



From VET to sustainable employment for Aboriginal and Torres Strait Islander peoples



National Centre for Vocational Education Research

INTRODUCTION

One aim of vocational education and training (VET) is to provide a pathway to employment. The effectiveness of this, particularly for Aboriginal and Torres Strait Islander peoples, is an important policy issue. Research demonstrates that, for Aboriginal and Torres Strait Islander peoples, the transition from education to employment does not occur at the same rate as for non-Indigenous Australians (Windley 2017), and the difference in employment rates between Aboriginal and Torres Strait Islanders and non-Indigenous Australians has remained substantial (Productivity Commission 2020). Taking a slightly longer-term view than the immediate transition from VET to employment, this research explores the link between VET participation and *sustainable* employment for Aboriginal and Torres Strait Islanders.

There is no agreed definition of sustainable employment. Four possible indicators have been identified in the literature: individuals who access and remain in employment; individuals with the capacity to regain employment if required; the availability of quality employment, whereby the conditions and remuneration allow for basic needs to be met; and the availability of employment generated by the economy (McCord & Slater 2014; Moore 2020). Since these indicators are not easily identified in the available data sources, sustainable employment is defined, for the purpose of this research, as six months or more of continuous employment. Further, due to the limitations of the available data, the non-receipt of unemployment benefits is used as a proxy for continuous employment (over six months) in this analysis. It is important to consider the limitations of the definition and data used; these are discussed on page 16.

By examining the personal and training characteristics associated with Aboriginal and Torres Strait Islander peoples' attainment of sustainable employment, the research aims to determine VET's potential for enabling longer-term benefits for this cohort.

Data from the Multi Agency Data Integration Project (MADIP)¹ for Aboriginal and Torres Strait Islander peoples who commenced at least one VET program in 2016² have been analysed to examine the effect of VET on achieving sustainable employment. Further information on the data and methodologies used can be found in the support document to this publication, which also contains more detailed findings.

HIGHLIGHTS

- This research highlights the limitations of the available data in investigations of the longer-term employment outcomes for Aboriginal and Torres Strait Islander peoples. The findings from this research should be viewed in light of the data limitations, with consideration given to improving the efficacy of future data collection and analysis.
- Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 had an increased likelihood of achieving sustainable employment compared with those who had not commenced a VET program in 2016. The outcomes were similar irrespective of whether students had completed (19% more likely) or not completed (21% more likely) a VET program, suggesting that VET participation for Aboriginal and Torres Strait Islander peoples is important in its own right.
- When compared with their non-Indigenous counterparts, Aboriginal and Torres Strait Islander peoples who had commenced a VET program in 2016 had an increased likelihood of achieving sustainable employment (17% higher for completers, 15% higher for non-completers).
- The following personal and training characteristics had the strongest effects on the likelihood of Aboriginal and Torres Strait Islander peoples achieving sustainable employment:
 - Those residing in the least disadvantaged areas (high score on Index of Relative Socio-economic Disadvantage) were up to 320% more likely to achieve sustainable employment than those residing in areas of high disadvantage
 - Those who were an apprentice or trainee were 150% more likely to achieve sustainable employment compared with non-apprentices or trainees, noting that employment is an inherent element of an apprenticeship or traineeship
 - Students who were enrolled at a TAFE (technical and further education) institute or university were up to 30% more likely to achieve sustainable employment than those enrolled at a private training provider or community education provider
 - Those who were enrolled in a certificate IV were 100% more likely to achieve sustainable employment compared with those enrolled in a certificate II or certificate III
 - Students aged 15–19 years old were more likely to achieve sustainable employment than those in older age groups.

1 MADIP is a secure data asset, combining information on health, education, government payments, income and taxation, employment and population demographics in Australia over time. Details can be found at: <<https://www.abs.gov.au/about/data-services/data-integration/integrated-data/multi-agency-data-integration-project-madip>>.

2 The 2016 commencing cohort was used as the group of interest to allow for sufficient time to have passed to investigate their program completion and post-training outcomes in the linked data.

VET AND SUSTAINABLE EMPLOYMENT FOR ABORIGINAL AND TORRES STRAIT ISLANDER PEOPLES

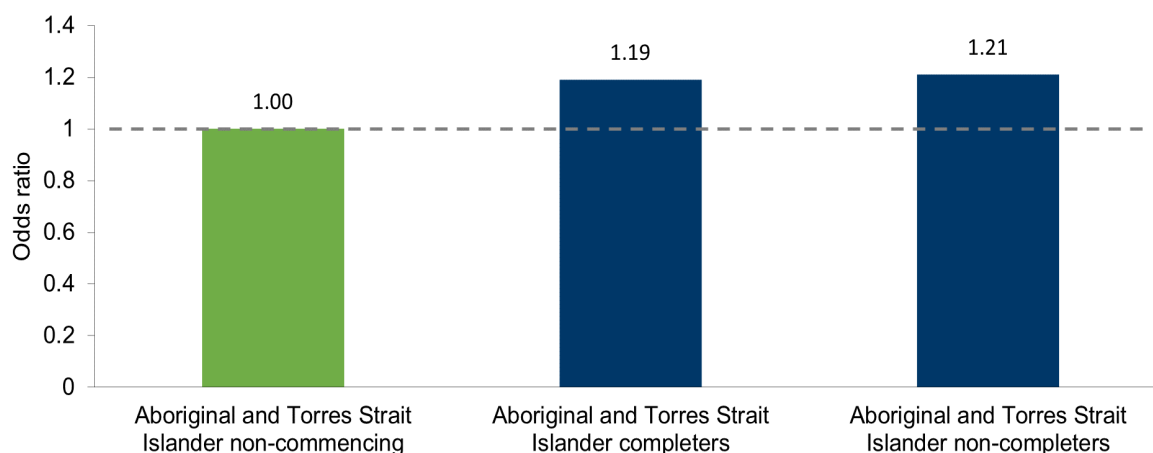
How to interpret the findings

Figures 1 and 2 present the odds ratios as estimated by logistic regressions. The odds ratios represent the likelihood that an outcome will occur when given a particular ‘treatment’ (for example, commencing a VET program), while holding all other factors constant. An odds ratio greater than 1 indicates an increased likelihood of achieving sustainable employment by comparison with those in the baseline group. Conversely, an odds ratio lower than 1 suggests that it decreases the likelihood of achieving the outcome.

Participating in VET increases the likelihood of sustainable employment for Aboriginal and Torres Strait Islander peoples

The analysis shows that the likelihood of achieving sustainable employment was about 20% higher for Aboriginal and Torres Strait Islander peoples who had commenced at least one VET program in 2016 compared with those who had not commenced a VET program during the same year (figure 1). Interestingly, the outcomes were similar irrespective of whether the students had completed (19% more likely) or not completed (21% more likely) any of the VET programs they commenced in 2016. (See below for more discussion on the importance of course completion.)

