



# Factors Affecting Higher Education Completions

## Student Aboriginal and Torres Strait Islander peoples' completions

- *Six-year completion rates of undergraduate student Aboriginal and Torres Strait Islander Australians remain lower than other Australian students, even after controlling for a range of circumstances.*
- *Undergraduate student Aboriginal and Torres Strait Islander Australians receiving income support are more likely to complete.*

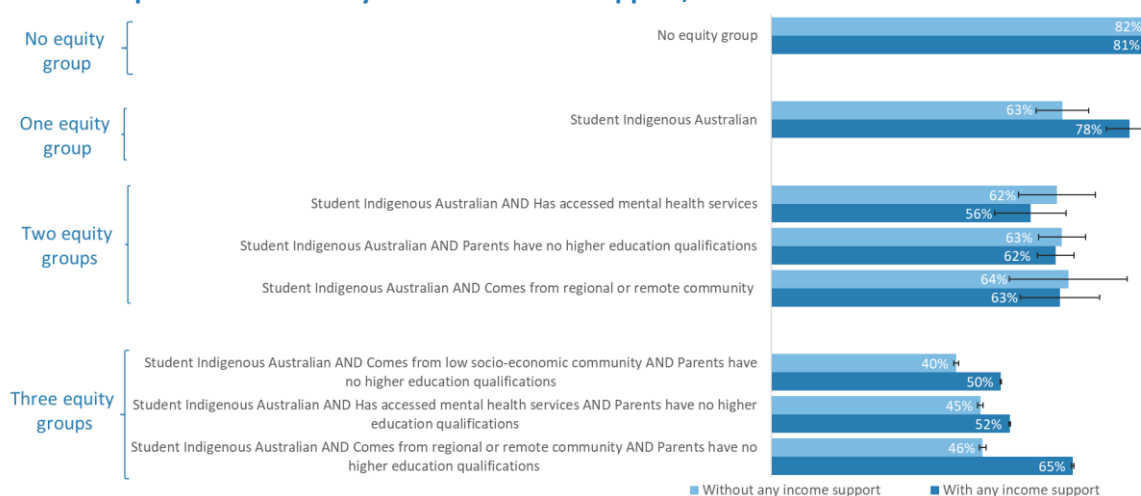
Higher educational attainment brings with it not only better lifetime employment and income benefits but also other social and health benefits to the individual, to society and future generations.<sup>i</sup> Supporting student Aboriginal and/or Torres Strait Islander peoples through higher education will help address other key areas of disadvantage including those identified in the *Closing the Gap* report.<sup>ii</sup>

### Undergraduate student Australian and Torres Strait Islander Australians receiving income support more likely to complete

We examined the six-year completion rates of a cohort of 120,000 students who commenced a bachelor's degree for the first time in 2011. Using student data linked to health, tax, social support and demographic data, it was found that student income support has a positive correlative influence on student Aboriginal and Torres Strait Islander Australians university completion rates (Figure 1). The greatest increase was for/in relation to undergraduate student Aboriginal and Torres Strait Islander Australians who came from a regional or remote community and have parents who have not attained higher education qualifications (65 per cent vs 46 per cent). This shows a possible link that even a small amount of government income support can have a positive impact.

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**Figure 1. Six-year undergraduate student completion rates of full-time students by equity group membership and whether they received income support, 2011-16.**



Source: Multi-Agency Data Integration Project (MADIP), custom analytical extract, 2011-2016.

Notes: Equity groups include Indigeneity, student originated from the lowest 30 per cent of Socio-Economic Index for Areas *Index of Relative Socio-economic Advantage and Disadvantage*, regional or remote background, and/or had no parents with higher education qualifications. Error bars are 95 per cent standard errors. Income support included any of the following received during study: Youth Allowance, Austudy, ABSTUDY, Carer Payment, Disability Support Pension or Parenting Payment

## Student Aboriginal and Torres Strait Islander Australians enrolment in higher education has doubled but completion rates remain lower

The number of student Aboriginal and Torres Strait Islander Australians enrolling in higher education courses has more than doubled (201 per cent) over the past decade, compared to only a 46 per cent increase in other domestic student enrolments.<sup>iii</sup> However:

