 16 to 24 in the United Kingdom.

Sources: Statistics Canada, Table 14-10-0327-01, Labour force characteristics by sex and detailed age group, annual; European Labour Force Survey (EU-LFS); UK Labour Force Survey (UK-LFS); https://www.macrotrends.net/countries/AUS/australia/youth-unemployment-rate.

# FACTS ABOUT EMPLOYMENT AND EDUCATIONAL ATTAINMENT

### Males and females in Australia exhibit higher rates of unsuccessful transitions from high school than many other countries

A typical measure of an unsuccessful transition after high school is the rate of young adults who are not in employment, education, or training (NEET). NEET captures the share of youth who have stopped studying or training (either because they have dropped out or because they have completed their studies), but who are nevertheless not working (that is, unemployed or out of the labour force). Figure 2 depicts NEET rates in 2020 for Australia relative to other selected countries, separated by age and gender.<sup>1</sup> A country with a low NEET means that most young adults are gainfully employed.

The figure shows clear differences between genders for the early transition period (aged 15 to 19). For males, Australia ranks 12th, with a NEET rate of 9 percent. Instead of improving, the rate for those aged 20 to 24 is even higher, more than 15 percent. One might expect this rate to decline as young adults mature. Instead, an increasing rate suggests a disconnect between opportunities for training and education and these young men.

Females in Australia fare better. For those aged 15 to 19, the NEET rate is less than 6 percent in 2020 and Australia ranks 8th, exhibiting lower NEET rates than countries such as the United Kingdom, the United States, and New Zealand. This finding may not be too surprising given females are more likely to remain in high school than males. The full-time retention rate for school years 7/8 to 12 for females over the last decade has exceeded 85 percent whereas the rate for males has been closer to 80 percent and declining in recent years.<sup>2</sup>

Unfortunately, the lower NEET for females does not continue into later ages. For women aged 20 to 24, the NEET is approximately the same as that for men, close to 15 percent. The NEET for men and women in this age group mirrors the unemployment rate observed in Figure 1.

### Figure 2.

Males aged 15-19 Females aged 15-19 United Kingdom Canada Israel Inited State Australia New Zealand Spair Icelano Austria Belgiun Finlano and Norway Ó 10 12 10 12 8 0 8 Rate of NEET(%) Rate of NEET(%) Males aged 20-24 Females aged 20-24 Isra Australi Isra Canad Austri lingdo Finla ngdo Ireland Canada ealar Stat No Iceland Netherlands itzerland 0 10 15 20 25 С 10 15 20 25 Rate of NEET(%) Rate of NEET(%)

Rates of individuals not in employment, education, or training (NEET) in selected countries in 2020.

 $Source: OECD\,(2022)\,Youth \, not \, in \, employment, \, education, \, or \, training\,(NEET)\,(indicator).$ 

<sup>1</sup> For Figure 2, we selected countries that (i) were members of the OECD, (ii) were among the 35 countries with the highest GDP per capita, and (iii) had the indicators available for 2020 at OECD (2022).

<sup>2</sup> https://www.abs.gov.au/statistics/people/education/schools/latest-release#retention-rates

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### A high proportion of students (mostly males) do not continue high school beyond year 10

Australia's vision for educational attainment, as articulated or supported by the Alice Springs (Mparntwe) Education Declaration (Education Council, 2019) and the National School Reform Agreement (NSRA) (COAG, 2018), aims to create successful lifelong learners who are confident and creative. Young adults are also expected to be active and informed members of the community. Since 2010, the National Youth Participation Requirement expects that all youth will participate in schooling until they complete year 10. Beyond year 10, it is expected that students will remain in full-time education or training until reaching the age of 17. There is, however, variability in requirements and expectations across the states. Thus, in Australia, beyond year 10, one can continue with school (a necessary requirement to enrol in university) or seek training through vocational education training programs and/or apprenticeships.