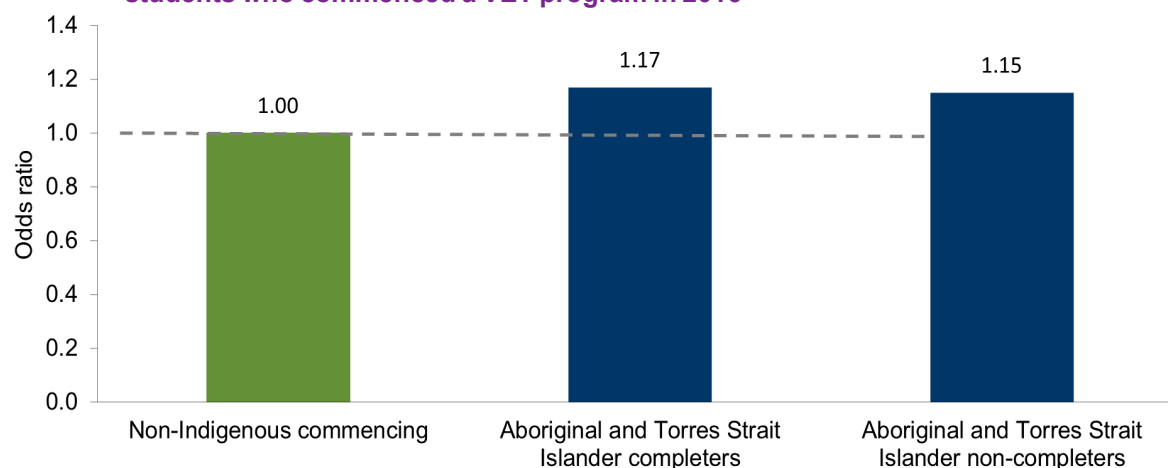
Figure 1 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced at least one VET program in 2016, by completion status, compared with those who did not commence a VET program in 2016



Note: The green bar in the figure indicates the baseline category for the analysis, with the odds ratio set at 1 (meaning no increase or decrease in the likelihood of achieving sustainable employment). See the support document for further information on the analysis and interpretation.

Further, Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 were more likely to achieve a sustainable employment outcome than their non-Indigenous counterparts irrespective of whether they completed a program (17% more likely) or not (15% more likely) (figure 2).

Figure 2 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by completion status, compared with non-Indigenous students who commenced a VET program in 2016



Note: The green bar in the figure indicates the baseline category for the analysis, with the odds ratio set at 1 (meaning no increase or decrease in the likelihood of achieving sustainable employment). See the support document for further information on the analysis and interpretation.

How important is course completion?

While these findings suggest that Aboriginal and Torres Strait Islander peoples experience an improved sustainable employment benefit even when they do not complete their VET program, some caution in interpretation is warranted. This analysis does not consider how much of the program has been completed by the non-completers, nor does it measure other important characteristics of employment (such as salary, type of employment, etc.).

To further examine the link between qualification completion and employment, data from the National Student Outcomes Survey was examined (table 1). These data show that similar proportions of Aboriginal and Torres Strait Islander peoples were employed after training irrespective of whether they had completed or part-completed a VET qualification, supporting the findings presented above. This was not the case for non-Indigenous students, with a higher proportion of qualification completers than part-completers employed after training. Both Aboriginal and Torres Strait Islander and non-Indigenous students, however, were more likely to report an improved employment status (for example, a higher-paying job) after training if they had completed their qualification.

Table 1 Employment outcomes of qualification completers and part-completers (%)

	Aboriginal and Torres Strait Islander		Non-Indigenous	
	Qualification completers	Qualification part-completers	Qualification completers	Qualification part-completers
Employed after training	71.3 (1.1)	71.9 (6.3)	77.5 (0.2)	74.4 (1.3)
Employed before training	57.8 (1.2)	54.7 (7.6)	65.7 (0.3)	64.7 (1.5)
Employed or in further study after training	81.2 (1.0)	78.0 (5.9)	85.8 (0.2)	81.4 (1.2)
Improved employment status after training	61.4 (1.2)	58.0 (7.4)	65.1 (0.2)	58.8 (1.5)

Note: The 95% margin of error is shown in brackets.

Source: NCVET 2022, VET student outcomes 2022: DataBuilder, Category, Outcome, Variable by Group.

The completion and non-completion of VET qualifications of all students has been of long-term interest to researchers and policy-makers. While qualification completion is often the focus of policy, research shows that there are many reasons (both employment-related and otherwise) why students fail to complete their qualification, some of which can be considered positive outcomes of the training. For example, a student might not complete their qualification if they have obtained employment while studying.

Guenther et al. (2017, p.19) illustrated the tension of equating program completion with success for Aboriginal and Torres Strait Islander students by posing the following questions:

Is a program unsuccessful because it has a 15% completion rate? Or,
Is it successful because non-completers leave the program with higher levels of self-confidence and positive cultural, personal and social transformation?

The findings reported in this publication support the proposition that VET participation for Aboriginal and Torres Strait Islander peoples is important and beneficial in its own right.

FACTORS AFFECTING THE LIKELIHOOD OF SUSTAINABLE EMPLOYMENT

To understand the influence of individual personal and training characteristics on sustainable employment, a regression model was fitted to the data. Further details of the model and the outputs are provided in the support document.

All the factors used in the regression analysis were associated with a sustainable employment outcome for Aboriginal and Torres Strait Islander peoples. Table 2 presents the factors affecting the likelihood of achieving a sustainable employment outcome, in order of influence (that is to say, the degree of disadvantage endured by students exercises the most influence, with state of residence the least).

Table 2 Personal and training characteristics affecting the likelihood of Aboriginal and Torres Strait Islander peoples achieving sustainable employment from VET, in order of influence

1. Index of Relative Socio-economic Disadvantage (IRSD)	7.Field of education
2. Apprentice or trainee	8. Occupation (ANZSCO) 1-digit
3. Provider type	9. Gender
4. Level of Education	10. Remoteness region
5. Age	11. Type of training
6. Funding source	12. State of residence

How each of these individual factors influences the likelihood of sustainable employment for Aboriginal and Torres Strait Islander peoples is described in detail below.

How to interpret the below findings

The figures below present the odds ratios for each of the personal and training characteristics *while holding all other characteristics constant*. The analysis presented below does not allow for these characteristics to be combined; further analysis would be required to examine the various combinations.

