



**2020 Graduate Outcomes  
Survey – Longitudinal**

**AUGUST 2020**

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For more information on the conduct and results of the QILT survey program see the Quality Indicators for Learning and Teaching (QILT) website. The QILT team can be contacted by email at [qilt@srcentre.com.au](mailto:qilt@srcentre.com.au).



# Contents

Acknowledgements	<b>i</b>
Contents	<b>ii</b>
List of tables and figures	<b>iii</b>
Results	<b>1</b>
Undergraduate results	<b>1</b>
Postgraduate coursework graduate	<b>4</b>
Postgraduate research graduate	<b>5</b>
Results by study area	<b>7</b>
Results by institution	<b>8</b>
Skills utilisation	<b>13</b>
Further study	<b>16</b>
Appendix 1 Participating institutions and response characteristics	<b>17</b>
Appendix 2 Definitions	<b>21</b>

Appendix 3 GOS-L 2020 methodological summary	<b>22</b>
Appendix 4 GOS-L 2020 item summary	<b>23</b>
Appendix 5 Additional tables	<b>38</b>
Appendix 6 Impact of COVID-19 on GOS-L undergraduate estimates	<b>47</b>

# List of tables and figures

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## Tables

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1 Short-term and medium-term full-time employment rate for all 2007 to 2017 undergraduates	2
2 Short-term and medium-term outcomes for undergraduates	3
3 Short-term and medium-term outcomes for undergraduates by gender	4
4 Short-term and medium-term outcomes for postgraduate coursework graduates	4
5 Short-term and medium-term outcomes for postgraduate coursework graduates by gender	5
6 Short-term and medium-term outcomes for postgraduate research graduates	6
7 Short-term and medium-term outcomes for postgraduate research graduates by gender	6
8 Short-term and medium-term full-time employment outcomes by level of study and study area (%)	7
9 Short-term and medium-term full-time employment outcomes by university and level of study (%)	11
10 Proportion of employed undergraduates working in occupational groups by study area (%)	14

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11 Undergraduate main reason for working in job in 2020 that doesn't fully use skills and education (%)	15
12 Broad field of education (BFOE) destinations of graduates undertaking further full-time study (%) – undergraduate	16

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## Figures

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1 Undergraduate medium-term full-time employment rate by university, 2020 (%)	9
2 Postgraduate coursework medium-term full-time employment rate by university, 2020 (%)	10

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# Results

The 2020 Graduate Outcomes Survey – Longitudinal (GOS-L) measures the medium-term outcomes of higher education graduates based on a cohort analysis of graduates who responded to the 2017 Graduate Outcomes Survey (GOS). Prior administrations of the GOS-L had instead relied on the Australian Graduate Survey (AGS) for ‘establishment year’ data. The GOS-L is an ongoing part of the Quality Indicators for Learning and Teaching (QILT) survey suite.

Participation in the GOS-L was open to any higher education institution which participated in the 2017 GOS. In total, at all study levels 83 institutions chose to participate, including all 41 Table A and B universities and 42 non-university higher education institutions (NUHEIs). The GOS-L achieved an overall 50.0 per cent response rate, representing 40,153 completed surveys, down from 55.9 per cent and 42,666 completed surveys in 2019 but higher than the 44.3 per cent and 39,744 completed surveys in 2018.

The following report provides high level results from the GOS-L 2020. Further detail is available from [www.qilt.edu.au/](http://www.qilt.edu.au/).

## Undergraduate results

The 2020 GOS-L survey coincided with the introduction of government mandated social distancing measures on 23 March 2020. Only around 5 per cent of total survey responses were received after 23 March. Nominal or crude estimates show a slight reduction in labour market aggregates post 23 March 2020. For example, the estimated undergraduate full-time employment rate falling from 90.2 per cent for survey responses received up to 23 March 2020 and 88.6 per cent for survey responses received after 23 March 2020. However, multivariate analysis shows there was no statistically significant impact of the social distancing measures on estimates of labour market aggregates of full-time employment, overall employment, labour force participation rate, average salaries or hours worked. That is, since only 5 per cent of 2020 GOS-L survey responses were received after the introduction of social distancing measures on 23 March 2020, it is not possible to discern any significant impact on survey estimates of labour market aggregates as a result of COVID-19 in a statistical sense. See Appendix 6 “Impact of COVID-19 on GOS-L undergraduate estimates”.

Therefore, in general, the 2020 GOS-L confirms findings from previous reports, that following a downturn in economic activity, it can take graduates longer to successfully establish themselves in their careers. In 2017, 73.0 per cent of graduates who completed both the Graduate Outcomes Survey (GOS) and Graduate Outcomes Survey (Longitudinal) (GOS-L) were in full-time employment, four months after

completing their course. However, three years later in 2020, the proportion of the same cohort of graduates in full-time employment had risen to 90.1 per cent which represents an increase of 17.1 percentage points from 2017-2020 compared to the difference of 17.5 percentage points from 2016-2019 from 72.6 per cent in 2016 and 90.1 per cent respectively.

The proportion of undergraduates in employment in 2017, four to six months after completing their course was 86.9 per cent, while three years later, 93.3 per cent had secured employment. The labour force participation rate measures the proportion of graduates available for employment. The labour force participation rate of graduates shortly after course completion was 92.3 per cent and this remained unchanged over the medium-term. Three years out, the median salary level among graduates in full-time employment had increased from \$60,000 to \$75,000, an increase of 25 per cent.

Table 1 Short-term and medium-term full-time employment rate for all 2007 to 2017 undergraduates

Short-term outcome		Medium-term outcome		Number of participating institutions
2007 <sup>i</sup>	83.6	2010 <sup>i</sup>	92.6	31
2008 <sup>i</sup>	83.2	2011 <sup>i</sup>	92.8	34
2009 <sup>i</sup>	79.3	2012 <sup>i</sup>	92.2	39
2010 <sup>i</sup>	76.3	2013 <sup>i</sup>	90.2	36
2011 <sup>i</sup>	76.0	2014 <sup>i</sup>	89.2	40
2012 <sup>i</sup>	76.2	2015 <sup>i</sup>	88.5	19
2013 <sup>ii</sup>	70.9	2016 <sup>ii</sup>	88.4	51
2014 <sup>ii</sup>	67.5	2017 <sup>ii</sup>	89.3	54
2015 <sup>ii</sup>	67.1	2018 <sup>ii</sup>	89.2	60
2016 <sup>ii</sup>	72.6	2019 <sup>ii</sup>	90.1	73
2017	73.0	2020	90.1	79

Sources: Beyond Graduation Survey 2010–2015<sup>i</sup> and Graduate Outcomes Survey – Longitudinal 2016–2020.<sup>ii</sup>

<sup>i</sup>NB Results from the GOS-L are consistent with standard ABS labour force definitions unlike previous results presented in the BGS. Using the previous methodology from the BGS, the full-time employment rate in 2015 immediately upon graduation was 68.8 per cent in comparison with 67.1 per cent using the ABS/GOS-L methodology as shown above.

## Overall full-time employed

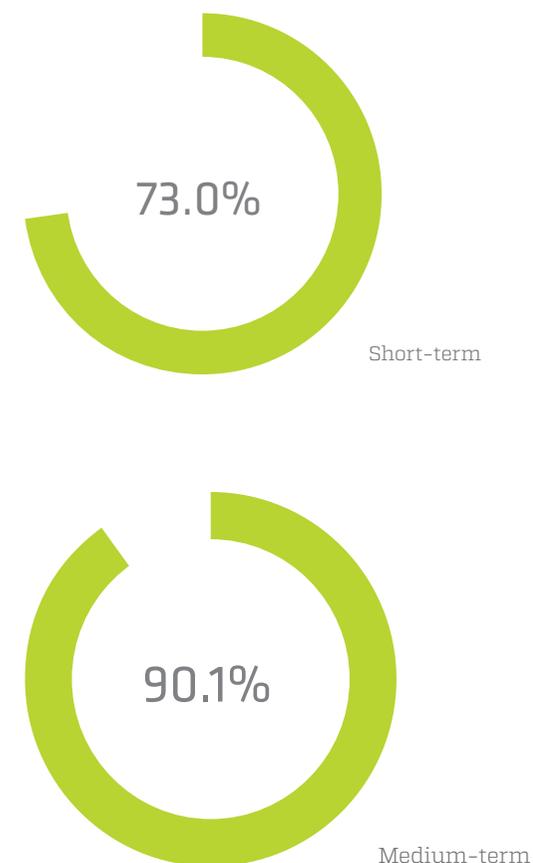


Table 2 Short-term and medium-term outcomes for undergraduates

	Short-term outcomes 2017	Medium-term outcomes 2020
In full-time employment (as a percentage of those available for full-time work)	73.0	90.1
Overall employed (as a percentage of those available for any work)	86.9	93.3
Labour force participation rate (as a percentage of all graduates)	92.3	92.3
Median salary (of those employed full-time)	\$60,000	\$75,000

Table 3 shows that high level undergraduate labour market outcomes are broadly similar for males and females with the notable exception that female graduates earn less than male graduates. In 2017, the gender gap in graduate median salaries was \$2,600 or 4.3 per cent.<sup>1</sup> In 2020, for the same cohort of graduates three years later, the gender gap in graduate median salaries had increased to \$6,900 or 9.4 per cent.

Previous research suggests that one of the key factors contributing to the gender gap in graduate median salaries is that females tend to graduate from fields of education that achieve lower salaries e.g. Humanities, whereas males tend to graduate from more highly remunerated fields e.g. Engineering. However, female graduates often earn less than their male graduates within the same field of education. For example, undergraduate study areas with large gender gaps in salaries three years out include Architecture and built environment, \$13,400 or 20 per cent, Health services and support, \$8,500 or 11 per cent, Social work, \$6,900 or 9 per cent, Nursing with \$6,600 or 9 per cent, and the largest study area, Business and management, where the gender gap is \$5,900 or 8 per cent. There are some exceptions where females are paid more than males such as in Creative arts, \$2,500 or 4 per cent, There are also some study areas with no, or very little gender gap in salaries such as Computing and information systems where salaries are equal, and Engineering where males are paid \$500 or 1 per cent more than females three years after graduation. This information is available in the PowerBI Dashboard accompanying this report.

**93.3%**

of undergraduates in overall employment (medium-term)

**92.3%**

undergraduate labour force participation rate (medium-term)

**\$75,000**

undergraduate median salary (medium-term)

<sup>1</sup> The gender pay gap is calculated as  $100 \times (\text{Male salaries} - \text{Female salaries}) / \text{Male salaries}$  consistent with the methodology used by the Workplace Gender Equality Agency (WGEA). Prior to 2018, the Graduate Outcomes Survey- Longitudinal used female salaries in the denominator.

Table 3 Short-term and medium-term outcomes for undergraduates by gender

	Short-term outcomes 2017			Medium-term outcomes 2020		
	Male	Female	Total	Male	Female	Total
Full-time employment (as a percentage of the full-time labour force i.e. those available for full-time work)	72.5	73.2	73.0	90.2	90.1	90.1
Overall employment (as a percentage of the labour force i.e. those available for any work)	84.8	87.9	86.9	92.6	93.7	93.3
Labour force participation rate (as a percentage of all graduates)	91.7	92.5	92.3	92.4	92.3	92.3
Median salary (of those employed full-time)	\$62,600	\$60,000	\$60,000	\$80,000	\$73,100	\$75,000

### Postgraduate coursework graduate results

In 2017, 86.2 per cent of postgraduate coursework graduates were in full-time employment four to six months after completing their course, as shown in Table 4. Three years later in 2020, the proportion in full-time employment had risen to 94.1 per cent which was 4.0 percentage points higher than for those who had completed undergraduate qualifications. The proportion of graduates in employment in 2017, four to six months after completing their course was 92.9 per cent, and three years later remained strong with 95.8 per cent having secured employment. The labour force participation rate measures the proportion of all graduates entering the labour force. The labour force participation rate of graduates shortly after course completion was 95.8 per cent which decreased slightly to 94.5 per cent over the medium-term. Three years out, the median salary level of postgraduate coursework graduates in full-time employment increased from \$83,300 to \$98,000, an increase of 17.6 per cent. The salary outcomes for postgraduate coursework graduates are much higher than for undergraduates, being \$23,300 in the short-term and \$23,000 in the medium-term. In part, this may reflect the fact many postgraduate coursework graduates are well established in their careers before they commence further study. This is demonstrated by the higher proportion of postgraduate coursework graduates who study externally as they combine careers and study.

