



Benefits of Educational Attainment

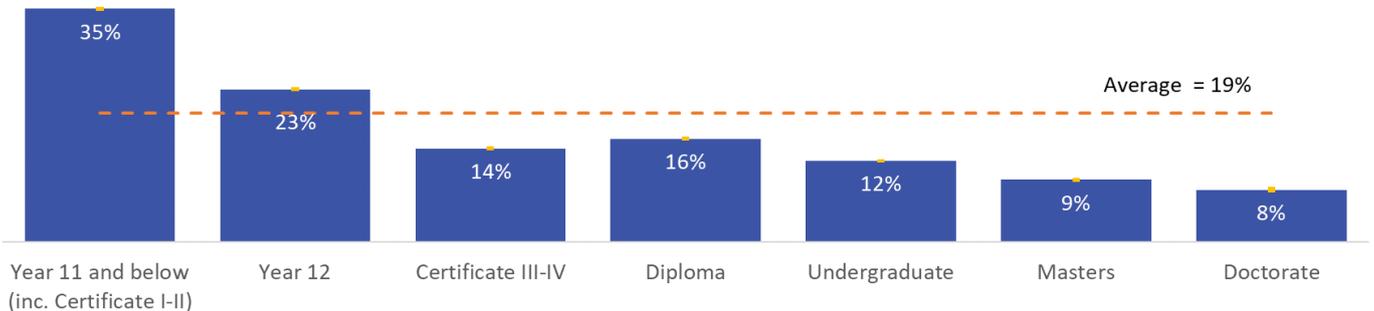
Employment and income support

Higher educational attainment is associated with higher labour force participation, higher likelihood of employment and lower use of income support

Labour force participation

Higher participation in the labour force¹ leads to greater purchasing power, cash flow and a more prosperous society.^{2,3} By examining newly integrated Multi-agency Data Integration Project data we found that higher levels of educational attainment is positively associated with higher participation in the labour force (Figure 1). This trend holds after controlling for a range of confounding variables such as age, gender, location and family type.

Figure 1. Proportion of 30-64 year olds not in the labour force who are not currently studying, by highest level of educational attainment, 2016.



Source: Multi-Agency Data Integration Project 2016

Notes: Average is the proportion all persons aged 30-64 not in the labour force who are not currently studying. Post-matching logit likelihood ratio results show educational attainment is associated with not being in the labour force ($\chi^2 = 253,387$, $p < 0.001$, $N = 7,415,057$). All groups were significantly different, post-matching (Tukey-adjusted pairwise comparisons).

Employment outcomes

The unemployment rate⁴ remained relatively constant, fluctuating between four and five per cent in the year prior to and after August 2016.⁵ Within this job market, individuals with higher levels of educational attainment were more likely to be employed, as demonstrated through their lower rates of unemployment (Figure 2). Compared with their co-workers, people with higher educational attainment are less likely to be dismissed during economic downturns.

¹ The labour force is defined as those either employed or seeking employment.

² Productivity Commission (2005) *Economic implications of an ageing Australia*, Productivity Commission, Government of Australia Research Reports.

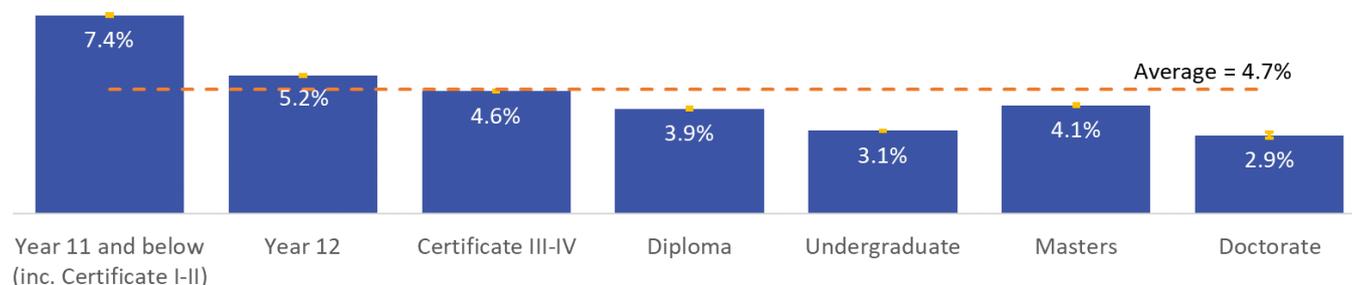
³ Australian Treasury (2007) *Intergenerational report 2007*, Treasury, Canberra, Australia.

⁴ The unemployment rate is defined as the number of people unemployed as a proportion of the labour force.