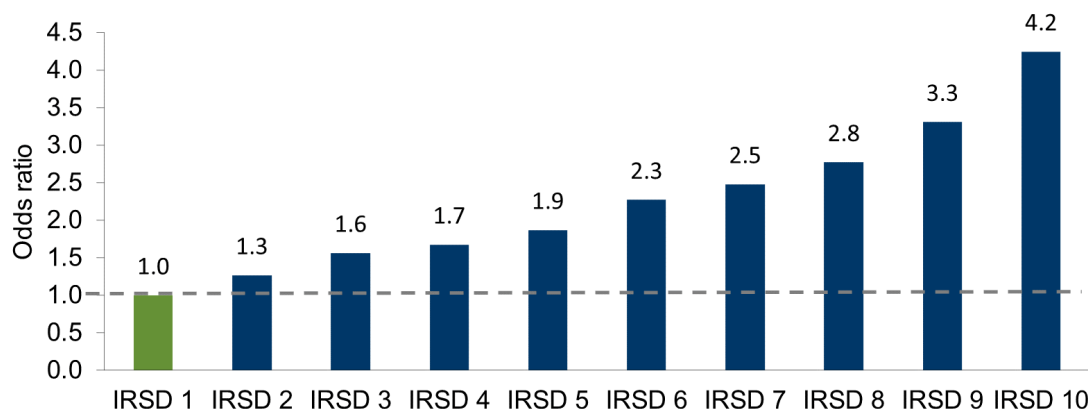
Index of Relative Socio-economic Disadvantage

The Index of Relative Socio-economic Disadvantage (IRSD) is a general socio-economic index that summarises a range of information about the economic and social conditions of people and households in an area (ABS 2018). A high score reflects a relative lack of disadvantage.

The findings indicate that Aboriginal and Torres Strait Islander peoples residing in the least disadvantaged areas (higher IRSD scores) are up to 320% more likely to achieve sustainable employment from VET than those residing in more disadvantaged areas (figure 3).

Enrolment data show that the majority (68%) of Aboriginal and Torres Strait Islander students who commenced a VET program in 2016 were residing in the most disadvantaged areas (IRSD 1–4; table 3).

Figure 3 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by Index of Relative Socio-economic Disadvantage



Note: The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category is selected by choosing the first category in this ordered factor.

Table 3 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by Index of Relative Socio-economic Disadvantage (%)

IRSD	Aboriginal and Torres Strait Islander peoples
IRSD 1	27.9
IRSD 2	16.2
IRSD 3	13.2
IRSD 4	10.3
IRSD 5	8.8
IRSD 6	7.4
IRSD 7	5.9
IRSD 8	4.4
IRSD 9	4.4
IRSD 10	1.5

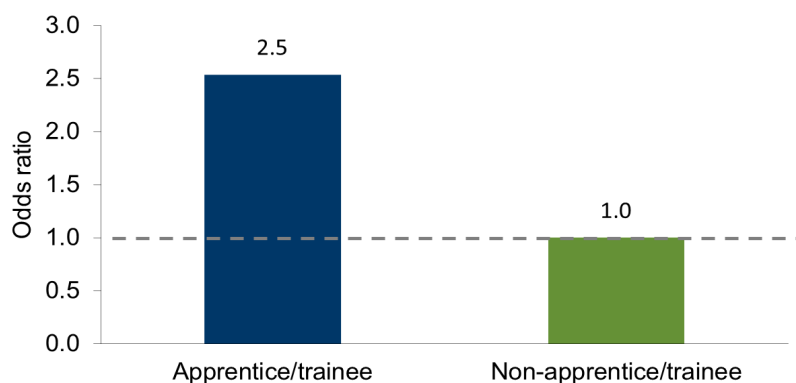
Source: MADIP: Census (2016), Total VET Activity (2015—19).

Apprentice/trainee status

Figure 4 indicates that the Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 as an apprentice or trainee in 2016 were 150% more likely to achieve sustainable employment compared with those who were not apprentices or trainees. Note that employment is an inherent element of undertaking an apprenticeship or traineeship; hence, those with an apprentice/trainee status in 2016 were likely employed in that year. The analysis does not specifically include consideration of sustainable employment after apprenticeship/traineeship completion.

Enrolment data show that 9.3% of Aboriginal and Torres Strait Islander students who commenced a VET program in 2016 undertook their training as part of an apprenticeship or traineeship (table 4). For the purpose of comparison, 8.6% of non-Indigenous students who commenced their program that year were apprentices or trainees.

Figure 4 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by apprenticeship/traineeship status



Note: The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category was selected by choosing the most common category in this factor. This factor only reflects students' apprentice or trainee status in 2016.

Table 4 Apprentice/trainee status of Aboriginal and Torres Strait Islander and non-Indigenous students who commenced a VET program in 2016 (%)

Apprentice or trainee	Aboriginal and Torres Strait Islander	Non-Indigenous
Yes	9.3	8.6
No	90.7	91.4

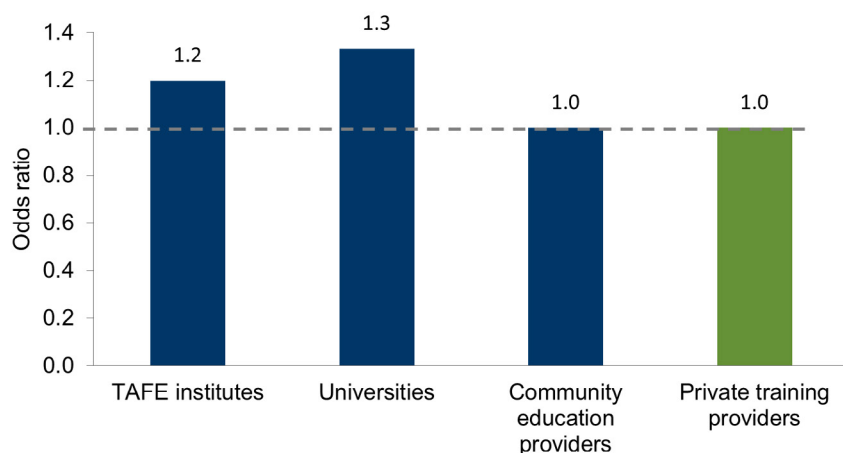
Source: MADIP: Total VET Activity (2015–19).

Provider type

Aboriginal and Torres Strait Islander VET students who were enrolled at universities or TAFE institutes were 30% and 20% more likely, respectively, to achieve a sustainable employment outcome than those enrolled at private training providers or community education providers (figure 5).

Enrolment data show that 45% of Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 were enrolled with private training providers, followed by 44% at TAFE institutes (table 5).

Figure 5 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by provider type



Notes: 1. The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category was selected by choosing the most common category in this factor.