Table 4 Short-term and medium-term outcomes for postgraduate coursework graduates

	Short-term outcomes 2017	Medium-term outcomes 2020
In full-time employment (as a percentage of those available for full-time work)	86.2	94.1
Overall employed (as a percentage of those available for any work)	92.9	95.8
Labour force participation rate (as a percentage of all graduates)	95.8	94.5
Median salary (of those employed full-time)	\$83,300	\$98,000

**\$83,300**

postgraduate coursework median salary (short-term)

**\$98,000**

postgraduate coursework median salary (medium-term)

Overall, in the short-term fewer female postgraduate coursework graduates were in full time employment by 3.1 percentage points, however they had a slightly higher rate three years later with 94.4 per cent compared with 93.7 per cent for males. The gender gap in salaries is more pronounced at postgraduate coursework level than for undergraduates. In 2017, four to six months after completion of their studies, the median salary of male postgraduate coursework graduates was \$15,900 or 16.9 per cent higher than females, as shown by Table 5. This gap has increased to \$17,200 in dollar terms, which represents 15.8 per cent of the full-time median female salary, three years after graduation in 2020. The gender gap in salaries among postgraduate coursework graduates persists across all study areas, in particular, in Medicine, Business and management, Health services and support and Science and mathematics, with gender pay gaps in excess of 15 per cent three years after course completion. This is likely due to a range of factors such as occupation, age, experience, personal factors and possible inequalities within workplaces.

Table 5 Short-term and medium-term outcomes for postgraduate coursework graduates by gender

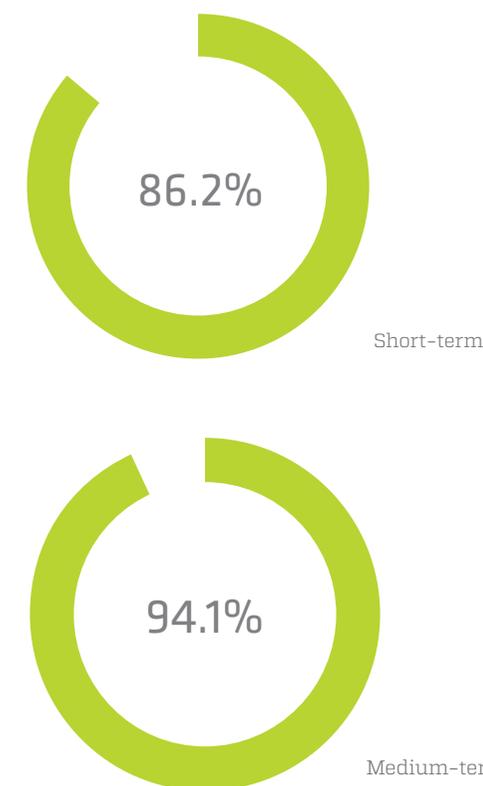
	Short-term outcomes 2017			Medium-term outcomes 2020		
	Male	Female	Total	Male	Female	Total
Full-time employment (as a percentage of the full-time labour force i.e. those available for full-time work)	88.1	85.0	86.2	93.7	94.4	94.1
Overall employment (as a percentage of the labour force i.e. those available for any work)	92.4	93.1	92.9	95.5	96.0	95.8
Labour force participation rate (as a percentage of all graduates)	96.6	95.4	95.8	95.6	94.0	94.5
Median salary (of those employed full-time)	\$93,900	\$78,000	\$83,300	\$109,000	\$91,800	\$98,000

### Postgraduate research graduate results

In 2017, 81.4 per cent of postgraduate research graduates were in full-time employment compared with 73.0 per cent of those who had completed undergraduate qualifications and 86.2 per cent of those who had completed postgraduate coursework qualifications, four to six months after completing their course. However, three years later in 2020, the gap in full-time employment rates between these groups of graduates had narrowed with 90.1 per cent of both postgraduate research graduates and undergraduates in full-time employment compared with 94.1 per cent of postgraduate coursework graduates.

The proportion of postgraduate research graduates in employment in 2017, four to six months after completing their course was 91.3 per cent and three years later this had increased slightly to 92.6 per cent, as shown by Table 6. The labour force participation rate of postgraduate research graduates shortly after course completion was 95.7 per cent which was slightly lower in the medium-term at 93.6

### Postgraduate coursework graduates employed full-time



per cent. Three years out the median salary level among postgraduate research graduates in full-time employment had increased from \$89,500 to \$103,000, an increase of 15.1 per cent. This is slightly lower than growth in postgraduate coursework graduate salaries of 17.6 per cent and lower than growth in undergraduate salaries of 25 per cent.

The gender gap in postgraduate research graduate salaries was \$1,200 or 2.2 per cent in 2017 four to six months after graduation. Three years later this gap had widened to \$4,000 or 3.8 per cent.

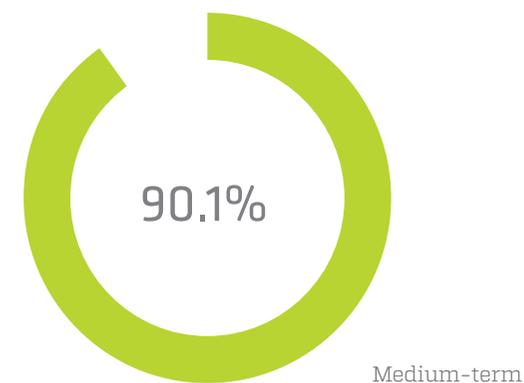
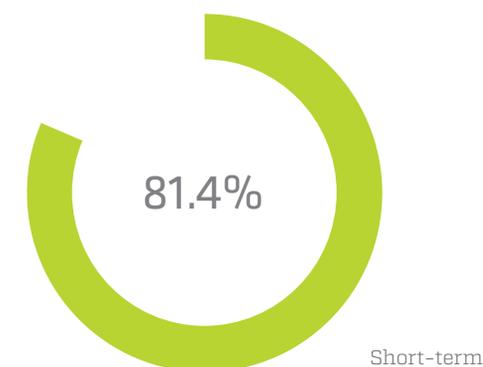
Table 6 Short-term and medium-term outcomes for postgraduate research graduates

	Short-term outcomes 2017	Medium-term outcomes 2020
In full-time employment (as a percentage of those available for full-time work)	81.4	90.1
Overall employed (as a percentage of those available for any work)	91.3	92.6
Labour force participation rate (as a percentage of all graduates)	95.7	93.6
Median salary (of those employed full-time)	\$89,500	\$103,000

Table 7 Short-term and medium-term outcomes for postgraduate research graduates by gender

	Short-term outcomes 2017			Medium-term outcomes 2020		
	Male	Female	Total	Male	Female	Total
Full-time employment (as a percentage of the full-time labour force i.e. those available for full-time work)	81.5	81.4	81.4	88.7	91.1	90.1
Overall employment (as a percentage of the labour force i.e. those available for any work)	91.7	91.0	91.3	90.7	93.9	92.6
Labour force participation rate (as a percentage of all graduates)	96.0	95.5	95.7	91.9	94.7	93.6
Median salary (of those employed full-time)	\$90,000	\$88,000	\$89,500	\$105,000	\$101,000	\$103,000

## Postgraduate research graduates employed full-time



**\$103,000**  
postgraduate research median salary  
(medium-term)

## Results by study area

In 2017, the proportion of undergraduates in full-time employment across study areas ranged from 96.6 per cent for Medicine, 95.1 per cent for Pharmacy and 86.2 per cent for Dentistry, compared to 53.4 per cent for Creative arts, 61.6 per cent for Science and mathematics, 61.9 per cent for Humanities, culture and social sciences and 62.0 per cent for Psychology, with a range between the highest and lowest full-time employment rates of 43.2 percentage points.

By 2020, this range had contracted to 18.9 percentage points with modest increases in full-time employment rates to 98.3 per cent for Dentistry, 97.3 per cent for Medicine, 96.7 per cent for Rehabilitation and 95.7 per cent for Pharmacy. The areas with lower full-time employment rates three years later saw larger increases up to 79.4 per cent for those who had completed courses in Creative arts, 84.6 per cent for those who had completed courses in Tourism, hospitality, personal services, sport and recreation and 84.9 per cent for those who had completed courses in Communications.

This continues to demonstrate an important point that while undergraduates from some fields of education, in particular, those with generalist degrees have weaker employment outcomes soon after completing their course, the gap in employment outcomes across fields of education tends to narrow over time.

Table 8 Short-term and medium-term full-time employment outcomes by level of study and study area (%)

Study area	Undergraduate		Postgraduate coursework		Postgraduate research	
	2017	2020	2017	2020	2017	2020
Science and mathematics	61.6	87.1	76.1	88.6	80.4	90.9
Computing and information systems	76.7	92.9	85.0	88.7	76.9	89.5
Engineering	81.8	95.4	90.6	95.1	75.4	90.8
Architecture and built environment	76.6	90.1	84.5	92.0	n/a	n/a
Agriculture and environmental studies	69.2	91.7	77.9	93.9	70.4	90.7
Health services and support	73.0	92.4	84.1	94.9	92.2	96.6
Medicine	96.6	97.3	97.5	98.0	93.0	94.0
Nursing	80.1	92.1	93.9	96.3	n/a	n/a
Pharmacy	95.1	95.7	98.0	97.8	n/a	n/a

# 98.3%

highest medium-term proportion of undergraduates in full-time employment (Dentistry)



# 79.4%

lowest medium-term proportion of undergraduates in full-time employment (Creative arts)



Dentistry	86.2	98.3	90.0	94.1	n/a	n/a
Veterinary science	84.3	90.3	89.2	94.4	n/a	n/a
Rehabilitation	86.1	96.7	93.8	98.6	n/a	n/a
Teacher education	83.6	93.8	84.6	94.6	88.5	88.4
Business and management	79.3	92.9	89.9	95.1	73.9	80.2
Humanities, culture and social sciences	61.9	87.0	81.2	90.5	73.7	87.1
Social work	73.1	92.8	80.1	92.8	n/a	n/a
Psychology	62.0	87.2	83.1	92.6	88.9	90.6
Law and paralegal studies	75.4	91.6	88.9	96.7	n/a	n/a
Creative arts	53.4	79.4	68.1	87.1	77.9	85.5
Communications	65.3	84.9	75.5	88.0	n/a	n/a
Tourism, hospitality, personal services, sport and recreation	63.8	84.6	n/a	n/a	n/a	n/a
<b>All study areas</b>	<b>73.0</b>	<b>90.1</b>	<b>86.2</b>	<b>94.1</b>	<b>81.4</b>	<b>90.1</b>

Note: Cells marked with n/a had too few responses for meaningful analysis.

In general terms, trends in employment outcomes for postgraduate coursework and postgraduate research graduates over time are similar to, but less pronounced than those observed for undergraduates. That is, graduates from more vocationally oriented programs such as Medicine tend to have higher rates of full-time employment in the short-term than more generalist study areas such as Science and mathematics, and Humanities, culture and social sciences. However, the gap in employment rates between those with vocational and generalist degrees diminishes over time.

## Results by institution

Three years after graduation there has been substantial improvement in full-time employment rates across universities so that all universities have full-time employment rates for undergraduates above 81 per cent with 12 institutions' full-time employment rates increasing by more than 20 percentage points over this period.

# 98.6%

highest medium-term proportion of postgraduate coursework graduates in full-time employment (Rehabilitation)



# 96.6%

highest medium-term proportion of postgraduate research graduates in full-time employment (Health services and support)



Figure 1 Undergraduate medium-term full-time employment rate by university, 2020 (%)