- Six-year completion rates for undergraduate (domestic) have remained lower at 40 per cent for student Aboriginal and Torres Strait Islander Australians compared with around 66 per cent for other Australian students.<sup>iv</sup>
- First year drop-out rates were 19 per cent and 8 per cent for student Aboriginal and Torres Strait Islander Australians and other Australian students, respectively<sup>1</sup>.
- Student Aboriginal and Torres Strait Islander Australians are more likely to start university belonging to around three (2.8) equity groups such as having a lower socio-economic status background, poorer prior academic achievement, older commencement age and being the first member of their family to attend university.<sup>2</sup> Other Australian commencing domestic students belonged to an average of 1.4 equity groups.

As shown in Figure 1, background issues of equity<sup>3</sup> known at, or prior to, enrolment can have a profound effect on student completion rates.

<sup>1</sup> Calculated between the years 2011-2016.

<sup>2</sup> We found that student Aboriginal and/or Torres Strait Islander peoples start with a mean of 2.8 equity group membership. Other Australian students start with a mean of 1.1 equity group membership.

<sup>3</sup> Equity membership is defined as belonging to any of the following groups: originating from a low socio-economic background, having no parents with higher education qualifications, the use of Medicare or Pharmaceutical Benefits Scheme (PBS) mental health items, Medicare chronic health management items, disability, Aboriginal and/or Torres Strait Islander peoples and coming from a regional or remote area.

Even after controlling for these factors, Indigeneity was still found to impact the likelihood of completion.<sup>4,5</sup> This is likely due to not being able to control for all factors including early childhood and perinatal health. In our 2011-2016 cohort of undergraduate students, after controlling for a wide range of other demographic and institutional factors<sup>5</sup> including age, we found that that six-year completion rates of student Aboriginal and Torres Strait Islander Australians were still on average 15 percentage points lower than that of other Australian students,<sup>4</sup> consistent with other studies.<sup>v,vi</sup>

## Income and age also affect university completion rates for student Aboriginal and Torres Strait Islander Australians

Students on income support were generally found to have higher completion rates. Student Aboriginal and Torres Strait Islander Australians who were not members of other equity groups and received income support had 70 per cent completion rates (Figure 1). After controlling for a wide range of student and institutional factors the study found that income support consistently improved completion for full-time<sup>6</sup> student Aboriginal and Torres Strait Islander Australians (at 55 per cent vs. 44 per cent in our matched sample) except for part-time students on ABSTUDY.

Unlike full-time students, part-time student Aboriginal and Torres Strait Islander Australians reported median annual expenses higher than their incomes in 2017<sup>vii</sup> potentially explaining why they might be more likely to drop-out regardless of their total income. Part-time students may also not have had enough time to complete their studies in six years,<sup>7</sup> but the increase in completion rates between six and nine years is only about eight to ten percentage points.<sup>viii</sup>

There has previously been many reasons why income support during study has been reported to have a positive impact on student Aboriginal and Torres Strait Islander Australian completion rates.<sup>ix,x,xi,xii</sup> University student Aboriginal and Torres Strait Islander Australians are more likely to report their intention to stop studying for a variety of reasons including financial stress, lack of support and racism.<sup>ix,x,xi,xii</sup> Dropping out of university study is costly both in terms of missing out on life-time and intergenerational financial, health and social benefits but also with respect to short-term tuition costs, living costs and student debt-incurred.<sup>xiii</sup>

Student Aboriginal and Torres Strait Islander Australians are less likely to have savings, more likely to support dependents, less likely to receive financial support from their family or partners and more likely to report having had to defer studies or reduce their course load for financial reasons.<sup>xvi</sup> Finances were a major source of worry for the majority of student Aboriginal and Torres Strait Islander Australians in 2017 (at 71 per cent) and over a quarter of these students reported that they regularly went without food or other necessities because they could not afford them.<sup>xiv</sup>

On-campus accommodation can be expensive and in high demand, and the private rental market can be difficult to enter as a young person and/or a person with a lack of rental history.<sup>xv</sup> For some students, needing to relocate to study while coming from families with low incomes and large families to support can provide additional strain.<sup>xvi</sup> In 2019 the federal government increased the

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<sup>4</sup> We found that with the matched sub-sample an 11 percentage point decrease is found between student Indigenous Australians and other Australian students' completion rates on weighted data. Student Indigenous Australians – 44%, other Australian students – 55%, GLM binomial regression  $p \leq 0.0001$ . Completion rates on unweighted data: Indigenous – 45%, non-Indigenous – 69%.