2. Enterprise providers have been excluded from this chart because students who undertake VET with enterprise providers are employed by those providers.

3. Community education providers had an odds ratio of 1 as it was not statistically significant at the 5% level (meaning there was no evidence suggesting the likelihood of achieving the outcome is different from the baseline).

Table 5 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by provider type (%)

Provider type	Aboriginal and Torres Strait Islander
TAFE institutes	44.1
Universities	2.0
Schools ¹	1.0
Community education providers	5.9
Enterprise providers ²	2.0
Private training providers	45.1

Notes: 1. Schools were excluded from the regression analysis; see support document for further information on scope.

2. Enterprise training providers were excluded from figure 5 as students who commence VET with an enterprise provider are employed by the provider.

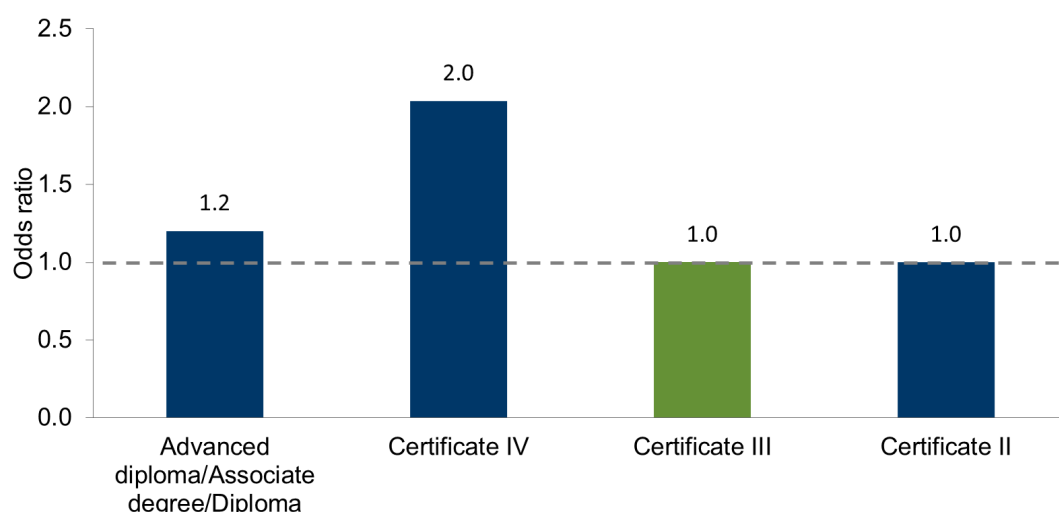
Source: MADIP: Total VET Activity (2015–19).

Level of education

The analysis indicates that Aboriginal and Torres Strait Islander peoples who commenced a certificate IV in 2016 were 100% more likely to achieve sustainable employment compared with those who commenced a certificate II or certificate III (figure 6).

Enrolment data show that 9% of Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 were enrolled in a certificate IV program (table 6). The majority were enrolled in certificate III (36%), followed by certificate II (24%).

Figure 6 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by level of education



Notes: 1. The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category was selected by choosing the most common category in this factor.

2. Certificate II had an odds ratio of 1 as it was not statistically significant at the 5% level (meaning there was no evidence suggesting the likelihood of achieving the outcome is different from the baseline).

Table 6 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by level of education (%)

Level of education	Aboriginal and Torres Strait Islander
Diploma/ Advanced diploma/ Associate degree	13.1
Certificate IV	9.2
Certificate III	36.4
Certificate II	23.8
Year 10/11/12	10.2
Other	7.3

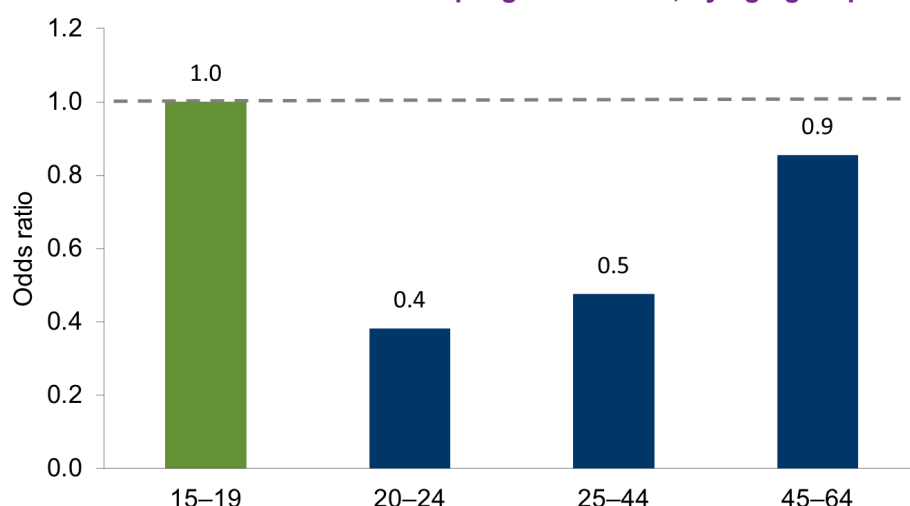
Note: Years 10/11/12 (VET in Schools) was excluded from the regression analysis.

Source: MADIP: Total VET Activity (2015–19).

Age

While 56% of Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 were aged between 20 and 44 years (table 7), this research shows that those older than 20 years were less likely to achieve sustainable employment than those aged 15–19 years (figure 7).

Figure 7 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by age group



Note: The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category was selected by choosing the first category in this ordered factor.

Table 7 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by age group (%)

Age group (years)	Aboriginal and Torres Strait Islander
15–19	28.2
20–24	19.7
25–44	36.6
45–64	15.5
65 & over	0.0

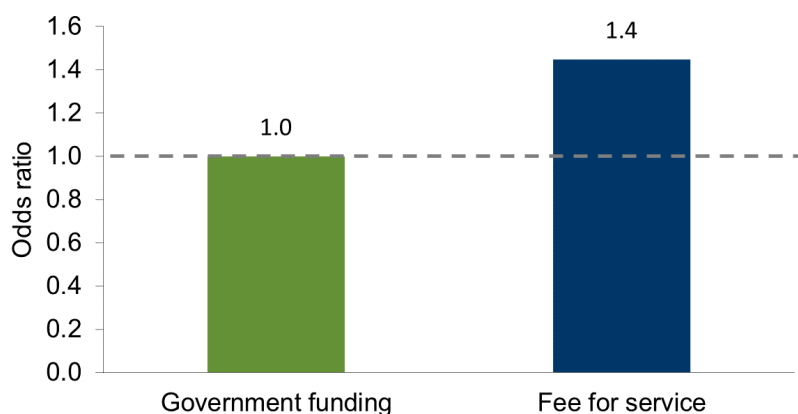
Source: MADIP: Total VET Activity (2015–19).