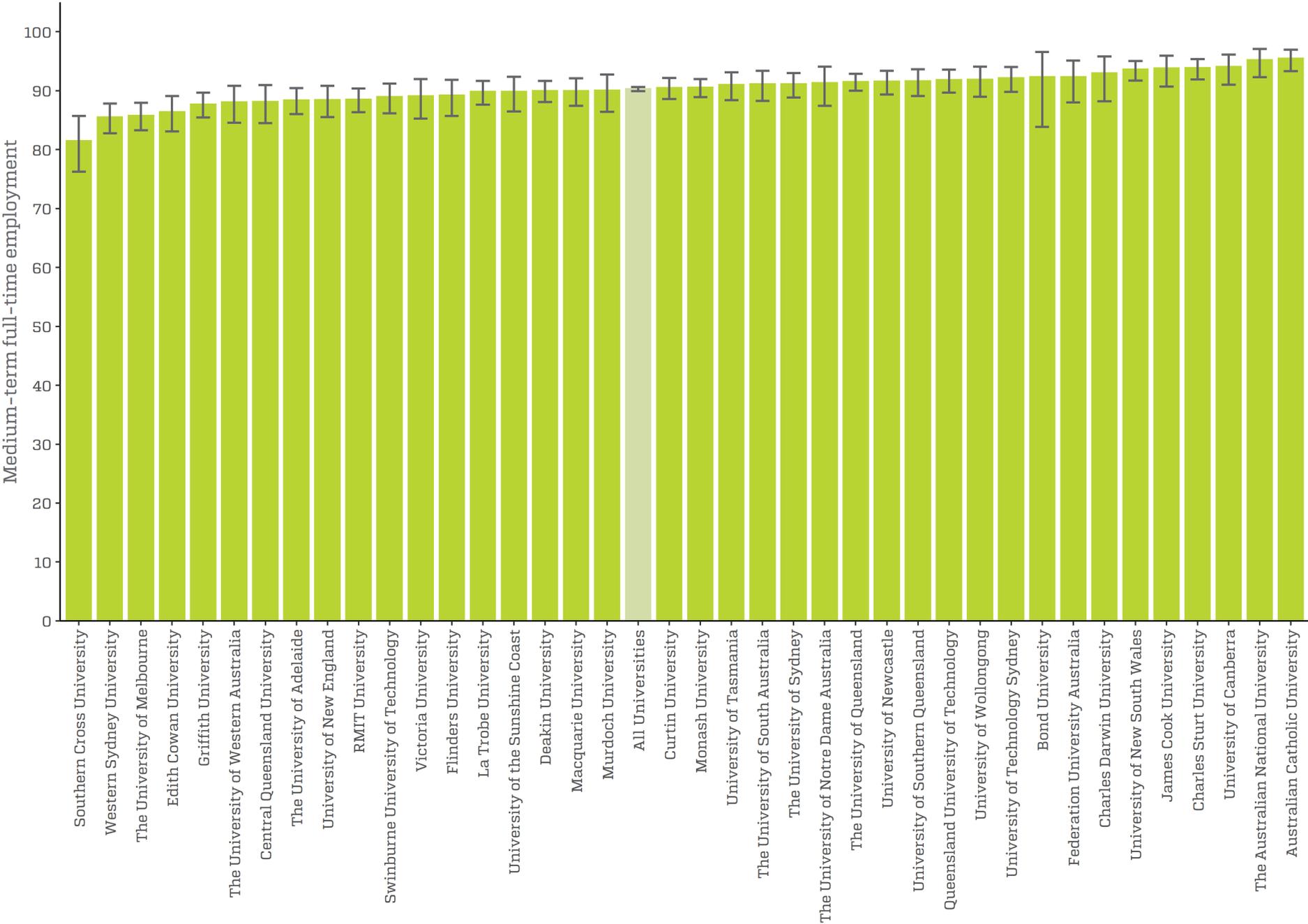
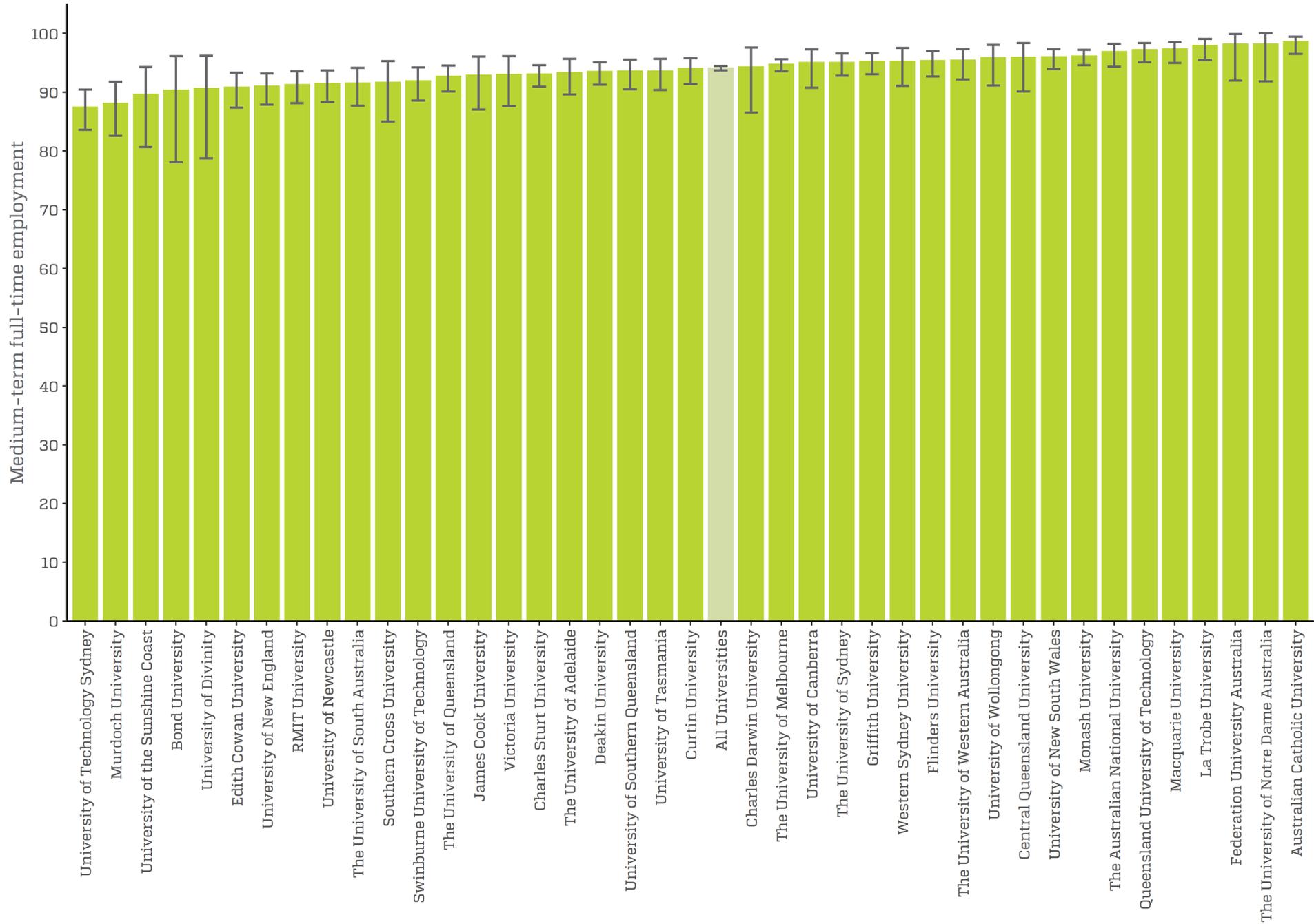


Figure 2 Postgraduate coursework medium-term full-time employment rate by university, 2020 (%)



It is important to acknowledge that factors beyond the quality of teaching, careers advice and the like, such as course offerings, the composition of the student population and variations in state/territory and regional labour markets, might also impact on employment outcomes. Nevertheless, it appears there is differentiation among universities with some achieving higher rates of full-time employment over the medium-term than others.

Three years after graduation, universities with high full-time employment rates for undergraduates include Australian Catholic University, 95.5 per cent, The Australian National University, 95.2 per cent, University of Canberra 94.1 per cent, Charles Sturt University, 93.9 per cent, James Cook University, 93.8 per cent, University of New South Wales, 93.6 per cent, and Charles Darwin University with 93.0 per cent.

At postgraduate coursework level, universities with high full-time employment rates three years after graduation include the Australian Catholic University, 98.6 per cent, Federation University Australia, 98.2 per cent, The University of Notre Dame Australia, 98.2 per cent, La Trobe University, 97.9 per cent, Macquarie University, 97.3 per cent, and Queensland University of Technology with 97.2 per cent.

Institutional results are not available at postgraduate research graduate level as there are too few survey responses. Table 6 shows 90% confidence intervals to assist in interpreting results.

All universities reported having full-time employment rates for undergraduates above **81%** three years following their graduation.



Table 9 Short-term and medium-term full-time employment outcomes by university and level of study (%)

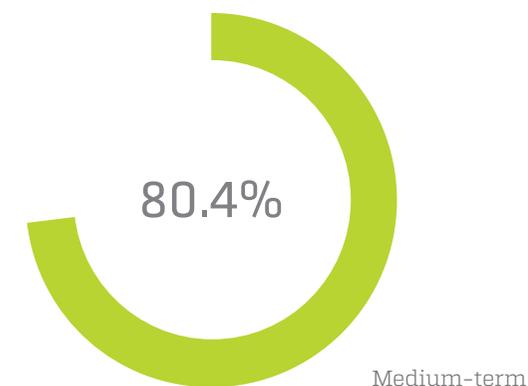
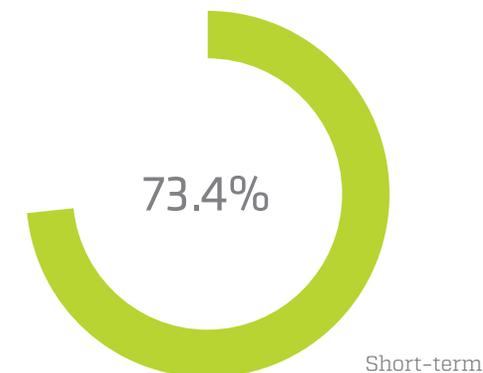
University	Undergraduate		Postgraduate coursework	
	Short-term outcomes 2017	Medium-term outcomes 2020	Short-term outcomes 2017	Medium-term outcomes 2020
Australian Catholic University	83.4 (79.9, 86.3)	95.5 (93.3, 97.0)	90.6 (87.0, 93.2)	98.6 (96.5, 99.5)
Bond University	77.8 (66.4, 86.0)	92.3 (83.8, 96.6)	74.3 (61.3, 83.8)	90.3 (78.1, 96.1)
Central Queensland University	80.4 (76.2, 84.0)	88.1 (84.5, 90.9)	92.3 (85.1, 96.1)	95.9 (90.1, 98.4)
Charles Darwin University	80.5 (74.6, 85.1)	93.0 (88.2, 95.8)	83.6 (74.5, 89.6)	94.2 (86.5, 97.6)
Charles Sturt University	84.8 (82.1, 87.2)	93.9 (91.9, 95.4)	87.3 (84.7, 89.4)	93.0 (90.9, 94.6)
Curtin University	70.5 (67.6, 73.2)	90.5 (88.6, 92.1)	87.7 (84.5, 90.2)	94.0 (91.4, 95.8)
Deakin University	73.0 (70.1, 75.6)	90.0 (88.1, 91.6)	81.8 (78.6, 84.5)	93.5 (91.3, 95.1)
Edith Cowan University	63.0 (58.5, 67.1)	86.4 (83.1, 89.1)	78.1 (73.6, 82.0)	90.8 (87.4, 93.3)
Federation University Australia	75.2 (69.0, 80.3)	92.3 (88.0, 95.1)	85.2 (76.8, 90.7)	98.2 (92.0, 99.9)
Flinders University	67.8 (62.8, 72.4)	89.2 (85.7, 91.9)	87.7 (84.2, 90.5)	95.3 (92.6, 97.0)
Griffith University	66.1 (62.9, 69.0)	87.7 (85.4, 89.6)	84.4 (81.3, 87.0)	95.2 (93.1, 96.6)

University	Undergraduate		Postgraduate coursework	
	Short-term outcomes 2017	Medium-term outcomes 2020	Short-term outcomes 2017	Medium-term outcomes 2020
James Cook University	82.5 (78.0, 86.1)	93.8 (90.6, 95.9)	87.2 (81.0, 91.4)	92.9 (87.0, 96.0)
La Trobe University	71.2 (67.9, 74.2)	89.8 (87.6, 91.6)	86.2 (82.1, 89.4)	97.9 (95.5, 99.0)
Macquarie University	75.1 (71.3, 78.4)	90.0 (87.4, 92.1)	89.1 (85.5, 91.8)	97.3 (95.0, 98.5)
Monash University	75.3 (72.8, 77.6)	90.6 (88.9, 92.0)	84.6 (82.1, 86.8)	96.1 (94.6, 97.2)
Murdoch University	60.2 (54.8, 65.3)	90.0 (86.4, 92.7)	69.8 (63.0, 75.7)	88.0 (82.6, 91.8)
Queensland University of Technology	74.3 (71.0, 77.3)	91.8 (89.7, 93.6)	90.3 (87.1, 92.7)	97.2 (95.1, 98.4)
RMIT University	72.2 (69.1, 75.0)	88.5 (86.3, 90.3)	81.0 (77.0, 84.4)	91.3 (88.1, 93.5)
Southern Cross University	71.3 (65.4, 76.5)	81.5 (76.2, 85.7)	85.3 (77.4, 90.5)	91.7 (85.0, 95.3)
Swinburne University of Technology	71.5 (67.7, 74.9)	88.9 (86.2, 91.2)	81.3 (77.2, 84.8)	91.9 (88.5, 94.2)
The Australian National University	67.1 (61.2, 72.4)	95.2 (92.3, 97.1)	86.8 (82.9, 89.9)	96.8 (94.3, 98.2)
The University of Adelaide	64.5 (60.7, 68.2)	88.4 (86.0, 90.4)	79.1 (73.8, 83.5)	93.3 (89.6, 95.7)
The University of Melbourne	66.8 (62.6, 70.7)	85.8 (83.3, 88.0)	89.3 (87.8, 90.6)	94.7 (93.6, 95.6)
The University of Notre Dame Australia	80.2 (75.4, 84.2)	91.4 (87.5, 94.1)	92.6 (84.4, 96.7)	98.2 (91.8, 100.0)
The University of Queensland	72.5 (70.1, 74.8)	91.5 (90.0, 92.8)	80.5 (77.2, 83.4)	92.7 (90.1, 94.5)
The University of South Australia	74.6 (70.5, 78.3)	91.1 (88.2, 93.3)	79.4 (74.6, 83.4)	91.5 (87.7, 94.1)
The University of Sydney	75.1 (71.7, 78.2)	91.1 (88.8, 93.0)	88.2 (85.3, 90.6)	95.0 (92.8, 96.6)
The University of Western Australia	57.6 (51.8, 63.1)	88.0 (84.5, 90.8)	82.1 (77.2, 86.1)	95.4 (92.1, 97.3)
Torrens University	n/a	n/a	n/a	n/a
University of Canberra	73.9 (69.0, 78.3)	94.1 (91.0, 96.1)	90.7 (85.6, 93.9)	95.0 (90.8, 97.2)
University of Divinity	n/a	n/a	91.4 (80.4, 96.5)	90.6 (78.7, 96.2)
University of New England	81.1 (77.6, 84.2)	88.4 (85.5, 90.8)	83.5 (79.8, 86.5)	91.0 (87.9, 93.2)
University of New South Wales	79.4 (76.4, 82.1)	93.6 (91.7, 95.1)	93.3 (91.0, 95.1)	96.0 (93.9, 97.3)
University of Newcastle	72.4 (69.1, 75.5)	91.6 (89.4, 93.3)	91.0 (87.9, 93.2)	91.4 (88.3, 93.7)
University of Southern Queensland	78.7 (75.2, 81.7)	91.7 (89.1, 93.6)	90.7 (87.3, 93.2)	93.5 (90.5, 95.5)
University of Tasmania	74.0 (70.0, 77.6)	91.0 (88.4, 93.1)	91.8 (88.5, 94.1)	93.5 (90.3, 95.7)