<sup>5</sup> See Data and Methodology Section

<sup>6</sup> Full time study is defined as 0.75 EFTSL per year or greater.

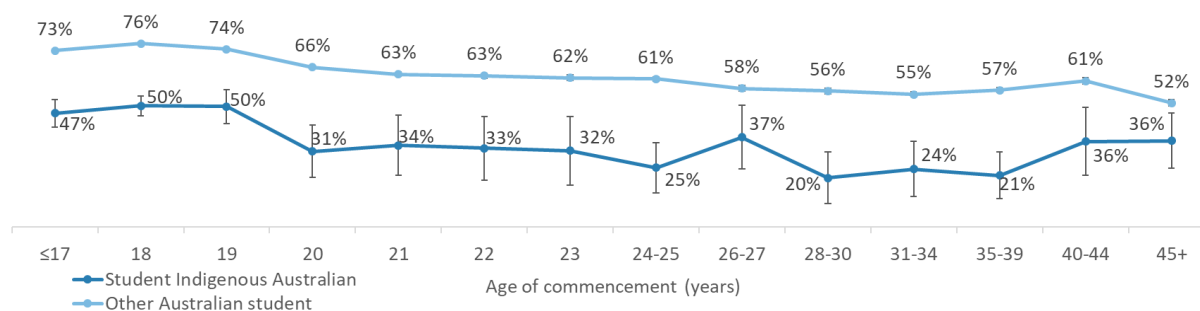
<sup>7</sup> We were not able to review longer time periods because the integrated data set we used is only six years long.

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parental income threshold for regional students seeking independent status allowing a greater number of student to qualify for Youth Allowance or a higher rate of payment.<sup>xvii</sup> Additionally, in 2017 the Aboriginal and Torres Strait Islander Student Success Program<sup>xviii</sup> was commenced creating additional support to some regional and remote students with accommodation scholarships and Away From Base assistance for distance learners.<sup>xix</sup> This change may drive improved completion rates given the positive impact of income support shown in this paper.

Age is also a known factor that lowers the likelihood of completion as older working age students can sacrifice more study time to obtain more income.<sup>vi</sup> Student Aboriginal and Torres Strait Islander Australians are known to commence university studies later in life than other Australian students with 24.4 per cent of student Aboriginal and Torres Strait Islander Australians being over the age of 24 at commencement compared to 9.4 per cent of other Australian students.<sup>8</sup> Across all starting ages, however, the student Aboriginal and Torres Strait Islander Australian completion rates remain significantly lower (Figure 2).

**Figure 2. Six-year undergraduate student completion rates, by Indigeneity and age at commencement (2005-2016).**



Source: Custom Multi-Agency Data Integration Project extract linked to HEIMS records.

Notes: Original unmatched data shown. Binary logit analysis:  $p < 0.05$ . Student Indigenous Australian N = 1,668, other Australian student N = 556,219.

## Data and methodology

The analysis in this paper used approximately 555,000 Higher Education Information Management System (HEIMS) records linked to MADIP (Microdata: Multi-Agency Data Integration Project, Australia) for the age at commencement analysis and approximately 120,000 for figure three. The analysis included all students who commenced a bachelor’s degree (course types: 9, 10) (excluding Open University Australia courses) for the first time in 2011, undertook study between 2011 and 2016 (reference period) and determines their study status at the end of 2016 (completed, still actively studying (i.e. enrolled) or inactive (i.e. no instance of enrolment)). The ‘during study’ time period is defined as between first semester and last semester inclusive, ‘after study’ is defined as after last semester.