Funding source

Aboriginal and Torres Strait Islander peoples who commenced a fee-for-service VET program in 2016 were 40% more likely to obtain sustainable employment compared with those who commenced a government-funded program (figure 8). It should be noted that this analysis did not consider any individual funding programs that may have been in place in 2016, whose outcomes may have been different.

Enrolment data show that 66% of Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 were enrolled in a government-funded program (table 8).

Figure 8 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by funding source



Note: The green bar in the figure indicates the baseline category, with an odds ratio of 1. Government funding was selected as the baseline category in order to better assess the impact of funding on sustainable employment.

Table 8 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by funding source (%)

Funding source	Aboriginal and Torres Strait Islander
Government funding	66.3
Fee-for-service funding	33.7

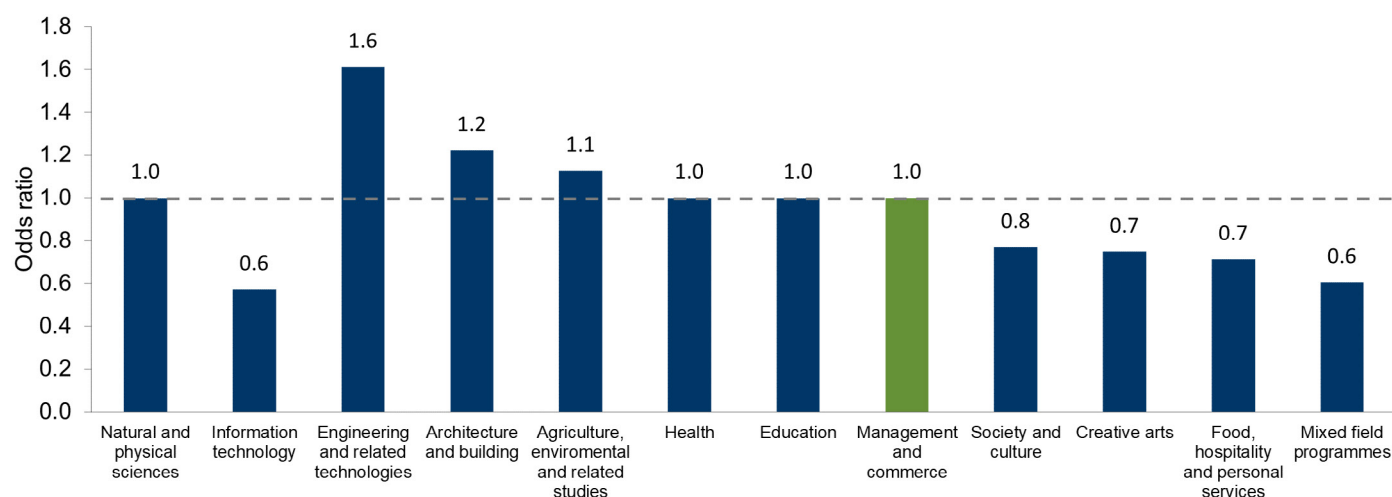
Source: MADIP: Total VET Activity (2015–19).

Field of education

Studying a program in Engineering and related technologies had the most positive effect (60% more likely) on the likelihood of Aboriginal and Torres Strait Islander peoples achieving sustainable employment from VET, compared with the baseline field, Management and commerce (figure 9). Students in the Agriculture, environment and related studies and Architecture and building fields of education were 10–20% more likely than baseline students to achieve a sustainable employment outcome. Information technology and Mixed field programs were 40% less likely to lead to sustainable employment.

Enrolment data show that the most common fields of education for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 were Management and commerce (20% of enrolments, selected as the baseline); Society and culture (19%); and Engineering and related technologies (15%; table 9).

Figure 9 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by field of education



Note: 1. The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category was selected by choosing the most common category in this factor.

2. Programs with an unknown field of education have been excluded from this chart.

3. Natural and physical sciences, Health and Education had an odds ratio of 1 as they were not statistically significant at the 5% level (meaning there was no evidence suggesting the likelihood of achieving the outcome is different from the baseline).

Table 9 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by field of education (%)

Field of education	Aboriginal and Torres Strait Islander
Natural and physical sciences	0.5
Information technology	1.5
Engineering and related technologies	15.1
Architecture and building	5.9
Agriculture, environmental and related studies	5.4
Health	4.9
Education	3.4
Management and commerce	20.0
Society and culture	18.5
Creative arts	2.0
Food, hospitality and personal services	9.3
Mixed field programmes	10.7
Unknown	2.9

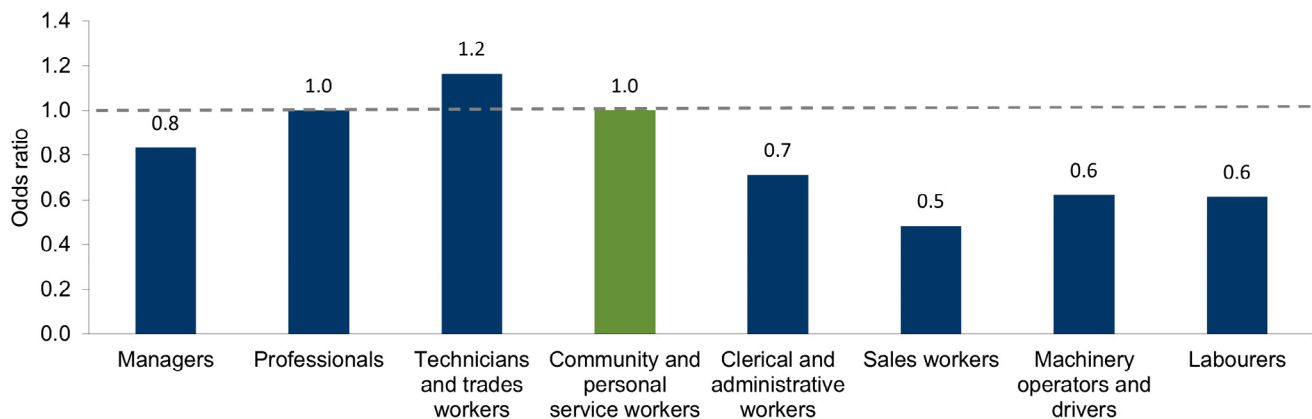
Source: MADIP: Total VET Activity (2015–19).

Occupation (ANZSCO)

Aboriginal and Torres Strait Islander peoples enrolled in programs aligned with occupations in the ANZSCO group Technicians and trades workers were 20% more likely to achieve a sustainable employment outcome from VET when compared with the baseline group, Community and personal service workers (figure 10). Those enrolled in programs aligned with Sales workers were 50% less likely to achieve sustainable employment.