University	Undergraduate		Postgraduate coursework	
	Short-term outcomes 2017	Medium-term outcomes 2020	Short-term outcomes 2017	Medium-term outcomes 2020
University of Technology Sydney	77.1 (73.5, 80.2)	92.2 (89.8, 94.0)	85.8 (81.9, 88.9)	87.4 (83.6, 90.4)
University of the Sunshine Coast	67.1 (62.3, 71.5)	89.8 (86.5, 92.4)	71.2 (61.1, 79.1)	89.6 (80.6, 94.3)
University of Wollongong	76.4 (72.1, 80.2)	91.9 (88.9, 94.1)	87.4 (81.0, 91.6)	95.8 (91.1, 98.1)
Victoria University	68.3 (62.9, 73.1)	89.1 (85.2, 92.0)	78.4 (71.3, 84.1)	93.0 (87.6, 96.1)
Western Sydney University	73.5 (70.0, 76.7)	85.5 (82.8, 87.8)	84.8 (79.0, 89.1)	95.2 (91.1, 97.5)
<b>All Universities</b>	<b>73.3 (72.7, 73.9)</b>	<b>90.3 (89.9, 90.6)</b>	<b>86.1 (85.5, 86.6)</b>	<b>94.1 (93.7, 94.4)</b>

Note: Cells marked with n/a had too few responses for meaningful analysis.

## Undergraduates employed full-time working in managerial or professional occupations



## Skills utilisation

In terms of whether graduates are fully utilising their skills, the 2020 GOS-L survey finds that over time, many more of those who have completed undergraduate qualifications find work in managerial and professional occupations. These are occupations defined by the ABS as being commensurate with requiring bachelor level or higher qualifications.

In the short-term, 73.4 per cent of undergraduates working full-time upon graduation were employed in managerial and professional occupations. This figure increased by 7.0 percentage points to 80.4 per cent three years after graduation slightly lower than the figure of 80.7 per cent in 2019 and 2018.

61.7 per cent of all employed graduates who had completed an undergraduate qualification were working in professional and managerial occupations immediately upon graduation rising by 14.5 percentage points to 76.3 per cent three years later, as shown by Table 10.

Study areas that showed large gains in the proportion of undergraduates employed in managerial or professional occupations after three years, that is increases of over 20 percentage points, were Psychology, Law and paralegal studies, Humanities, culture and social sciences and Science and mathematics.

Table 10 Proportion of employed undergraduates working in occupational groups by study area (%)

Study area	Managers		Professionals		All other occupations		All employed	
	2017	2020	2017	2020	2017	2020	2017	2020
Science and mathematics	4.1	4.8	44.8	64.8	51.0	30.4	100.0	100.0
Computing and Information Systems	8.5	6.4	66.1	78.0	25.4	15.6	100.0	100.0
Engineering	6.3	8.0	71.5	79.0	22.2	13.0	100.0	100.0
Architecture and built environment	10.5	10.3	46.8	54.5	42.8	35.2	100.0	100.0
Agriculture and environmental studies	10.4	9.8	42.1	57.5	47.6	32.7	100.0	100.0
Health services and support	2.9	3.9	47.5	62.5	49.6	33.6	100.0	100.0
Medicine	0.0	0.5	93.4	94.1	6.6	5.4	100.0	100.0
Nursing	0.9	1.2	85.6	92.2	13.5	6.6	100.0	100.0
Pharmacy	0.0	5.8	94.3	89.3	5.7	4.9	100.0	100.0
Dentistry	0.0	4.2	55.0	50.0	45.0	45.8	100.0	100.0
Veterinary science	1.9	1.7	54.6	67.5	43.5	30.8	100.0	100.0
Rehabilitation	1.3	1.3	88.5	96.0	10.1	2.7	100.0	100.0
Teacher education	2.6	3.3	87.2	88.7	10.1	8.0	100.0	100.0
Business and management	14.6	17.4	50.3	62.2	35.1	20.4	100.0	100.0
Humanities, culture and social sciences	6.7	7.5	37.9	57.8	55.4	34.7	100.0	100.0
Social work	3.5	5.0	54.8	70.7	41.6	24.3	100.0	100.0
Psychology	6.5	6.5	37.1	63.5	56.4	29.9	100.0	100.0
Law and paralegal studies	6.8	7.7	44.3	69.7	48.8	22.6	100.0	100.0
Creative arts	4.6	8.2	43.3	57.9	52.1	33.9	100.0	100.0
Communications	8.8	13.0	45.6	60.6	45.7	26.3	100.0	100.0
Tourism, hospitality, personal Services, sport and recreation	21.6	20.4	15.7	33.3	62.7	46.3	100.0	100.0
<b>All fields</b>	<b>6.2</b>	<b>7.5</b>	<b>55.5</b>	<b>68.8</b>	<b>38.3</b>	<b>23.7</b>	<b>100.0</b>	<b>100.0</b>

The proportion of graduates reporting they are not utilising their skills or education in their current job is an important indicator of the underutilisation of graduate skills and as such it is important to monitor this over time. Immediately following graduation 40.9 per cent of employed undergraduates reported their skills and qualifications were not fully utilised. This declined to 26.7 per cent three years after graduation in 2020. This is a slight improvement in medium-term outcomes from 27.1 per cent in 2019 and 27.2 per cent in 2018.

Of those who were employed full-time, 22.0 per cent felt that they were not fully using their skills or education in their current positions three years after graduation in 2020, down slightly from 22.4 per cent in 2019 and 22.6 per cent in 2018.

While the most commonly cited reason for employed graduates working in a job that did not fully utilise their skills and education three years after graduation was because the graduate was satisfied with their current job, 20.6 per cent, a sizeable proportion, 19.4 per cent said this was because there were no suitable jobs in their area of expertise. A further 13.9 per cent said they were not fully utilising their skills or education because there were no suitable jobs in their local area. Other employed respondents gave personal reasons for working in jobs that did not fully utilise their skills or education such as the 15.8 per cent who were engaged in further full-time study.

Table 11 Undergraduate main reason for working in job in 2020 that doesn't fully use skills and education (%)

Reason	Full-time employment	Overall employment
Studying	5.7	15.8
I'm satisfied with my current job	25.7	20.6
Changing jobs/careers	2.5	2.0
Entry level job/career stepping stone	2.0	1.5
Caring for children or family member	2.0	3.0
<b>Sub total – personal factors</b>	<b>37.9</b>	<b>42.9</b>
No suitable jobs in my area of expertise	20.5	19.4
No suitable jobs in my local area	14.6	13.9
Considered to be too young by employers	6.5	4.6
Not enough work experience	3.1	3.0
No jobs with a suitable number of hours	2.4	2.6
Cannot find a job	1.6	1.6
My job is temporary/casual	0.2	0.3
<b>Sub total – labour market factors</b>	<b>48.9</b>	<b>45.3</b>

Immediately following graduation **40.9%** of employed undergraduates reported their skills and qualifications were not fully utilised.

This declined to **26.7%** three years after graduation in 2020.

Reason	Full-time employment	Overall employment
Other	13.2	11.8
<b>Extent to which skills and education are not fully utilised</b>	<b>22.0</b>	<b>26.7</b>

## Further study

Around a fifth, or 20.5 per cent, of undergraduate respondents were engaged in further study four to six months after completing their qualification (see Table 25 in accompanying data tables). Fewer students, 14.5 per cent, were enrolled in further study three years following graduation. Health, Society and culture and Natural and physical sciences were the most popular fields of education for further study immediately following graduation. Among graduates who were engaged in further full-time study three years after completion of their undergraduate award in 2020 the most popular field of education was Health, attracting 41.1 per cent of these respondents, as shown by Table 12.

Table 12 **Broad field of education (BFOE) destinations of graduates undertaking further full-time study (%) – undergraduate**

Study area	Current study 2017	Current study 2020
Natural and physical sciences	14.9	13.5
Information technology	1.6	2.2
Engineering and related technologies	3.5	3.8
Architecture and building	2.0	1.2
Agriculture, environmental and related studies	1.8	1.7
Health	30.3	41.1
Education	8.0	7.2
Management and commerce	5.9	4.6
Society and culture	22.0	18.4
Creative arts	7.2	4.1
Food, hospitality and personal services	0.1	0.4
Mixed field programmes	2.5	1.6
Other (please specify)	0.2	0.2
<b>All fields</b>	<b>100.0</b>	<b>100.0</b>

# Appendix 1

## Participating institutions and response characteristics

Participation in the 2020 GOS-L was open to any higher education institution which participated in the 2017 Graduate Outcomes Survey (GOS). 83 institutions in total chose to participate, including all 41 universities and 42 non-university higher education institutions (NUHEIs). The GOS-L achieved an overall 50.0 per cent response rate, representing 40,153 completed surveys, compared to the response rate in 2019 of 55.9 per cent and in 2018 of 44.3 per cent.

Table 1.1 GOS-L 2020 Operational Summary

Operational summary	2020 University	2020 NUHEIs	2020 Total
Number of participating institutions	41	42	83
GOS responses	120,115	4,722	124,837
Final in-scope	77,204	3,087	80,291
Number of completed surveys	38,760	1,393	40,153
<b>Response rate (%) -Prior to 2019</b>	<b>50.2</b>	<b>45.1</b>	<b>50.0</b>

Overall, the undergraduate response rate was 49.5 per cent, postgraduate coursework, 49.7 per cent and postgraduate research, 60.9 per cent of the usable sample after data was cleaned and opt-outs and out of scope were removed. Table 1.2 below shows response rates by institution for all study levels for the 2020 GOS-L.

Table 1.2 2020 GOS-L university response rates (All study levels)

Institution	GOS responses	Final in-scope	Completed	Response rate (%)
Australian Catholic University	2,667	1,610	807	50.1
Bond University	780	389	148	38.0
Central Queensland University	2,153	1,096	504	46.0
Charles Darwin University	856	584	302	51.7
Charles Sturt University	3,470	2,479	1,272	51.3
Curtin University	3,899	2,959	1,432	48.4
Deakin University	6,066	2,997	1,653	55.2
Edith Cowan University	2,381	1,552	832	53.6
Federation University Australia	1,293	885	349	39.4

<b>Institution</b>	<b>GOS responses</b>	<b>Final in-scope</b>	<b>Completed</b>	<b>Response rate (%)</b>
Flinders University	2,289	1,714	861	<b>50.2</b>
Griffith University	4,741	3,117	1,560	<b>50.0</b>
James Cook University	1,339	896	483	<b>53.9</b>
La Trobe University	3,192	2,216	1,220	<b>55.1</b>
Macquarie University	3,366	2,268	1,043	<b>46.0</b>
Monash University	8,708	4,710	2,380	<b>50.5</b>
Murdoch University	1,387	1,016	527	<b>51.9</b>
Queensland University of Technology	2,736	1,967	1,122	<b>57.0</b>
RMIT University	5,091	3,046	1,374	<b>45.1</b>
Southern Cross University	1,051	764	349	<b>45.7</b>
Swinburne University of Technology	2,624	1,781	865	<b>48.6</b>
The Australian National University	1,956	1,378	762	<b>55.3</b>
The University of Adelaide	3,240	2,141	1,104	<b>51.6</b>
The University of Melbourne	8,141	5,449	3,002	<b>55.1</b>
The University of Notre Dame Australia	1,063	715	334	<b>46.7</b>
The University of Queensland	6,804	3,896	2,325	<b>59.7</b>
The University of South Australia	2,600	1,760	799	<b>45.4</b>
The University of Sydney	4,854	3,022	1,398	<b>46.3</b>
The University of Western Australia	2,607	1,790	806	<b>45.0</b>
University of Canberra	1,587	1,039	526	<b>50.6</b>
University of Divinity	259	158	102	<b>64.6</b>
University of New England	1,887	1,337	816	<b>61.0</b>
University of New South Wales	5,111	3,185	1,416	<b>44.5</b>
University of Newcastle	3,176	2,218	1,080	<b>48.7</b>
University of Southern Queensland	1,952	1,409	761	<b>54.0</b>