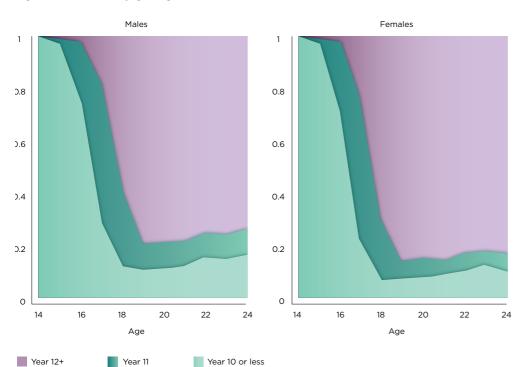
Figure 3 depicts high school completion rates by age and gender from 2016 Census of Population and Housing data. The figure reveals several key insights. First, many young adults do not continue high school beyond year 10 for both genders. Second, this share is the highest for males. Third, males from younger cohorts increasingly complete high school, whereas completion rates are more stable for females.

### A high proportion of students do not pursue further education or training after high school

Figure 4 shows the evolution of student status by age across genders. The proportion of non-students is similar between males and females until age 17 but increases relatively more for males after that age. The largest gender differences in student status arise from ages 18 to 21. This difference is in large part explained by women moving on to further education after high school in greater numbers, which is a well-documented phenomenon over the last few decades in most developed countries (see Card and Payne, 2021). Importantly, high school performance can be critical in determining these educational pathways after high school. For example, Cardak and Ryan (2022) show that high school performance is the most important predictor of university enrolment for Australian disadvantaged students, as being financially at risk or other disadvantage measures seem to play a lesser role.

Figure 3.

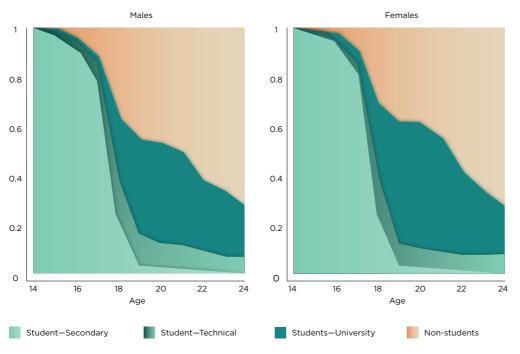
High school attainment by age and gender in Australia-2016.



### A significant share of young adults do not transition to employment after their studies

Do young people who stop studying start working, look for work, or do they fail to join the labour force? Figure 5 shows the shares of students and non-students who are employed, unemployed, and out of the labour force by gender. The sum of the medium-dark and dark orange areas shows the proportion of young people who have stopped studying yet are not working—that is, those NEET. Males and females exhibit separate patterns. A substantial share of males become NEET in their early transition period, suggesting they face strong challenges in their transitions after high school. Furthermore, NEET status for males is explained almost equally by unemployment and dropping out of the labour force for all ages. Thus, for this group, transitions to NEET seem to be explained both by the failure to find work (unemployment) and by becoming inactive (not in the labour force). For females, NEET status is less important in the early transition period but becomes relatively more important with age. As females age, NEET status becomes increasingly explained by those dropping out of the labour force.

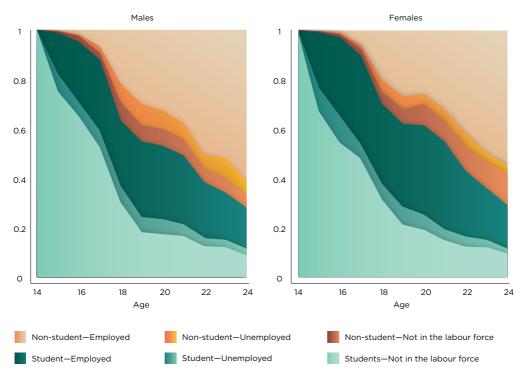
### Figure 4.



### Student status by age and gender in Australia-2016.

### Figure 5.

Student and labour market status by age and gender in Australia-year 2016.