Enrolment data show that 9% of Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 were in a program aligned with Technicians and trades workers, the ANZSCO group most likely to lead to sustainable employment, while the remaining 91% commenced in programs aligned with other occupations (table 10).

Figure 10 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by occupation (ANZSCO)



Note: 1. The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category was selected by choosing the most common category in this factor.

2. Programs with an unknown ANZSCO have been excluded from this chart.

3. Professionals had an odds ratio of 1 as it was not statistically significant at the 5% level (meaning there was no evidence suggesting the likelihood of achieving the outcome is different from the baseline).

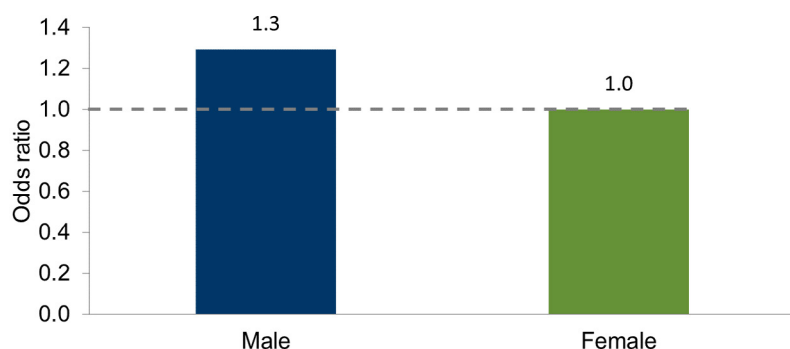
Table 10 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by occupation (%)

Occupation (ANZSCO)	Aboriginal and Torres Strait Islander
Managers	5.3
Professionals	5.3
Technicians and trades workers	9.2
Community and personal service workers	29.1
Clerical and administrative workers	13.1
Sales workers	3.4
Machinery operators and drivers	8.7
Labourers	12.6
Unknown	13.1

Gender

The analysis indicates that male Aboriginal and Torres Strait Islander peoples were 30% more likely than females to achieve a sustainable employment outcome from VET (figure 11). Of the Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, 52% were females and 48% males (table 11).

Figure 11 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by gender



Note: The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category is selected by choosing the most common category in this factor.

Table 11 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by gender (%)

Gender	Aboriginal and Torres Strait Islander
Female	52.1
Male	47.9

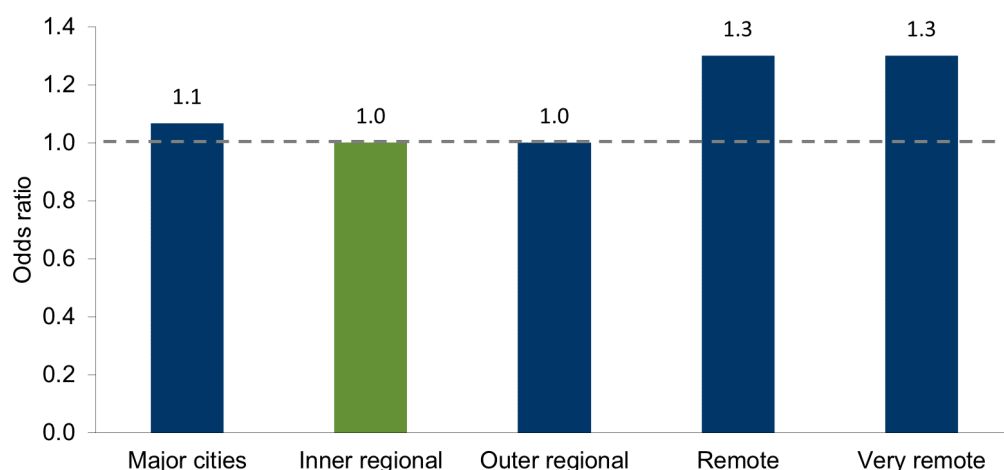
Source: MADIP: Total VET Activity (2015–19).

Geographic remoteness

Figure 12 indicates that Aboriginal and Torres Strait Islander peoples who were residing in remote and very remote areas were 30% more likely to obtain a sustainable employment outcome from VET when compared with those residing in regional areas, and 20% more likely than those living in major cities (figure 12).

Enrolment data show the majority of Aboriginal and Torres Strait Islander VET students reside in major cities, followed by inner and outer regional areas (table 12).

Figure 12 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by geographic remoteness



Note: 1. The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category was selected by choosing the second most common category in this factor as it provided a better comparison of results.

2. Outer regional had an odds ratio of 1 as it was not statistically significant at the 5% level (meaning there was no evidence suggesting the likelihood of achieving the outcome is different from the baseline).

Table 12 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by geographic remoteness (%)

Remoteness region	Aboriginal and Torres Strait Islander
Major cities	39.4
Inner regional	26.8
Outer regional	21.1
Remote	5.6
Very remote	7.0

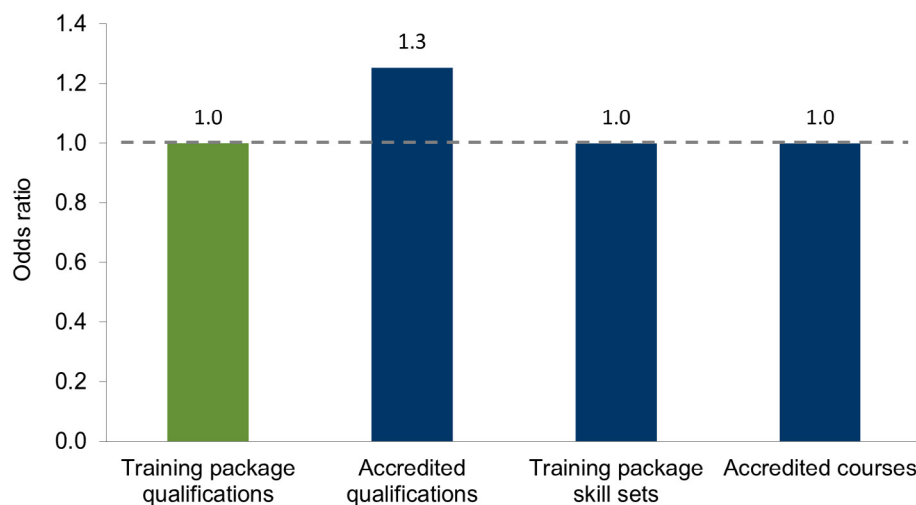
Source: Total VET Activity (2015–19).