Institution	GOS responses	Final in-scope	Completed	Response rate (%)
University of Tasmania	2,563	1,811	999	55.2
University of Technology Sydney	3,329	2,025	908	44.8
University of the Sunshine Coast	1,166	891	462	51.9
University of Wollongong	1,987	1,332	603	45.3
Victoria University	2,153	1,321	536	40.6
<b>Western Sydney University</b>	<b>3,525</b>	<b>2,232</b>	<b>914</b>	<b>40.9</b>
<b>All Universities</b>	<b>120,115</b>	<b>77,204</b>	<b>38,760</b>	<b>50.2</b>

Table 1.3 2020 GOS-L NUHEI response rates (All study levels)

Institution	GOS responses	Final in-scope	Completed	Response rate (%)
Academy of Information Technology	40	24	8	33.3
ACAP and NCPS	427	304	161	53.0
Alphacrucis College				
Australian College of Christian Studies	4	2	2	100.0
Australian College of Theology Limited	315	184	130	70.7
Australian Institute of Business Pty Ltd	488	358	181	50.6
Australian Institute of Professional Counsellors	14	13	6	46.2
Avondale College of Higher Education	136	96	48	50.0
Box Hill Institute	66	36	20	55.6
Christian Heritage College	84	58	31	53.4
Collarts (Australian College of the Arts)				
Eastern College Australia	47	34	18	52.9
Endeavour College of Natural Health	216	155	85	54.8
Excelsia College	46	36	23	63.9
Holmes Institute	242	156	43	27.6

Institution	GOS responses	Final in-scope	Completed	Response rate (%)
Holmesglen Institute	80	57	26	45.6
International College of Management, Sydney	93	58	14	24.1
Jazz Music Institute	3	2		0.0
Kaplan Business School	273	186	66	35.5
Kaplan Higher Education Pty Ltd	310	193	78	40.4
Macleay College	82	45	16	35.6
Melbourne Institute of Technology	119	61	9	14.8
Melbourne Polytechnic	112	74	30	40.5
National Art School	77	48	24	50.0
Photography Studies College (Melbourne)	30	23	12	52.2
SAE Institute	253	177	69	39.0
Study Group Australia Pty Limited	16	6	1	16.7
Tabor College of Higher Education	92	57	38	66.7
TAFE NSW	137	92	38	41.3
TAFE Queensland	24	16	10	62.5
TAFE South Australia	29	19	9	47.4
The Australian College of Physical Education	63	37	14	37.8
The Australian Institute of Music	30	21	12	57.1
The MIECAT Institute	28	20	14	70.0
William Angliss Institute	41	31	13	41.9
<b>All NUHEIs</b>	<b>4,722</b>	<b>3,087</b>	<b>1,393</b>	<b>45.1</b>

# Appendix 2

## Definitions

### Labour force definitions

The following definitions of labour market indicators have been used for the 2020 Graduate Outcomes Survey – Longitudinal (GOS-L).

#### Employed

Graduates who were usually or actually in paid employment for one or more hours in the week before the survey.

#### Employed full-time

Graduates who were usually or actually in paid employment for at least 35 hours per week.

#### Available for employment

Graduates who were employed, looking for employment or waiting to start a job in the week prior to the survey.

#### Available for full-time employment

Graduates who were employed full-time or looking for full-time employment in the week prior to the survey.

#### Overall employment rate

Employed graduates (including in full-time, part-time or casual employment), as a proportion of those available for employment.

#### Full-time employment rate

Graduates employed full-time, as a proportion of those available for full-time work.

#### Labour market participation rate

Graduates available for employment, as a proportion of all graduates.

### Median salary

The median salary of graduates employed full-time, after removing records with salaries of less than \$20,000 per year and the top one per cent of recorded salaries. No reference is made to a graduate's age or previous work experience.

### Full-time study rate

Graduates who reported being in full-time study, as a proportion of all graduates. Note that participation in full-time study is not taken into account for any other indicator.

The GOS-L, like the GOS, conforms to the conceptual framework of the standard labour force statistics model used by the Australian Bureau of Statistics (ABS).

### Other definitions

QILT – Quality Indicators for Learning and Teaching

GOS – Graduate Outcomes Survey

SES – Student Experience Survey

AGS – Australian Graduate Survey

GCA – Graduate Careers Australia

NUHEI – Non-University Higher Education Institution

CATI – Computer Assisted Telephone Interviewing

ANZIC – Australian and New Zealand Standard Industrial Classification

ANZSCO – Australian and New Zealand Standard Classification of Occupations

# Appendix 3

## GOS-L 2020

### methodological summary

#### Methodology overview

Graduates were invited to participate in the GOS-L via an email survey invitation. The main online fieldwork period ran from 20 February to 29 March 2020. The online survey could be accessed by clicking on the link in the email invitation or email reminders.

Online survey presentation was informed by Australian Bureau of Statistics standards, accessibility guidelines and other relevant resources, with standard features including:

- mobile device optimisation;
- sequencing controls;
- input controls and internal logic checks;
- use of a progress bar;
- tailored error messages, as appropriate;
- recording panels for free text responses commensurate with level of detail required in the response;
- ‘saving’ with progression to the next screen; and
- capacity to save and return to finish off at another time, resuming at the last question completed.

A copy of the generic survey instrument (i.e. excluding any institution specific items) and screenshots of the survey are included in the full methodology report and a summary of items is available in Appendix 4 of this report.

#### Sampling

Graduates were considered to be in-scope for the GOS-L if they completed the 2017 Graduate Outcomes Survey (GOS) and had not explicitly opted out of further research.

The Social Research Centre holds the file of all graduates who had completed the GOS in 2017. Institutions were given the option to either exclude themselves from the GOS-L, take part in the GOS-L but not update any details of the graduates in the file (i.e. graduate name, graduate email address etc.) or to take part in the GOS-L and update graduate details where they could.

#### Invitation and follow-up reminder strategy

A multi-pronged approach was used in the GOS-L response maximisation effort; utilising email, reminder telephone calls and SMS as methods of approaching and following up with graduates. During the course of the survey, between 20 February and 29 March, the Social Research Centre sent one email invitation, ten email reminders, three SMSs, and conducted reminder calls (between March 5-23). In addition to continuous improvements to messaging in the survey invitations and reminders, alternate email addresses were immediately utilised on a bounce-back from the original survey invitation, until an address did not bounce back. This was first introduced in 2019 and has markedly improved early response rates to the QILT surveys.

# Appendix 4

## GOS-L 2020 item summary

Question ID	Question	Response scale
<b>INTRO - SAMEEMP</b>	<b>Module A: Screening and confirmation</b>	
<b>Module B: Labour force</b>		
BETWEENWRK	In <COLYEAR>, following on from the completion of your <QUALNAME >, you told us you were not working. At any time in the last three years, did you do any work at all in a job, business or farm?	1. Yes 5. No 6. Permanently unable to work 7. *(DISPLAY IF E913>64) Permanently not intending to work
FIRSTWRK	Following on from the completion of your <QUALNAME>, in what year did you first obtain employment?	1. 2017 or earlier 2. 2018 3. 2019 4. 2020 5. I have not obtained employment
WORKED	Thinking about last week, the week starting <daystart>, <datestart> and ending last <dayend>, <dateend>. Last week, did you do any work at all in a job, business or farm?  *(DISPLAY IF BETWEENWRK=1, 5) Can you confirm whether in the last week, the week starting <daystart>, <datestart> and ending last <dayend>, <dateend>, you did any work at all in a job, business or farm?	1. Yes 5. No 6. Permanently unable to work 7. *(DISPLAY IF E913>64) Permanently not intending to work
WWOPAY	Last week, did you do any work without pay in a family business?	1. Yes 5. No 6. *(DISPLAY IF E913>64) Permanently not intending to work
AWAYWORK	Did you have a job, business or farm that you were away from because of holidays, sickness or any other reason?	1. Yes 5. No 6. *(DISPLAY IF E913>64) Permanently not intending to work

Question ID	Question	Response scale
LOOKFTWK	At any time during the last 4 weeks have you been looking for full-time work?	1. Yes 5. No 6. *(DISPLAY IF E913>64) Permanently not intending to work
LOOKPTWK	Have you been looking for part-time work at any time during the last 4 weeks?	1. Yes 5. No 6. *(DISPLAY IF E913>64) Permanently not intending to work
BEGNLOOK	When did you begin looking for work?	1. Enter <b>month</b> <dropdown list> 2. Enter <b>year</b> (NUMERIC RANGE 1960 – 2020)
STARTWK	If you had found a job, could you have started last week?	1. Yes 5. No
WAITWORK	You mentioned that you didn't look for work during the last 4 weeks. Was that because you were waiting to start <b>work you had already obtained</b> ?	1. Yes 5. No
MORE1JOB	Did you have <b>more than 1 job or business last week</b> ?	1. Yes 5. No
INTROSELFEMPIi	The next few questions are about the job or business in which you usually work the most hours, that is, your <b>main job</b> .	
INTROSELFEMPIii	The next few questions are about the job or business in which you usually work the most hours.	
SELFEMP	Thinking about your < <b>main job/job</b> >, do you work for an employer, or in your own business?	1. Employer 2. Own business 3. Other or uncertain
PAYMENT	Are you paid a wage or salary, or some other form of payment?	1. Wage or Salary 5. Other or Uncertain

Question ID	Question	Response scale
PAYARRNG	What are your <working/payment> arrangements?	10. Unpaid voluntary work 11. Unpaid trainee or work placement 12. Contractor or Subcontractor 13. Own business or Partnership 14. Commission only 15. Commission with retainer 16. In a family business without pay 17. Payment in kind 18. Paid by the piece or item produced 19. Wage or salary earner 20. Other
ACTLHRSM	How many hours did you <b>actually</b> work in your main job last week less <b>time off</b> but counting any <b>extra hours</b> worked?	1. Enter hours (NUMERIC, RANGE 0-168)
USLHRSM	How many hours do you usually work each week in your <b>main job</b> ?	1. Enter hours (NUMERIC, RANGE 0-168)
ACTLHRS	How many hours did you <b>actually work</b> last week less <b>time off</b> but counting any <b>extra hours worked</b> *(DISPLAY IF MORE1JOB=1) <b>in all jobs</b> ?	1. Enter hours (NUMERIC, RANGE 0 to 168)
USLHRS	How many hours do you <b>usually</b> work each week (*DISPLAY IF MORE1JOB=1) <b>in all your jobs</b> ?	1. Enter hours (NUMERIC, RANGE 0-168)
PREFMHRS	Would you prefer to work more hours than you usually work (*DISPLAY IF MORE1JOB=1) in all your jobs?	1. Yes 5. No 6. Don't know
PREFHRS	How many hours a week would you like to work?	1. Enter hours (NUMERIC, RANGE 0-168, CAN'T BE LESS THAN USLHRS)
AVLMHRS	Last week, were you available to work more hours than you usually work?	1. Yes 2. No
OCC	What is your occupation in your < <b>main job/job/business</b> >?	1. Enter occupation
DUTIES	What are your main tasks and duties?	1. Enter main tasks and duties
INDUSTRY	What kind of <b>business or service</b> is carried out by your <employer at the place where you work/business>?	1. Enter business or service
EMPLOYER	What is the <b>name of your</b> < <b>employer/business</b> >?	1. Enter employer/business name

Question ID	Question	Response scale
SECTOR	In what sector are you wholly or mainly employed?	1. Public or government 2. Private 3. Not-for-profit
INAUST	Are you working in Australia?	1. Yes 2. No 3. Not sure
EMPSTATE	In which state or territory is your <employer/business> currently located?	1. NSW 2. VIC 3. QLD 4. SA 5. WA 6. TAS 7. NT 8. ACT 98. Don't know
LOCATION	And what is the postcode of your <employer/business>?	1. Enter postcode or suburb 2. Not sure
COUNTRYX	In which country is your <employer/business> based?	1. Country list (SACC) 90. Other (specify)
CURCOUNTRY	Do you currently live in Australia or Overseas?	1. Australia 2. Overseas
CURSTATE	In which state or territory do you usually live?	1. NSW 2. VIC 3. QLD 4. SA 5. WA 6. TAS 7. NT 8. ACT 98. Don't know
CURPCODE	What is the postcode or suburb where you usually live?	1. <verbatim text box> 2. Not sure
OSCOUNTRY	In which country do you currently live?	1. <Predictive text verbatim text box>