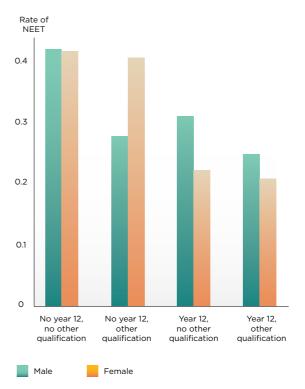
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### Not completing year 12 decreases the probability of transition to employment after finishing studies, but other qualifications can help

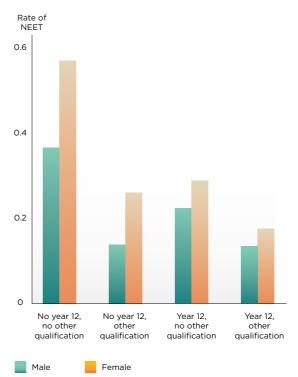
The above discussion shows that many Australians do not transition into employment after their studies. But who are those young adults who fail to do so? Figure 6 focuses on individuals aged 15 to 19 who stopped studying or training and presents the probability of being NEET given educational attainment. We separate educational attainment into four categories, combining the state of having completed year 12 or not with the state of having some other qualifications or not. Rates of NEET are high within this age group, as this is a population that stopped studying early. Around 40 percent of those who have stopped studying without any qualification (no year 12 and no other qualification) fail to transition into employment. Obtaining some other qualification reduces the probability of becoming NEET but not for females: females without a year 12 attainment have a rate of NEET of around 40 percent regardless of other qualifications.

Figure 7 presents the rates of NEET for individuals aged 20 to 24 who stopped training or studying. We again observe very high rates for individuals without any qualification, even more so for women (close to 60 percent). All other qualifications play a role in decreasing the probability of transitioning to NEET. Overall, these results suggest that completing year 12 is important in successfully transitioning to employment, but that other qualifications can still play a role. They also highlight that those without any qualifications are especially at risk.

**Figure 6.** Rate of NEET for non-students aged 15 to 19–2016.



**Figure 7.** Rate of NEET for non-students aged 20 to 24–2016.



# YOUTH TRANSITIONS AFTER HIGH SCHOOL

### Levels of financial stress for young adults vary substantially with educational attainment

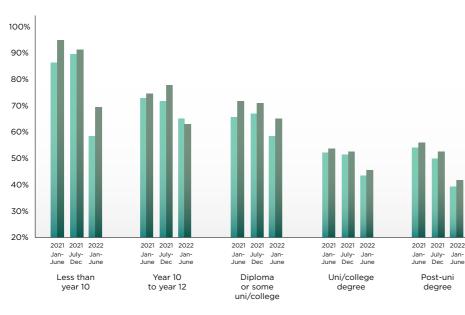
The previous section showed that dropping out of high school is highly associated with failing to transition into employment. There is further evidence that dropping out of high school is also associated with economic struggles in later life. Australians who did not finish high school experience particularly high poverty rates that have been increasing over time (Ananyev et al., 2020).

To illustrate the importance of educational attainment for later life, we use the Melbourne Institute's Taking the Pulse of the Nation (TTPN) data set. The TTPN regularly surveys Australians and inquires, among other things, about the financial stress they experience. Figure 8 depicts the correlation between financial stress and educational attainment by educational attainment and gender between 2021 and 2022. Financial stress is measured as one identifying one's current circumstances as just making ends meet or worse. There is a clear negative relationship between financial stress and educational attainment. Those with a university degree report lower financial stress. In 2021, around 90 percent of individuals with less than a year 10 qualification experienced financial stress, suggesting that this population is part of the group who have suffered financially during the pandemic.

To assess whether the above differences in financial stress can be attributed to differences in employment status, we use TTPN to regress the above financial stress measure on a set of variables, including educational attainment and employment measures. The tables below present the results for men (Table 1) and women (Table 2) aged 25 to 34. The estimations include employment variables (indicating no employment or part-time employment, relative to full-time employment) that strongly predict financial stress for both genders. The estimations also include indicators of half-years and of living in an urban area, which could affect the rates of stress. Even after controlling for these variables, most measures of educational attainment strongly predict financial stress. For both men and women, predicted financial stress is substantially decreased by having a post-high school degree or higher. Furthermore, for females, predicted financial stress is significantly increased when they fail to complete year 10.

### Figure 8.

Male



Share of individuals experiencing financial stress, defined as making ends meet or worse—Individuals aged between 25 and 55.