Summary statistics and a binomial logit was used on a sample of 118,985 students to confirm significance. Variables used in the regression were: gender, field of education, institution, use of Medicare or Pharmaceutical Benefits Scheme mental health items, use of Medicare chronic health management items, use of disability services, Index of Relative Socio-economic Advantage and Disadvantage (IRSAD), Remoteness Area (RA), language spoken at home, Tertiary Entrance Rank (TER), completion status, parents’ highest level of education, gap year incidence, student payment received, mode of attendance, average number of units studied per semester, age at commencement, average income per semester.

<sup>i</sup> Department of Education. [Benefits of educational attainment](#), Department of Education, Accessed 10/10/2019.

<sup>8</sup> The study found that student Aboriginal and Torres Strait Islander peoples are more likely to complete at age 18 than age 24, 1.8 times more likely to complete when receiving income support, and 0.14 times less likely to complete in six years if part time.

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- <sup>ii</sup> Commonwealth of Australia, Department of the Prime Minister and Cabinet (2019) [Closing the Gap Report 2019](#), Department of the Prime Minister and Cabinet, Accessed 29/10/2019.
- <sup>iii</sup> Commonwealth of Australia, Department of the Prime Minister and Cabinet (2018) [Closing the Gap Prime Minister's Report 2018](#), Department of the Prime Minister and Cabinet, Accessed 29/10/2019.
- <sup>iv</sup> Department of Education (2019) [Completion rates of higher education students – Cohort analysis 2005 to 2018](#), Department of Education, see Table 2; Accessed 3 December 2019.
- <sup>v</sup> Marks G (2007) 'Completing university: Characteristics and outcomes of completing and non-completing students, LSAY Research Reports'. *Longitudinal surveys of Australian youth research report* No.51.
- <sup>vi</sup> Cherastidham I, Norton A and Mackey W (2018) *University attrition: What helps and what hinders university completion*. Grattan Institute.
- <sup>vii</sup> *Ibid*
- <sup>viii</sup> Department of Education (2019) [Completion rates of higher education students – Cohort analysis 2005 to 2018](#), Department of Education, see Table 1; Accessed 3 December 2019.
- <sup>ix</sup> Asmar C, Page S and Radloff A (2011) 'Dispelling myths: Indigenous students' engagement with university', *AUSSE Research Briefings* vol. 10
- <sup>x</sup> Coates H (2014) 'Students' early departure intentions and the mitigating role of support', *The Australian Universities' Review* 56(2): 20-29.
- <sup>xi</sup> Taylor E, Lalavic A, and Thompson S C. (2019). 'Beyond enrolments: A systematic review exploring the factors affecting the retention of Aboriginal and Torres Strait Islander health students in the tertiary education system', *International Journal for Equity in Health* 18(136).
- <sup>xii</sup> Social Research Centre, QILT (2019) [2018 Student Experience Survey National Report](#), QILT, Accessed 16 December 2019.
- <sup>xiii</sup> Norton A, Cherastidham I and Mackey W (2018) *Dropping out: the benefits and costs of trying university*. Grattan Institute
- <sup>xiv</sup> Universities Australia (2018) [Universities Australia student finances survey 2017](#), Universities Australia, Accessed 3 December 2019.
- <sup>xv</sup> Halsey J (2018) [Independent review into regional, rural and remote education – final report](#), Department of Education and Training, Accessed 24 January 2020.
- <sup>xvi</sup> Wilson K and Wilks J (2015) Australian Indigenous higher education: politics, policy and representation. *Journal of Higher Education Policy and Management* 37(6): 659-672 DOI: <https://doi.org/10.1080/1360080X.2015.1102824>
- <sup>xvii</sup> Department of Social Services (2018) [Student measures, 2018 budget](#), Department of Social Services, Accessed 24 January 2020.
- <sup>xviii</sup> National Indigenous Australians Agency (2020) [Indigenous Student Success Program](#), National Indigenous Australians Agency, Accessed 19 May 2020.
- <sup>xix</sup> National Indigenous Australians Agency (2020) [Away from Base Mixed-Mode program \(AFB\)](#), National Indigenous Australians Agency, Accessed 19 May 2020.