Type of training

Aboriginal and Torres Strait Islander peoples enrolled in accredited VET qualifications were 30% more likely to achieve a sustainable employment outcome when compared with those enrolled in training package qualifications (figure 13). Sustainable employment outcomes for those enrolled in training package skill sets and accredited courses were no different from those enrolled in training package qualifications.

Enrolment data indicate that 84% of Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 were enrolled in a training package qualification, while 8% were enrolled in accredited qualifications (table 13).

Figure 13 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by type of training



Note: 1. The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category was selected by choosing the most common category in this factor.

2. Training package skill sets and accredited courses had an odds ratio of 1 as they were not statistically significant at the 5% level (meaning there was no evidence suggesting the likelihood of achieving the outcome is different from the baseline).

Table 13 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by type of training (%)

Type of training	Aboriginal and Torres Strait Islander
Training package qualifications	84.4
Accredited qualifications	8.3
Training package skill sets	2.9
Accredited courses	4.4

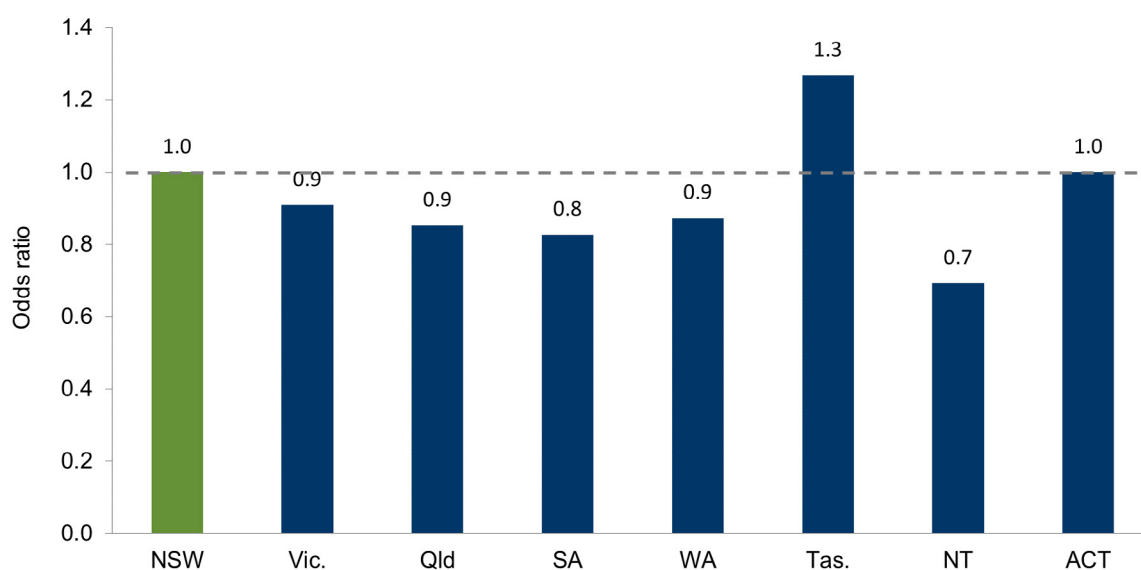
Source: MADIP: Total VET Activity (2015–19).

State/territory of residence

Aboriginal and Torres Strait Islander peoples in Tasmania were 30% more likely to achieve a sustainable employment outcome from VET when compared with those in New South Wales (the baseline group). Aboriginal and Torres Strait Islander peoples in the Northern Territory and South Australia were 30% and 20% less likely than the baseline group to achieve a sustainable employment outcome (figure 14).

The distribution of Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016 by state and territory of residence is shown in table 14.

Figure 14 Sustainable employment odds ratios for Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by state/territory of residence



Note: 1. The green bar in the figure indicates the baseline category, with an odds ratio of 1. The baseline category is selected by choosing the most common category in this factor.

2. ACT had an odds ratio of 1 as it was not statistically significant at the 5% level (meaning there was no evidence suggesting the likelihood of achieving the outcome is different from the baseline).

Table 14 Aboriginal and Torres Strait Islander peoples who commenced a VET program in 2016, by state/territory of residence (%)

State of residence	Aboriginal and Torres Strait Islander
New South Wales	35.7
Victoria	7.1
Queensland	32.9
South Australia	4.3
Western Australia	11.4
Tasmania	2.9
Northern Territory	4.3
Australian Capital Territory	1.4

Source: MADIP: Total VET Activity (2015–19).

LIMITATIONS AND FURTHER RESEARCH

This analysis demonstrates that enrolling in a VET program increases the likelihood of sustainable employment for Aboriginal and Torres Strait Islander peoples. It also shows that certain personal and training characteristics have a greater influence than others; however, if policy and practice are to be usefully informed by this and similar research, further information is required on the mechanisms by which these characteristics influence a sustainable employment outcome. For example, the analysis demonstrates that Aboriginal and Torres Strait Islander peoples who commence a certificate IV program have a higher likelihood of achieving sustainable employment — but we did not explore which certificate IV programs have better outcomes, nor how these might align with current patterns of enrolment.

The analysis presented here also takes a macro view of training, in that it considers averages for the different personal and training characteristics, which does not enable an examination of specific characteristics at the micro level. For example, do Aboriginal and Torres Strait Islander peoples have better sustainable employment outcomes if they study at a training provider that specialises in that cohort compared with other providers? Additional research is required to investigate some of these questions.

Other limitations of the analysis that should be considered when interpreting the findings include:

- The definition of sustainable employment is subjective, as are the decisions made regarding how the cohorts used were chosen and the timeframe for program completions.
- The definition applied would capture people who may be underemployed (for example, in casual employment which may be less secure; potentially working fewer hours than desired).
- The use of the non-receipt of unemployment benefits as a proxy for sustainable employment does not account for people who have left the labour market and who are not receiving income support, a situation that potentially over-estimates the sustainable employment outcome.
- The employment measure does not provide any information on the type of employment or the relevance of the training to the employment outcome.
- The 2016 Census data (and corresponding VET enrolment data) used were nearly seven years old at the time of analysis, meaning that the results may not reflect the outcomes of more recent student cohorts.

The limitations of the available data sources have been well articulated by Nicolaou et al. (2023) in their report *First Nations People Workforce Analysis*, conducted by Jobs and Skills Australia using MADIP data. Similar to the analysis reported in that publication, this research provides a new view of employment outcomes for Aboriginal and Torres Strait Islander peoples, one with the capacity to inform conversations, further research and data collection.