Female

### **Table 1.** Effect of individual characteristics on financial stress, Men.

	Estimated effect	Significance	Robust standard error
No employment	0.194	***	0.028
Part-time employment	0.098	**	0.036
Less than year 10	0.022		0.050
Some post-high school education	-0.070		0.039
Post-high school degree	-0.183	***	0.015
Post-university degree	-0.167	***	0.042
June to Dec. 2021	-0.054	*	0.023
Jan. to June 2022	-0.123	***	0.025
Urban area	0.002		0.029
Constant	0.737	***	0.041
Observations	2587		

Notes: Dependent variable equals one for individuals who financially are just making ends meet or worse and zero otherwise. Ordinary least square estimation includes statistical weights. Standard errors are clustered by state.\*, \*\* and \*\*\* indicate statistical significance at 10, 5 and 1 percent confidence levels respectively. The reference category (constant) is for an individual with full-time employment, who completed year 10, who was interviewed from January 2021 to May 2021 and who lives in a rural area.

### Table 2.

Effect of individual characteristics on financial stress, Women.

	Estimated effect	Significance	Robust standard error
No employment	0.227	***	0.021
Part-time employment	0.132	***	0.032
Less than Year 10	0.180	***	0.030
Some post-high school education	-0.036		0.035
Post-high school degree	-0.182	***	0.033
Post-university degree	-0.150	***	0.038
June to Dec. 2021	0.014		0.018
Jan. to June 2022	-0.090	***	0.035
Urban area	0.013		0.012
Constant	0.638	***	0.034
Observations	4037		

Notes: Dependent variable equals one for individuals who financially are just making ends meet or worse and zero otherwise. Ordinary least square estimation includes statistical weights. Standard errors are clustered by state.<sup>\*</sup>, <sup>\*\*</sup> and <sup>\*\*\*</sup> indicate statistical significance at 10, 5 and 1 percent confidence levels respectively. The reference category (constant) is for an individual with full-time employment, who completed year 10, who was interviewed from January 2021 to May 2021 and who lives in a rural area.

# WHICH FACTORS IMPAIR SUCCESSFUL TRANSITIONS AFTER HIGH SCHOOL?

The last section highlights that educational attainment and/or lack of pursuing vocational training is a contributing factor to higher unemployment rates and financial insecurity. This suggests that we should explore avenues for promoting high school completion and identify the challenges that disadvantaged students face. The reasons for higher NEET rates and lower incomes, however, are complex. What might explain the underlying issues that contribute to lower educational attainment and/or higher unemployment rates? In this section, we enumerate factors occurring during youth transitions that have been found to relate to unsuccessful transitions after school and discuss how they can be addressed.

### Place-based disadvantage contributes to lower education and income as adults

Recent studies show that disadvantage is substantially place-based. Some Australian regions consistently rank among the highest in terms of poverty rates. For example, among communities that ranked in the highest poverty quintile in 2006, 62 percent remained in that position in 2016 (Payne and Samarage, 2020). More than half of those in poverty in the 2016 Census year were also in poverty in the previous or next Census year. Moreover, living in a region that experiences high poverty is associated with increased probabilities of remaining in poverty in the future (Ananyev et al., 2020).

Importantly, Deutscher (2020) provides evidence that the region in which a person grows up has long-term causal effects on education and income, and that this effect operates most strongly in teenage years. Many factors can explain these results, like the quality of schools and services, differences in the labour market, or the social networks of teenagers. In all cases, these differences imply unequal opportunities for young Australians depending on where they live.

It is crucial to keep track of factors affecting youth disadvantage separately across regions in Australia, as understanding which regions face which type of disadvantage is the first step to tackling place-based disadvantage. To ensure that some young Australians will not be penalised throughout their lives by the region in which they are born, we should closely monitor indicators of regional youth disadvantage and use these to guide our work on providing more equal opportunities across all regions.

### Mental health disorders are highly prevalent in high schools and lower completion rates substantially

Adolescence and early adulthood are the most common periods for the emergence of many of the most common disorders, like anxiety, mood disorder, and substance abuse (McGorry et al., 2011). What is more, the prevalence of mental health issues is high among young Australians and is strongly associated with dropping out of school (Bowman et al., 2017; Butterworth and Leach, 2018).

Mental disorders can also be a consequence of living in a disadvantaged region or family. Johnson et al. (2019) show that living in poverty is associated with children's mental disorders, especially for males aged 12 to 17. As mental health problems are both a cause and a consequence of disadvantage, it is likely that they generate a vicious circle that perpetuates disadvantage within a person's life and within their family.