Question ID	Question	Response scale
EMP12	Have you worked <for your employer/in your business> for 12 months or more?	1. Yes, more than 12 months 5. No, less than 12 months
EMPMTHS	How many months have you worked <for your employer/in your business>?	1. Enter number of months (NUMERIC, RANGE 1-12)
EMPYRS	How many years have you worked <for your employer/in your business>?	1. Enter number of years (NUMERIC, RANGE 1-49)
FFTJOB	Is this your first full-time job?	1. Yes 2. No
SALARYA	In <b>Australian dollars</b> , how much do you usually earn in <this job/ <b>all your jobs</b> >, before tax or anything else was taken out? Please make only one selection. Specify in whole dollars, excluding spaces, commas, dollar sign (\$).	1. Amount per <b>hour</b> (Please specify) (NUMERIC, RANGE 1-250) 2. Amount per <b>day</b> (Please specify) (NUMERIC, RANGE 1-800) 3. Amount each <b>week</b> (Please specify) (NUMERIC, RANGE 1-4000) 4. Amount each <b>fortnight</b> (Please specify) (NUMERIC, RANGE 1-8000) 5. Amount each <b>month</b> (Please specify) (NUMERIC, RANGE 1-17,500) 6. Amount each <b>year</b> (Please specify) (NUMERIC, RANGE 1-250K) 7. No earnings 8. Don't know
SALARYB	Sorry but the salary you entered doesn't fit within our range. Please select the best option for how much you would usually earn in < IF MORE1JOB=5: this job/ IF MORE1JOB=1: <b>all your jobs</b> >, per annum before tax or anything else was taken out?	1. \$1 - \$9,999 2. \$10,000 - \$19,999 3. \$20,000 - \$29,999 4. \$30,000 - \$39,999 5. \$40,000 - \$49,999 6. \$50,000 - \$59,999 7. \$60,000 - \$79,999 8. \$80,000 - \$99,999 9. \$100,000 - \$124,999 10. \$125,000 - \$149,999 11. \$150,000 or more 12. Don't know

Question ID	Question	Response scale
SALARYC	And in <b>Australian dollars</b> , how much do you usually earn in your <b>main job</b> , before tax or anything else is taken out? Please make only one selection. Specify in whole dollars, excluding spaces, commas, dollar sign (\$).	<ol style="list-style-type: none"> <li>1. Amount per hour (Please specify) (NUMERIC, RANGE 1-250)</li> <li>2. Amount per day (Please specify) (NUMERIC, RANGE 1-800)</li> <li>3. Amount each week (Please specify) (NUMERIC, RANGE 1-4000)</li> <li>4. Amount each fortnight (Please specify) (NUMERIC, RANGE 1-8000)</li> <li>5. Amount each month (Please specify) (NUMERIC, RANGE 1-17,500)</li> <li>6. Amount each year (Please specify) (NUMERIC, RANGE 1-250K)</li> <li>7. No earnings</li> <li>8. Don't know</li> </ol>
SALARYD	Sorry but the salary you entered doesn't fit within our range. Please select the best option for how much you would usually earn in your <b>main job</b> , per annum before tax or anything else was taken out?	<ol style="list-style-type: none"> <li>1. \$1 - \$9,999</li> <li>2. \$10,000 - \$19,999</li> <li>3. \$20,000 - \$29,999</li> <li>4. \$30,000 - \$39,999</li> <li>5. \$40,000 - \$49,999</li> <li>6. \$50,000 - \$59,999</li> <li>7. \$60,000 - \$79,999</li> <li>8. \$80,000 - \$99,999</li> <li>9. \$100,000 - \$124,999</li> <li>10. \$125,000 - \$149,999</li> <li>11. \$150,000 or more</li> <li>12. Don't know</li> </ol>

Question ID	Question	Response scale
SALCONF1	Sorry but the salary you entered for your <b>main job</b> is higher than the salary you entered for <b>all your jobs</b> . Please select the best option for how much you would usually earn in your <b>main job</b> , per annum before tax or anything else was taken out?	<ol style="list-style-type: none"> <li>1. \$1 - \$9,999</li> <li>2. \$10,000 - \$19,999</li> <li>3. \$20,000 - \$29,999</li> <li>4. \$30,000 - \$39,999</li> <li>5. \$40,000 - \$49,999</li> <li>6. \$50,000 - \$59,999</li> <li>7. \$60,000 - \$79,999</li> <li>8. \$80,000 - \$99,999</li> <li>9. \$100,000 - \$124,999</li> <li>10. \$125,000 - \$149,999</li> <li>11. \$150,000 or more</li> <li>12. Don't know</li> </ol>
SALCONF2	And which of the following would you usually earn in your <b>all your jobs</b> , per annum before tax or anything else was taken out?	<ol style="list-style-type: none"> <li>1. \$1 - \$9,999</li> <li>2. \$10,000 - \$19,999</li> <li>3. \$20,000 - \$29,999</li> <li>4. \$30,000 - \$39,999</li> <li>5. \$40,000 - \$49,999</li> <li>6. \$50,000 - \$59,999</li> <li>7. \$60,000 - \$79,999</li> <li>8. \$80,000 - \$99,999</li> <li>9. \$100,000 - \$124,999</li> <li>10. \$125,000 - \$149,999</li> <li>11. \$150,000 or more</li> <li>12. Don't know</li> </ol>
SALARYOS	What is your gross (that is pre-tax) annual salary? You can estimate if necessary.	1. Enter gross annual salary <text box>
SALARYOS_OTH	Please specify the currency you referred to.	1. <verbatim text box>

Question ID	Question	Response scale
FINDJOB	How did you first find out about this job?	1. University of college careers service 2. Careers fair of information session 3. Other university of college source (such as faculties or lecturers or student society) 4. Advertisement in a newspaper or other print media 5. Advertisement on the internet (e.g. Seek, CareerOne, Ethical Jobs) 6. Via resume posted on the internet 7. Family of friends 8. Approached employer directly 9. Approached by an employer 10. Employment agency 11. Work contacts or networks 12. Social media (e.g. LinkedIn) 13. An employer promotional event 14. Graduate program / internship / work placement 90. Other (please specify) <text box>
SPOQ	<p>The following statements are about your skills, abilities and education.</p> <p>Please indicate the extent to which you strongly disagree, disagree, neither disagree nor agree, agree or strongly agree with each of these statements.</p> <p>(STATEMENTS)</p> <p>a) My job requires less education than I have</p> <p>b) I have more job skills than are required for this job</p> <p>c) Someone with less education than myself could perform well on my job</p> <p>d) My previous training is being fully utilised on this job</p> <p>e) I have more knowledge than I need in order to do my job</p> <p>f) My education level is above the level required to do my job</p> <p>g) Someone with less work experience than myself could do my job just as well</p> <p>h) I have more abilities than I need in order to do my job</p>	1. Strongly disagree 2. Disagree 3. Neither disagree nor agree 4. Agree 5. Strongly agree

Question ID	Question	Response scale
RSOVRQ	Your previous responses indicated that you have more skills or education than are needed to do your current job. What is the <b>main reason</b> you are working in a job that doesn't use all of your skills or education?	<ul style="list-style-type: none"> <li>1. No suitable jobs in my local area</li> <li>2. No jobs with a suitable number of hours</li> <li>3. No suitable jobs in my area of expertise</li> <li>4. Considered to be too young by employers</li> <li>5. Considered to be too old by employers</li> <li>6. Short-term illness or injury</li> <li>7. Long-term health condition or disability</li> <li>8. Caring for family member with a health condition or disability</li> <li>9. Caring for children</li> <li>10. Studying</li> <li>12. I'm satisfied with my current job</li> <li>11. Other (Please specify)</li> </ul>
RSNOMORE	You mentioned that you are not looking to work more hours. What is the <b>main reason</b> you work the number of hours you are currently working? Please select only one answer.	<ul style="list-style-type: none"> <li>1. No suitable job in my local area</li> <li>2. No job with a suitable number of hours</li> <li>3. No suitable job in my area of expertise</li> <li>4. Considered to be too young by employers</li> <li>5. Considered to be too old by employers</li> <li>6. Short-term illness or injury</li> <li>7. Long-term health condition or disability</li> <li>8. Caring for family member with a health condition or disability</li> <li>9. Caring for children</li> <li>10. Studying</li> <li>11. I'm satisfied with the number of hours I work</li> <li>12. No more hours available in current position</li> <li>90. Other &lt;text box&gt;</li> </ul>

Question ID	Question	Response scale
RSMORE	You mentioned that you are looking to work more hours. What is the <b>main reason</b> you work the number of hours you are currently working? Please select only one answer.	<ol style="list-style-type: none"> <li>1. No suitable job in my local area</li> <li>2. No job with a suitable number of hours</li> <li>3. No suitable job in my area of expertise</li> <li>4. Considered to be too young by employers</li> <li>5. Considered to be too old by employers</li> <li>6. Short-term illness or injury</li> <li>7. Long-term health condition or disability</li> <li>8. Caring for family member with a health condition or disability</li> <li>9. Caring for children</li> <li>10. Studying</li> <li>11. No more hours available in current position</li> <li>90. Other (please specify) &lt;text box&gt;</li> </ol>
UNEMP	What is the main reason you are currently not working or looking for work?	1. <text box>
<b>Module H: Employment History</b>		
OTHWORKi	Aside from your current role(s) have you worked anywhere else since <YEAR>?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>
OTHWORKii	Aside from your <VOCC> role at <VEMPLOYR> (IF VEMPLOYR=BLANK,'your 2017 employer') have you worked anywhere else since <YEAR>?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>
OTHWORKiii	Aside from your <VOCC> role at <VEMPLOYR> and your current occupation(s), have you worked anywhere else since <YEAR>?	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>
OTHOCC	Have you changed occupations within the same business since <YEAR>? An example of changing occupations may be getting a promotion from 'Business analyst' to 'Senior business analyst'.	<ol style="list-style-type: none"> <li>1. Yes</li> <li>2. No</li> </ol>
NUMOCC	How many other occupations *(IF WORKING SHOW: excluding your current occupation) have you performed since <YEAR>? If you changed occupations within the same business, please include each occupation separately. An example of changing occupations may be getting a promotion from 'Business analyst' to 'Senior business analyst'.	1. Enter number of occupations (NUMERIC, RANGE 0-30)
<b>Module C: Further study</b>		

Question ID	Question	Response scale
FQUALi	The next few questions are about qualifications you may have completed between <YEAR> and now. Since you completed your <QUALNAME> have you completed another <b>qualification</b> ?	1. Yes – full-time 2. Yes – part-time 5. No
FQLOC	Where did you complete this <b>qualification</b> ?	1. Australia 2. Overseas
VFQUAL	What is the full title of the most recent <b>qualification</b> you completed?	1. Qualification title <text box>
FQFOE	What was your major field of education for this <b>qualification</b> ?	1. Natural and Physical Sciences 2. Information Technology 3. Engineering and Related Technologies 4. Architecture and Building 5. Agriculture Environmental and Related Studies 6. Health 7. Education 8. Management and Commerce 9. Society and Culture 10. Creative Arts 11. Food, Hospitality and Personal Services 12. Mixed field qualification 90. Other (please specify)

Question ID	Question	Response scale
FQLEV	What was the level of this qualification?	1. Higher Doctorate 2. Doctorate by Research 3. Doctorate by Coursework 4. Master Degree by Research 5. Master Degree by Coursework 6. Graduate Diploma 7. Graduate Certificate 8. Bachelor (Honours) Degree 9. Bachelor (Pass) Degree 10. Advanced Diploma 11. Associate Diploma 12. Diploma 13. Non-award course 14. Bridging and Enabling course 15. Certificate I-IV 16. Other
VFQINST	And the institution where you completed this qualification?	1. Enter name of the institution <look up list>
FURSTUD	The following questions are about qualifications you are currently studying... Are you currently a full-time or part-time student at a TAFE, university or other education institution?	1. Yes – full-time 2. Yes – part-time 5. No
FURLOC	Where are you completing this <b>qualification</b> ?	1. Australia 2. Overseas
VFURQUAL	What is the full title of the <b>qualification</b> you are currently studying?	1. Enter qualification title <text box>

Question ID	Question	Response scale
FURFOE	What is your major field of education for this qualification?	1. Natural and Physical Sciences 2. Information Technology 3. Engineering and Related Technologies 4. Architecture and Building 5. Agriculture Environmental and Related Studies 6. Health 7. Education 8. Management and Commerce 9. Society and Culture 10. Creative Arts 11. Food, Hospitality and Personal Services 12. Mixed field qualification 13. Other (Please specify)
FURLEV	What is the level of this qualification?	1. Higher Doctorate 2. Doctorate by Research 3. Doctorate by Coursework 4. Master Degree by Research 5. Master Degree by Coursework 6. Graduate Diploma 7. Graduate Certificate 8. Bachelor (Honours) Degree 9. Bachelor (Pass) Degree 10. Advanced Diploma 11. Associate Diploma 12. Diploma 13. Non-award course 14. Bridging and Enabling course 15. Certificate I-IV 16. Other
VFURINST	And the institution where you are currently studying?	1. Enter name of the institution <look up list>
<b>Module D: Graduate attributes</b>		