⁵ Australian Bureau of Statistics (2018) *Labour Force, Australia, Detailed*, Cat. No. 6291.0.55.001.

Higher educational attainment also reduces the time that a person remains unemployed which may indicate their qualifications signal a better fit or greater value to prospective employers.⁶

Figure 2. Unemployment rate of 30-64 year olds who are not currently studying, by highest level of educational attainment, August 2016.



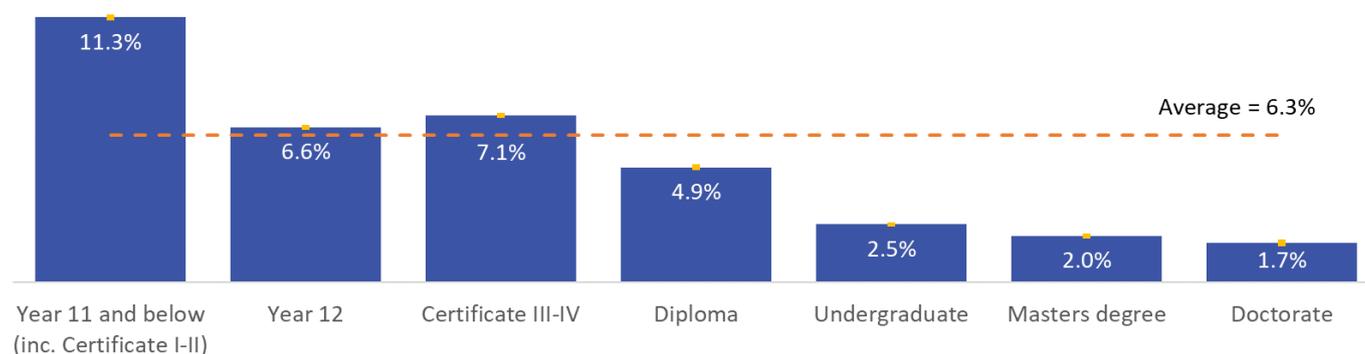
Source: Multi-Agency Data Integration Project 2016

Notes: Average is the proportion all unemployed peoples aged 30-64 who are not currently studying. Post-matching logit likelihood ratio results show educational attainment is associated with unemployment ($\chi^2=26,839$, $p < 0.001$, $N = 5,980,445$). All groups were significantly different, post-matching (Tukey-adjusted pairwise comparisons).

Welfare dependence

In the 2015-16 financial year, the Commonwealth spent \$9.91 billion on the [Newstart Allowance](#) – an income support payment that provides financial assistance for unemployed Australians.⁷ Figure 3 shows that the likelihood of receiving Newstart Allowance generally falls with increasing higher educational attainment. By completing Year 12, an individual was nearly half as likely (6.6 per cent) to be in receipt of the Newstart Allowance, compared to those who only completed Year 11 or below (11.3 per cent). These odds fall to about one-in-seven for those with a Doctorate. This result is consistent with estimated average lifetime welfare costs to government falling with increasing educational attainment.⁸

Figure 3. Proportion of 30-64 year olds receiving Newstart Allowance at least once in the year, who are not currently studying, by highest level of educational attainment, 2016.



Source: Multi-Agency Data Integration Project 2016

Notes: Average is the proportion all peoples aged 30-64 who received some form of income support in 2016. Post-matching logit likelihood ratio results show educational attainment is associated with Newstart Allowance received ($\chi^2 = 106,310$ $p < 0.001$, $N = 7,433,050$). All groups were significantly different, post-matching (Tukey-adjusted pairwise comparisons).

⁶ Chapman B & Lounkaew K (2015) Measuring the value of externalities from higher education, *Higher Education* 70: 767-785.

⁷ DSS Payment Trends and Profile Reports, <https://data.gov.au/dataset/dss-payment-trends-and-profile-reports> [Accessed on 22 April 2019]

⁸ Department of Social Services (2018) *Australian Priority Investment Approach to Welfare, 2017 valuation report*, Canberra Australia ISBN 978-1-76051-793-9

Data and Methodology

The analysis in this paper used linked records from the MADIP Basic Longitudinal Extract 2011-2016 (2016 Cohort) (Cat. No. 1700.0, Microdata: Multi-Agency Data Integration Project, Australia) where persons were aged 30 to 64 years (inclusive), resided in Australia on Census night (excluding overseas visitors) and were not currently studying. To control for confounding factors, randomised control trials were simulated by finding groups of statistically identical people across the following covariates; age, gender, indigenous status, remoteness by state/territory, English-speaking country of birth and family type (coupled or single person with or without dependent children). The same trends were observed in all simulated randomised control trials. This provides the strongest possible evidence of cause and effect in cross-sectional data.