Schools can play a role in promoting better mental health through several types of interventions. In-school interventions around the world can be classified as (i) universal approaches, where teachers include mental health promotion in their curriculum, (ii) selective approaches. where schools hire mental health clinicians who target students at risk of developing mental illness, and (iii) pre-emptive approaches, where health clinicians target students who already exhibit clinical symptoms. In Australian schools, most mental health interventions fall under the universal approach, yet evidence suggests that this approach has little impact and that the other two approaches can be far more successful (Bowman et al., 2017)

Therefore, there is still room for promoting better student mental health in schools. This would require targeting places where mental health issues are important and where resources and services are lacking. Such lack of services can be an especially important problem in rural areas (Hayes et al., 2011), where youth mental health issues can be especially prevalent (Boyd et al., 2006). Making sure all young Australians who need such services can obtain them would be an important element in combating disadvantages that can impact transitions after school and in ensuring equal chances for all.

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### Early education disengagement and truancy lead to unsuccessful transitions

One important and measurable form of disadvantage is educational disadvantage. It is critical to target lower-performing students or those disengaged from education, as such disadvantage in high school can lead to later educational and economic hardship. Polidano et al. (2013) show that one of the most important predictors of the gap in secondary school completion rates between disadvantaged and non-disadvantaged regions in Australia is the former group's lower numeracy and test scores at age 15. Cardak and Ryan (2022) show that high school performance is the most important predictor of university enrolment for disadvantaged students, as being financially at risk or other disadvantage measures seem to play a lesser role.

There are growing concerns that the education system suits a certain group of students in terms of interest or personality but leaves out students who may become uninterested in schooling for reasons that may include teaching methods, community influences and household factors that can limit time spent on schooling. To combat disengagement, propositions to make secondary schooling more adaptable yet universally recognised are worth considering (see, for example, Milligan et al., 2022).

Vocational education in Australia (VET) has evolved such that students are offered a range of pathways for pursuing training and education opportunities. In many respects, the VET system complements what might be characterised as more general qualifications provided in high school. Polidano and Tabasso (2014) estimate the effects of VET with and without a workplace learning component in Australia and find that offering the former can improve high school completion and improve longer-term employment outcomes. Currently, young people are required to stay in high school until year 10 is completed. As demonstrated in other countries, as well as in longerterm employment outcomes, there are merits to completing high school to year 12. Importantly, this can be done with or without additional training or qualifications. It is worth further exploring the role that post-secondary institutions such as universities and those offering

vocational or hands-on training can play to encourage higher degree completion and to retain students in high school beyond year 10. It is essential that we monitor training opportunities or lack of opportunities across Australian regions and that we ensure that these opportunities are adequate considering the challenges faced by youth in each region.

Another obvious avenue for reducing education disengagement is to make it more difficult for students to leave school through regulation. Beatton et al. (2018) study the effect of the 'Earning or Learning' 2006 reform in Queensland. Before the reform, students were required either to complete year 10 or to reach the age of 16 before dropping out. Since the reform, students must either complete two additional years of activities considered 'earning or learning' after year 10 or reach the age of 17. They find that the reform effectively increased the rate of young people 'earning or learning'. It increased the probability of young people remaining in high school until year 11 or 12, which was partially counterbalanced by a decrease in employment caused by students choosing to remain in school. The reform also caused a significant decline in crime, suggesting that mandatory education can prevent transitions to criminal pathways. However, such reforms should be considered with caution. Beatton et al. (2022) show that the reform also resulted in higher violent school discipline sanctions at ages 16 to 17 (resulting from the change in composition of the student population).

Another indicator of educational disengagement is truancy, or problematic school absenteeism. Thus, a natural avenue for promoting better educational outcomes among teenagers is to implement interventions that can combat this problem. There are currently few studies analysing interventions related to these issues. An exception is Bennett et al. (2018), who analyse a randomised control trial conducted in some of the most disadvantaged areas in Queensland. The intervention implied a partnership between police and schools and targeted a sample of high-risk young people. While not measuring effects on educational outcomes, the authors find that the intervention successfully reduced offending. Thus, keeping track of school absenteeism and designing appropriate interventions may be worthwhile avenues.