Question ID	Question	Response scale
GAS	<p>For each of the following skills or attributes, to what extent do you agree or disagree that your &lt;QUALNAME&gt; from &lt;E306CTXT&gt; prepared you for your current job?</p> <p>If the skill is not required in your role, you can answer “not applicable”.</p> <p>(STATEMENTS)</p> <p>Foundation skills</p> <p>FOUNDATION1/GFOUND1 Oral communication skills</p> <p>FOUNDATION2/GFOUND2 Written communication skills</p> <p>FOUNDATION3/GFOUND3 Numeracy skills</p> <p>FOUNDATION4/GFOUND4 Ability to develop relevant knowledge</p> <p>FOUNDATIONS5/GFOUND5 Ability to develop relevant skills</p> <p>FOUNDATIONS6/GFOUND6 Ability to solve problems</p> <p>FOUNDATION7/GFOUND7 Ability to integrate knowledge</p> <p>FOUNDATION8/GFOUND8 Ability to think independently about problems</p> <p>Adaptive skills and attributes</p> <p>ADAPTIVE1/GADAPT1 Broad general knowledge</p> <p>ADAPTIVE2/GADAPT2 Ability to develop innovative ideas</p> <p>ADAPTIVE3/GADAPT3 Ability to identify new opportunities</p> <p>ADAPTIVE4/GADAPT4 Ability to adapt knowledge in different contexts</p> <p>ADAPTIVES5/GADAPT5 Ability to apply skills in different contexts</p> <p>ADAPTIVE6/GADAPT6 Capacity to work independently</p> <p>Teamwork and interpersonal skills</p> <p>COLLAB1/GCOLLAB1 Working well in a team</p> <p>COLLAB2/GCOLLAB2 Getting on well with others in the workplace</p> <p>COLLAB3/GCOLLAB3 Working collaboratively with colleagues to complete tasks</p> <p>COLLAB4/GCOLLAB4 Understanding of different points of view</p> <p>COLLABS5/GCOLLABS5 Ability to interact with co-workers from different or multicultural backgrounds</p>	<p>1. Strongly disagree</p> <p>2. Disagree</p> <p>3. Neither disagree nor agree</p> <p>4. Agree</p> <p>5. Strongly agree</p> <p>9. Not applicable</p>

Question ID	Question	Response scale
<b>Module E: Graduate preparation</b>		
FORMREQ	Is a <QUALNAME> or similar qualification a formal requirement for you to do your current <main job/job>?	1. Yes 2. No
QUALIMP	To what extent is it important for you to have a <QUALNAME>, to be able to do your <main job/job>?	1. Not at all important 2. Not that important 3. Fairly important 4. Important 5. Very important
CRSPREP	Overall, how well did your <QUALNAME> prepare you for your <main job/job>?	1. Not at all 2. Not well 3. Well 4. Very well 5. Don't know / Unsure
VPREP	What are the main ways that <E306CTXT> prepared you for employment in your organisation?	1. <text box>
VBETTER	What are the main ways <E306CTXT> could have better prepared you for employment in your organisation?	1. <text box>
STCHOICE	Thinking about your original decision to complete your <EQUALNAME> between <GRADYR/YEAR_2> and early <YEAR>, if you had to make this choice again, would you study.. Please select only one answer.	1. The same qualification at the same institution 2. The same qualification at a different institution 3. The same subject area(s) at the same institution 4. The same subject area(s) at a different institution 5. Something completely different at the same institution 6. Something completely different at a different institution 7. I wouldn't study at all
VCHOICE	What is the main reason you say that?	1. <text box>
<b>Module F: Additional Institution-Specific Items</b>		
<b>Module G: Contact details</b>		

# Appendix 5

## Additional tables

This report is accompanied by additional benchmarking tables which may be used alongside this report and data visualisation to support institutional benchmarking and analysis.

Listed below are tables related to specific concepts relevant to the GOS-L survey as well as a listing of tables that can be used to explore additional themes related to the GOS-Longitudinal.

### List of National Report and associated tables

Course level	Report Table	Sheet name	Table title
UG	Table 1	FTE_UG_ALL_5Y	Short- and medium-term full-time employment rate for all 2007 to 2017 undergraduates
UG	Table 2	STMT_UG_ALL_1Y	Short-term and medium-term outcomes for undergraduates
UG		STMT_UG_ALL_3Y	Short- and medium-term outcomes for undergraduates 2015 to 2017
UG	Table 3	STMT_UG_ALL_1Y_SEX	Short-term and medium-term outcomes for undergraduates by gender
PGC	Table 4	STMT_PGC_ALL_1Y	Short-term and medium-term outcomes for postgraduate coursework graduates
PGC	Table 5	STMT_PGC_ALL_1Y_SEX	Short-term and medium-term outcomes for postgraduate coursework by gender
PGR	Table 6	STMT_PGR_ALL_1Y	Short-term and medium-term outcomes of postgraduate research graduates
PGR	Table 7	STMT_PGR_ALL_1Y_SEX	Short-term and medium-term outcomes for postgraduate research by gender
ALL	Table 8	FTE_ALL_ALL_1Y	Short-term and medium-term full-time employment outcomes by level of study and study area

Course level	Report Table	Sheet name	Table title
UG		STMT_UG_ALL_1Y_AREA	Short-term and medium-term outcomes for undergraduates by study area
PGC		STMT_PGC_ALL_1Y_AREA	Short-term and medium-term outcomes for postgraduate coursework graduates by study area
PGR		STMT_PGR_ALL_1Y_AREA	Short-term and medium-term outcomes for postgraduate research graduates by study area
ALL	Table 9	FTE_ALL_UNI_1Y_INST_CI	Short-term and medium-term full-time employment outcomes by university and level of study
UG		STMT2_UG_UNI_1Y_INST_CI	Short-term and medium-term undergraduate employment outcomes by university
PGC		STMT2_PGC_UNI_1Y_INST_CI	Short-term and medium-term postgraduate coursework employment outcomes by university
UG	Table 10	OCCO_UG_ALL_1Y_AREA	Proportion of employed undergraduates working in occupational groups by study area (%)
PGC		OCCO_PGC_ALL_1Y_AREA	Proportion of employed postgraduate coursework graduates working in occupational groups by study area (%)
PGR		OCCO_PGR_ALL_1Y_AREA	Proportion of employed postgraduate research graduates working in occupational groups by study area (%)
UG		OCCF_UG_ALL_1Y_AREA	Proportion of full-time employed undergraduates working in occupational groups by study area (%)
PGC		OCCF_PGC_ALL_1Y_AREA	Proportion of full-time employed postgraduate coursework graduates working in occupational groups by study area (%)
PGR		OCCF_PGR_ALL_1Y_AREA	Proportion of full-time employed postgraduate research graduates working in occupational groups by study area (%)
UG	Table 11	RSOVRQ_UG_ALL_1Y_MT	Undergraduate main reason for working in job in 2020 that doesn't fully use skills and education
UG		RSOVRQ_UG_ALL_1Y_STMT2	Undergraduate main reason for working in job in 2017–2020 that doesn't fully use skills and education
UG		RSOVRQ_UG_ALL_1Y_AREA	Undergraduate main reason for working in job in 2017–2020 that doesn't fully use skills and education by study area
PGC		RSOVRQ_PGC_ALL_1Y_STMT2	Postgraduate coursework graduate main reason for working in job in 2017–2020 that doesn't fully use skills and education
PGC		RSOVRQ_PGC_ALL_1Y_AREA	Postgraduate coursework graduate main reason for working in job in 2017–2020 that doesn't fully use skills and education by study area
PGR		RSOVRQ_PGR_ALL_1Y_STMT2	Postgraduate research graduate main reason for working in job in 2017–2020 that doesn't fully use skills and education
PGR		RSOVRQ_PGR_ALL_1Y_AREA	Postgraduate research graduate main reason for working in job in 2017–2020 that doesn't fully use skills and education by study area
UG	Table 12	FTS_UG_ALL_1Y_BFOE	Broad field of education (BFOE) destinations of undergraduates undertaking further full-time study 2017–2020

## Additional themes and associated tables

### Additional detail relevant to National Report tables

#### Short-term and medium-term outcomes by demographic group

Course level	Report Table	Sheet name	Table title
UG		STMT_UG_ALL_1Y_DG	Short- and medium-term undergraduate outcomes by demographic group
PGC		STMT_PGC_ALL_1Y_DG	Short- and medium-term postgraduate coursework graduate outcomes by demographic group
PGR		STMT_PGR_ALL_1Y_DG	Short- and medium-term postgraduate research graduate outcomes by demographic group
UG		STMT_UG_ALL_1Y_ARSX	Short- and medium-term outcomes for all 2017 undergraduates by study area and gender
PGC		STMT_PGC_ALL_1Y_ARSX	Short- and medium-term outcomes for all 2017 postgraduate coursework by study area and gender

#### Short-term and medium-term labour force and median full-time salaries by university by student level

Course level	Report Table	Sheet name	Table title
UG		STMT3_UG_UNI_1Y_INST_CI	Short-term and medium-term undergraduate labour force participation rate and median full-time salaries by university
PGC		STMT3_PGC_UNI_1Y_INST_CI	Short-term and medium-term postgraduate coursework graduate labour force participation rate and median full-time salaries by university

#### Aggregated Short-term (2015-2017) and medium-term (2018-2020) employment outcomes by university by student level

Course level	Report Table	Sheet name	Table title
UG		STMT2_UG_UNI_3Y_INST_CI	Short-term (2015-2017) and medium-term (2018-2020) undergraduate employment outcomes by university
PGC		STMT2_PGC_UNI_3Y_INST_CI	Short-term (2015-2017) and medium-term (2018-2020) postgraduate coursework employment outcomes by university
UG		STMT3_UG_UNI_3Y_INST_CI	Short-term (2015-2017) and medium-term (2018-2020) undergraduate labour force participation rate and median full-time earnings by university
PGC		STMT3_PGC_UNI_3Y_INST_CI	Short-term (2015-2017) and medium-term (2018-2020) postgraduate coursework labour force participation rate and median full-time earnings by university

## Labour market outcomes for undergraduates in full-time study

Course level	Report Table	Sheet name	Table title
UG		MT_UG_ALL_1Y_FTS	Labour market outcomes of graduates, by full-time study status – undergraduate
UG		FTS_UG_ALL_1Y_DG	Demographic profile of graduates in further full-time study (%) – undergraduate
UG		EHIST_UG_ALL_1Y_FTS	Employment history of graduates, by full-time study status in 2020

## GOS-L Methodological and Response Rate Tables

Course level	Report Table	Sheet name	Table title
ALL	Table A1.1	OV_ALL_ALL_1Y	2020 GOS-L Operational Summary
ALL	Table A1.2	RR_ALL_UNI_1Y_INST	2020 GOS-L university response rates – all study levels – undergraduate, postgraduate coursework and postgraduate research
UG		RR_UG_UNI_1Y_INST	2020 GOS-L university response rates – undergraduate
PGC		RR_PGC_UNI_1Y_INST	2020 GOS-L university response rates – postgraduate coursework
PGR		RR_PGR_UNI_1Y_INST	2020 GOS-L university response rates – postgraduate research
ALL	Table A1.3	RR_ALL_NUHEI_1Y_INST	2020 GOS-L NUHEI response rates – all study levels – undergraduate, postgraduate coursework and postgraduate research
UG		RR_UG_NUHEI_1Y_INST	2020 GOS-L NUHEI response rates – undergraduate
PGC		RR_PGC_NUHEI_1Y_INST	2020 GOS-L NUHEI response rates – postgraduate coursework
PGR		RR_PGR_NUHEI_1Y_INST	2020 GOS-L NUHEI response rates – postgraduate research
ALL		CHAR_ALL_ALL_1Y_SG	2020 GOS-L sample characteristics – all study levels – undergraduate, postgraduate coursework and postgraduate research
UG		CHAR_UG_ALL_1Y_SG	2020 GOS-L sample characteristics – undergraduate
PGC		CHAR_PGC_ALL_1Y_SG	2020 GOS-L sample characteristics – postgraduate coursework
PGR		CHAR_PGR_ALL_1Y_SG	2020 GOS-L sample characteristics – postgraduate research
ALL		CHAR_ALL_ALL_1Y_AREA	2020 GOS-L combined student response characteristics and population parameters by study area
UG		CHAR_UG_ALL_1Y_AREA	2020 GOS-L undergraduate student response characteristics and population parameters by study area
PGC		CHAR_PGC_ALL_1Y_AREA	2020 GOS-L postgraduate coursework student response characteristics and population parameters by study area
PGR		CHAR_PGR_ALL_1Y_AREA	2020 GOS-L postgraduate research student response characteristics and population parameters by study area

## Additional Themes and related tables

### Labour force transitions

This group of tables explores the journey of graduates from their labour force outcome in 2017 to their status in 2020. For example, the proportion of graduates who were unemployed in 2017 and the proportion of those graduates went on to full-time employment in 2020.