CHALLENGES TO SUSTAINABLE EMPLOYMENT

This analysis is encouraging, in that it shows that VET has the potential to increase the likelihood of sustainable employment for Aboriginal and Torres Strait Islander peoples. However, employment conditions for this cohort are not always conducive to sustainable employment; Hunter and Gray (2016) identified the following workforce challenges:

- Workplaces with Aboriginal and Torres Strait Islander employees are more likely to employ casuals and contractors.
- Aboriginal and Torres Strait Islander workers are historically concentrated in the secondary labour market,³ an issue compounded by:
 - their low levels of educational attainment
 - discrimination restricting Aboriginal and Torres Strait Islander workers to low paid and insecure work.
- Aboriginal and Torres Strait Islander workers are more likely to experience conflicts between work, family and community responsibilities, especially in workplaces that are not culturally aware/sensitive. These conflicts may cause Aboriginal and Torres Strait Islander employees to voluntarily exit the workforce.

The retention of employment by Aboriginal and Torres Strait Islander peoples is notably less than for non-Indigenous Australians. Aboriginal and Torres Strait Islander peoples are more likely to move out of employment and less likely to be employed five years later (Hunter & Gray 2016). Extended periods of unemployment can have a detrimental impact on an individual's ability to regain employment (Cassidy et al. 2020).

Geographic remoteness is another important factor in an examination of unemployment patterns for Aboriginal and Torres Strait Islander peoples. The research by Hunter and Gray (2016) found that the rate of movement out of employment increased with geographic remoteness for Aboriginal and Torres Strait Islander peoples, a relationship not evident for non-Indigenous Australians. Similarly, an examination of employment rates between 2011 and 2016 by Venn and Biddle (2018) identified a widening employment gap between Aboriginal and Torres Strait Islander peoples and non-Indigenous Australians in remote areas, while in non-remote areas this gap decreased slightly. The authors attributed the increased gap in remote areas to the demise of the Community Development Employment Projects scheme, coupled with (the then) weak labour markets across remote areas of Australia.

Education not the only factor

Education is not the sole factor influencing the attainment of sustainable employment. Additional social, institutional and economic barriers, which fall outside an individual's⁴ control, also influence employment patterns (Moore 2020). Often disproportionately affecting Aboriginal and Torres Strait Islander peoples, these barriers include poorer schooling outcomes, lower language, literacy and numeracy (LLN) skills, poorer health outcomes, greater family responsibilities, and greater challenges in accessing local employment, education and training opportunities (Productivity Commission 2020).

In addition to the barriers described above, racism and discrimination in the workplace have been found to influence the supply of Aboriginal and Torres Strait Islander workers' labour (Biddle et al. 2013). Analysis of the 2008 National Aboriginal and Torres Strait Islander Social Survey (NATSISS) data by Biddle et al. (2013) identified that some Aboriginal and Torres Strait Islander peoples intentionally opted out of the labour market to avoid discriminatory encounters. Workplace discrimination was also identified in survey findings by Nathan et al. (2020), with Aboriginal and Torres Strait Islander health workers reporting a 'lack of cultural sensitivity among colleagues' as the most common barrier experienced across their working lives. The same survey showed that respondents

³ The secondary labour market is characterised by 'low wages and fringe benefits, poor working conditions, high labour turnover, and little chance of advancement' (Doeringer & Piore 1971, cited in Hunter & Gray 2016).

⁴ Moore (2020) refers to young people in general, not just First Nations people.

employed by government were more likely to report racism; a lack of cultural awareness among colleagues; inflexible human resource practices; and feelings of a lack of management support compared with those employed by Aboriginal community-controlled health organisations (ACCHOs).

SUPPORTING ABORIGINAL AND TORRES STRAIT ISLANDER LEARNERS' TRANSITION FROM VET TO SUSTAINABLE EMPLOYMENT

The literature was examined to investigate ways in which the VET system could support the transition of Aboriginal and Torres Strait Islander students from VET into sustainable employment. Of the case studies identified, however, few focused on the transition from VET to employment, especially sustainable employment. One exception was an evaluation of an employment program for Aboriginal and Torres Strait Islanders, conducted by Brown et al. (2017), which highlighted several success factors:

- working with entire family units, rather than with an individual solely
- focusing on identifying and building on the strengths of the individual and their family by taking their preferences into account
- enabling individuals to be active decision-makers by defining their own goals and working towards these goals
- applying a holistic case-management approach by offering a mix of support and counselling, that addresses all issues faced by jobseekers, including often-complex family challenges
- maintaining traditional culture alongside interactions with mainstream services.

Empowerment, or positioning the individual at the centre of decision-making, was a common theme in some case studies (Stephens & Monro 2019; Victorian Department of Education 2019; Wilson et al. 2019). The study by Wilson et al. (2019) found that empowerment was a fundamental building block in attaining successful outcomes, exerting a direct impact on education and correlating with employment. Alongside empowerment was the importance of incorporating traditional culture into VET delivery, by using cultural practices and Indigenous perspectives in training (Stephens & Monro 2019; Victorian Department of Education 2019).

Other case studies highlighted the value of mentors and role models in supporting Aboriginal and Torres Strait Islander peoples towards successful outcomes (Guenther et al. 2017; Grupetta et al. 2018; Victorian Department of Education 2019; Waters 2017). In a case study examining Karajarri Ranger training, Guenther et al. (2017) explained the importance of this program in not only providing role models, but also leading many local children to aspire to become Caring for Country professionals. However, suitable mentors or role models are not always available in regional and remote communities. Furthermore, as many Aboriginal and Torres Strait Islander VET students have never held a job nor have people in their lives who are working, they need significant support to gain an understanding of employer and workplace expectations (Waters 2019). Waters (2019) suggests that where no suitable role model exists in the community, it is often down to the VET educator to fill these shoes.

Many of the strategies currently used are focused on assisting Aboriginal and Torres Strait Islander peoples to gain *initial* employment. If measures that address the workplace challenges described in the previous section were integrated into these strategies, however, then their usefulness in securing *sustainable* employment would likely be enhanced.

Other measures of success

It must be recognised that employment following VET participation is not the only measure of success for Aboriginal and Torres Strait Islander peoples, particularly in regional and remote areas of Australia (Stephens & Monro 2019). The definition of success, and learner aspirations, varies between sites, communities and the individual.

Limiting the measures of success to qualification completion and movement into further training and employment fails to recognise the alternative and beneficial effects flowing from VET that are valued by individuals, their families and communities (Waters 2019; Stephens & Monro 2019). Some Aboriginal and Torres Strait Islander peoples and their communities view unpaid community and cultural work as their occupation (Wilson et al. 2019), and many of the mainstream measures of success do not take local knowledge and practices into account, including local languages and community aspirations (Wilson et al. 2019). While this summary is focused on the VET system supporting Aboriginal and Torres Strait Islander peoples' transition from VET to sustainable employment, we acknowledge that this outcome is not the intention of all learners or their only measure of success.

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