### Risky behaviour in high school predicts later life problems but interventions can help if well-targeted

Heavy alcohol and other drug consumption during teenage years can have long-lasting consequences. There is clear evidence that cannabis consumption during teenage years is strongly associated with dropping out of high school (Horwood et al., 2010). The association of consuming alcohol and dropping out of high school is less clear (see, for example, Sillins et al., 2015). but heavy alcohol abuse has been shown to have long-lasting consequences on delinquency later in life (Miller et al., 2016). It is thus important to keep track of the prevalence of such risky behaviours and to target young adolescents at risk to intervene when needed.

Intervention can be effective. Teesson et al. (2012) evaluate social learning-based interventions in Australian high schools. They show that several interventions successfully reduced alcohol and drugrelated issues, although the effects are modest. Importantly, as for interventions focusing on mental health in Australia, all interventions covered by the study were universal, that is, conducted for all students regardless of their risk or behaviour. However, interventions have been shown to be most efficient when specifically targeted at high-risk individuals (Botvin, 2000). It is thus critical to keep track of which schools face alcohol and drugs issues to assess the need and guide the implementation of such interventions.

Another risky behaviour occurring in school is violence and bullying. Violence experienced during the teenage years can have long-lasting consequences. Moore et al. (2015) show that Australians who experienced aggression during adolescence are more likely to drop out of high school and more likely to become NEET. What is more, Najman et al. (2019) show that Australians who experienced aggression during adolescence have increased odds of adopting heavy drinking behaviour later in life.

Kelly et al. (2020) provide evidence that cognitive behavioural therapy interventions in Australian secondary schools can successfully reduce risks of bullying and harm, but only if interventions are targeted at high-risk students. This again underscores the need to target the appropriate high-risk groups to design effective intervention programs.

# A MECHANISM FOR DEVELOPING COMMUNITY-BASED INITIATIVES TO BETTER SUPPORT YOUTH AND THEIR TRANSITION FROM HIGH SCHOOL

The previous section highlighted that the transition period after high school deserves substantial consideration from institutions or policy-makers seeking to promote equal chances for all Australians. It also discussed several measurable factors associated with unsuccessful transitions and underscored that policy interventions targeted at high-risk groups are most effective in combating disadvantage. Yet, it is currently difficult to keep track of youth disadvantage and risk factors that can impact transitions from high school in Australia. Few (if any) tools are specifically designed to provide us with timely information on emerging trends in youth disadvantage in high school and to analyse opportunities relevant for these groups.

For this reason, there is ongoing work at the Melbourne Institute to develop a set of data-driven tools-the Youth Indices of Disadvantage, Employment and Opportunities-to rigorously track and map (i) various measures of youth disadvantage, (ii) labour market needs relevant to disadvantaged youth following their transition from high school, and (iii) training opportunities (or lack of thereof) relevant to young adults. These tools will be based on numerous databases that provide information on these components and that we are gathering and mapping together within the Melbourne Institute Data Lab (MIDL). The tools will take the form of an online platform that will provide dashboards and indicators at the regional level to assess where different types of interventions are needed. Examples of questions our tools will answer are as follows:

- 1. In which regions do young adults face the most disadvantage?
- Which forms of disadvantage are youths from a specific region facing? (For example, poverty, education attainment, mental health, employment opportunities after school.)
- 3. Does disadvantage arise from a lack of labour market opportunities in some regions? Or does it arise from a lack of training opportunities?
- 4. Should a policy intervention seeking to address youth disadvantage in a specific region focus on providing new training opportunities, promoting existing training opportunities, and or providing information on employment opportunities, mental health in high school, etc.?
- 5. Have specific policy interventions succeeded in decreasing youth disadvantage?

Thus, our tools will provide timely information on factors related to youth disadvantage that can impact transitions after high school, as well as on the state of opportunities that can make successful transitions more likely. Figure 9 provides an overview of the indices and data tools we are constructing. The green circles represent categories of information that we are gathering for the Breaking Down Barriers Shared Data Environment at the Melbourne Institute. The orange rectangles represent outputs that will constitute the tools accessible to stakeholders through interactive visualisations and web-based platforms. The lighter green oval represents the underlying analysis that bridges different measures together. Finally, the purple domes represent dimensions on which users will be able to focus. For example, users will be able to analyse labour market needs in specific regions and for specific occupations and industries.

The 'youth disadvantage dashboard' will provide different measures of disadvantage specific to young adults. These will include statistics on economic poverty, housing, physical and mental health, education, training and employment. The dashboard makes possible presentation of statistics separately by region and according to selected demographic characteristics, like gender or native status.

The 'labour market need dashboard' will use employment, job vacancies and business entries and exits to provide a picture of job opportunities by region, occupation and industry. It will make possible targeting of occupations or industries that face, or that are about to face, labour shortage challenges.

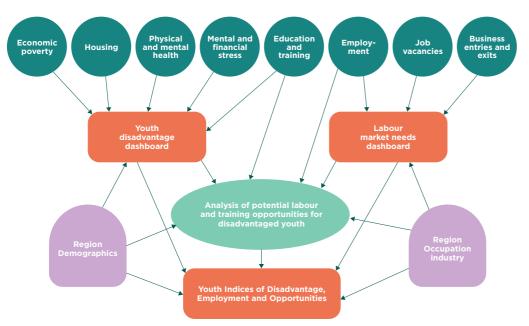
Combined, the information from the two dashboards discussed above will provide insights for promoting employment and training opportunities for disadvantaged young adults. This will be done by analysing potential matches between disadvantaged youth—as targeted by our youth disadvantage dashboard—and occupations in needs of labour-as targeted by our labour market needs dashboard. The feasibility of potential matches will be assessed using employment, unemployment, education. and training statistics, and will take into consideration the region, demographic, occupation, and industry dimensions.

This analysis will allow the creation of our Youth Indices of Disadvantage, Employment, and Opportunities. The indices will be built from three core components: 1) youth disadvantage statistics constructed from the youth disadvantage dashboard; 2) employment opportunities targeted by the labour market needs dashboard; and 3) measures of potential for policy intervention promoting employment for disadvantaged youth, constructed from our analysis of potential matches. Overall, the indices will provide a series of indicators to understand communitylevel disadvantage among young adults and the labour market opportunities that could be leveraged to promote employment in this population.

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### Figure 9.

Overview of the data tools for the Youth Indices of Disadvantage, Employment and Opportunities.



By identifying areas where specific forms of disadvantage occur, our tools will allow monitoring of (i) how educational transitions are progressing, (ii) which risk factors a region is facing, and (iii) which teenagers are susceptible to facing place-based disadvantage that can harm their transition.

These insights should prove useful to better target interventions that have been found to improve outcomes in Australia, like those seeking to address return to school for early school leavers (for example, Polidano et al., 2015), violence in high school (Kelly et al., 2020), alcohol and drugs problems (Teesson et al., 2012) or truancy (Bennett et al., 2018). However, our knowledge of which interventions are best suited to address different types of disadvantages is limited, and more evaluations of interventions are needed to understand what works. By measuring the evolution of various types of disadvantages specifically for young adults through time and across regions, our tools will be ideally suited to evaluate the effects of interventions on a variety of outcomes critical for successful transitions. Furthermore, the mapping of youth disadvantage measures to measures of employment and training opportunities will provide key insights for policy-makers seeking to ensure that opportunities exist where they are needed. This will provide guidance for the implementation of training programs that can favour successful transitions. (for example, Polidano and Tabasso, 2014) where they are needed the most.

# CONCLUSION

This chapter presented evidence that there is room for improvement in promoting successful transitions from high school to employment in Australia. Many Australian studies have identified a series of risk factors that relate to (un)successful transitions and have shown that interventions can be effective if targeted at the right students. For these reasons, we argue it is desirable to keep track of the different forms of youth disadvantage more rigorously across Australia to allow for well-targeted interventions. We must also make sure that labour and training opportunities exist for all Australians to ensure young adults can choose the best pathways for themselves and society. Our ongoing development of the Youth Indices of Disadvantage, Employment and Opportunities should serve this purpose well by allowing the targeting of specific types of disadvantages specifically for young adults and by allowing the assessment of the lack of employment or training opportunities across regions in Australia.

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