Course level	Report Table	Sheet name	Table title
UG		LFT_UG_ALL_1Y	Labour force transitions of undergraduates between 2017 and 2020, as a percentage of labour market category in 2017
PGC		LFT_PGC_ALL_1Y	Labour force transitions of postgraduate coursework graduates between 2017 and 2020, as a percentage of labour market category in 2017
PGR		LFT_PGR_ALL_1Y	Labour force transitions of postgraduate research graduates between 2017 and 2020, as a percentage of labour market category in 2017
UG		LFT_UG_ALL_1Y_SEX	Labour force transitions of undergraduates by gender between 2017 and 2020, as percentage of labour market category in 2017
PGC		LFT_PGC_ALL_1Y_SEX	Labour force transitions of postgraduate coursework graduates by gender between 2017 and 2020, as percentage of labour market category in 2017
PGR		LFT_PGR_ALL_1Y_SEX	Labour force transitions of postgraduate research graduates by gender between 2017 and 2020, as percentage of labour market category in 2017

### Employment History

This group of tables presents the number of graduates who were in the labour market in 2020 and the proportion who changed jobs (different employer), those who had worked for the same employer for more than 12 months, those who had changed roles with the same employer and those who had changed occupation level. The tables also present the median salary for those graduates (regardless of whether they were working full time) in 2017 compared to median salaries in 2020.

Course level	Report Table	Sheet name	Table title
UG		EHIST_UG_ALL_1Y	Employment history of undergraduate graduates in the labour market in 2020
PGC		EHIST_PGC_ALL_1Y	Employment history of postgraduate coursework graduates in the labour market in 2020
PGR		EHIST_PGR_ALL_1Y	Employment history of postgraduate research graduates in the labour market in 2020

## Graduate Occupations

This group of tables presents the proportion of employed graduates and graduates employed full time in different occupations in the short-term in 2017 and again in the medium term in 2020. These occupations are coded from graduate description of their job and job role to a detailed ANZCO code. The results are presented here at the top ANZCO levels. In general, a managerial or professional occupation is considered an appropriate employment outcome after completing a higher education level qualification and a useful proxy for the “relevance” of graduates’ employment outcomes to their qualification.

Course level	Report Table	Sheet name	Table title
UG		OCC_UG_ALL_1Y_STMT2	Proportion of employed graduates working in managerial or professional occupation, 2017 and 2020 (%)
PGC		OCC_PGC_ALL_1Y_STMT2	Proportion of employed postgraduate coursework graduates working in managerial or professional occupations, 2017 and 2020 (%)
PGR		OCC_PGR_ALL_1Y_STMT2	Proportion of employed postgraduate research graduates working in managerial or professional occupations, 2017 and 2020 (%)

## Importance of the qualification to short-term or medium-term employment

This group of tables presents information on the extent to which graduates consider that it was important for them to have their specific or similar qualification, to be able to do their job in the short-term and medium term.

Course level	Report Table	Sheet name	Table title
UG		QUALIMP_UG_ALL_1Y_STMT2	Importance of qualification for graduates in short-term and medium-term employment 2017–2020 (%) – undergraduate
PGC		QUALIMP_PGC_ALL_1Y_STMT2	Importance of qualification for graduates in short-term and medium-term employment 2017–2020 (%) – postgraduate coursework
PGR		QUALIMP_PGR_ALL_1Y_STMT2	Importance of qualification for graduates in short-term and medium-term employment 2017–2020 (%) – postgraduate research

## Extent to which qualification prepared graduates for short-term or medium-term employment

This group of tables present information on how well the qualification prepared graduates for their current job, in the short-term and medium term. Institutions also receive qualitative data in comment fields related to what the institution did well and what graduates considered could have been done better to prepare them for their current employment.

Course level	Report Table	Sheet name	Table title
UG		CRSPREP_UG_ALL_1Y_STMT2	Extent to which qualification prepared graduate for employment for graduates in short-term and medium-term employment 2017–2020 (%) – undergraduate
PGC		CRSPREP_PGC_ALL_1Y_STMT2	Extent to which qualification prepared graduate for employment for graduates in short-term and medium-term employment 2017–2020 (%) – postgraduate coursework
PGR		CRSPREP_PGR_ALL_1Y_STMT2	Extent to which qualification prepared graduate for employment for graduates in short-term and medium-term employment 2017–2020 (%) – postgraduate research

## Graduate Attributes

This group of tables present the scale scores of graduate ratings of how well their qualification and institution prepared them for their current job. The graduate attributes scales include Foundation skills, Adaptive skills and attributes and Team and interpersonal skills.

### Foundation skills

- a) Oral communication skills
- b) Written communication skills
- c) Numeracy skills
- d) Ability to develop relevant knowledge
- e) Ability to develop relevant skills
- f) Ability to solve problems
- g) Ability to integrate knowledge
- h) Ability to think independently about problems

### Adaptive skills and attributes

- i) Broad general knowledge
- j) Ability to develop innovative ideas
- k) Ability to identify new opportunities

- l) Ability to adapt knowledge in different contexts
- m) Ability to apply skills in different contexts
- n) Capacity to work independently

**Teamwork and interpersonal skills**

- o) Working well in a team
- p) Getting on well with others in the workplace
- q) Working collaboratively with colleagues to complete tasks
- r) Understanding of different points of view
- s) Ability to interact with co-workers from different or multicultural backgrounds

Course level	Report Table	Sheet name	Table title
UG		GAS_UG_ALL_1Y_STMT2	Graduates average ratings of their attributes in short-term and medium-term employment 2017–2020 (%) – undergraduate
PGC		GAS_PGC_ALL_1Y_STMT2	Graduates average ratings of their attributes in short-term and medium-term employment 2017–2020 (%) – postgraduate coursework
PGR		GAS_PGR_ALL_1Y_STMT2	Graduates average ratings of their attributes in short-term and medium-term employment 2017–2020 (%) – postgraduate research
UG		GAS_UG_ALL_1Y_AREA	Graduates average ratings of their attributes (%) by study area – undergraduate
PGC		GAS_PGC_ALL_1Y_AREA	Graduates average ratings of their attributes (%) by study area – postgraduate coursework

## List of National Report and associated figures

Course level	Report Figure	Sheet name	Figure title
UG	Figure 1	FTE_UG_UNI_1Y_INST_FIG	Undergraduate medium-term full-time employment rate by university, 2020 (%)
UG		SAL_UG_UNI_1Y_INST_FIG	Undergraduate medium-term earnings by university, 2020 (\$)
UG		FTE_UG_UNI_3Y_INST_FIG	Undergraduate medium-term full-time employment rate by university, 2018-2020 (%)
UG		SAL_UG_UNI_3Y_INST_FIG	Undergraduate medium-term earnings by university, 2018-2020 (\$)
PGC	Figure 2	FTE_PGC_UNI_1Y_INST_FIG	Postgraduate coursework medium-term full-time employment rate by university, 2020 (%)
PGC		SAL_PGC_UNI_1Y_INST_FIG	Postgraduate coursework medium-term earnings by university, 2020 (\$)
PGC		FTE_PGC_UNI_3Y_INST_FIG	Postgraduate coursework medium-term full-time employment rate by university, 2018-2020 (%)
PGC		SAL_PGC_UNI_3Y_INST_FIG	Postgraduate coursework medium-term earnings by university, 2018-2020 (\$)

# Appendix 6

## Impact of COVID-19 on GOS-L undergraduate estimates

### Introduction and methods

This section of the report has been prepared to estimate the impact of COVID-19 social distancing restrictions on 2020 GOS-L results of those who completed undergraduate degrees with respect to full-time employment, overall employment, labour force participation and full-time income.

There is no evidence of any statistically significant effect on any of these measures because the GOS-L field period only covered the beginning of the implementation of social distancing restrictions and pre-dated most of the economic impact. Also tested was whether there was any impact on hours worked, which is a leading indicator of labour market impacts of major disruption to the economy, finding no evidence of any statistically significant impact from COVID-19. Had the survey been released to field even several weeks later, it is likely that the impact on these outcomes would have been sizeable. Barring a rapid economic recovery, graduate employment, labour force participation and salaries in 2021 are likely to be profoundly impacted by the deep global recession triggered by COVID-19.

### GOS-L 2020 field period vis-à-vis COVID-19

GOS-L was fielded between 18 February and 3 April 2020. By the beginning of major social distancing restrictions on 23 March 2020, 95% of responses had already been received (see Figure 1).

The Australian Bureau of Statistics (2020a) characterises Australia as seeing 'the progressive introduction of major social distancing and other business-related restrictions to slow the spread of COVID-19' from 23 March.

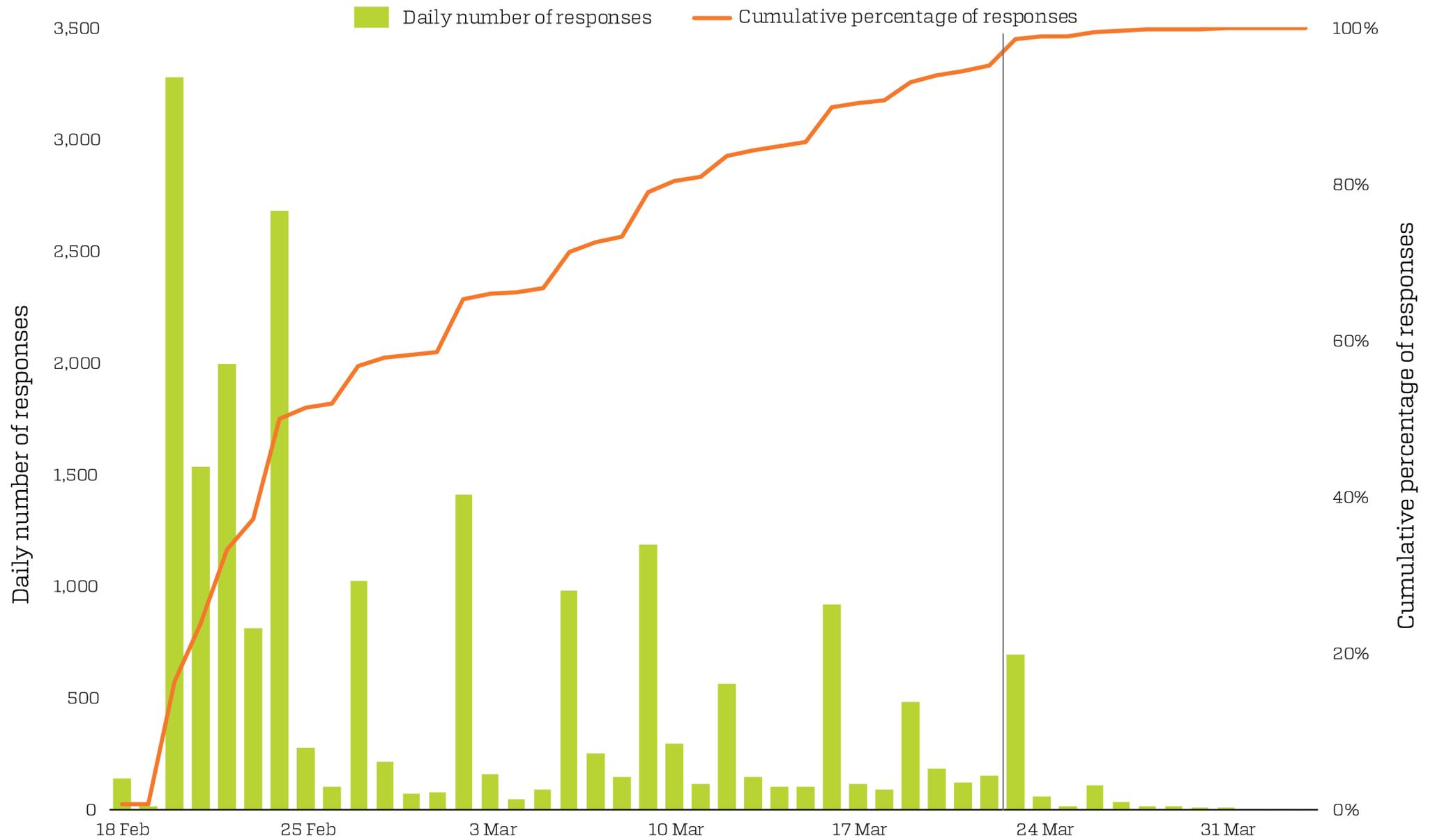
The key here is 'progressive' since respondents relatively early in the period from 23 March were less likely to see an impact than were those who responded later. Because the vast majority of surveys were completed before 23 March, we have too little power to undertake in-depth analyses of the progressive impact of COVID-19 from 23 March. The economic impacts of these restrictions were likely to have lagged the introduction of restrictions slightly, further limiting the potential impact of COVID-19 on GOS-L in 2020.

### Methods of analysis

Three analyses are shown for each outcome:

1. A simple tabulation of the outcome by year.
2. A regression model of the outcome without controls.
3. A regression model of the outcome with controls.

Figure 1 Undergraduate response to GOS-L 2020 by date



The form of the regression model without controls is as follows:

$$\hat{y}_i = \beta_0 + \beta_1 \text{year}_i + \beta_2 \text{period}_i + \beta_3 (\text{year}_i \times \text{period}_i) + \mathbf{x}_i \mathbf{B}$$

where:

$\text{year}_i$  is an indicator variable for the  $i$ th case (where  $i=1,2,\dots,N$ ), coded so that 2019 is 0 and 2020 is 1.  $\text{period}_i$  is an indicator variable, coded so that surveys completed prior to 23 March are coded 0 and surveys completed on or after 23 March are coded 1. Respondents who began the GOS-L prior to 23 March but completed surveys on or after 23 March are excluded from the analysis as the date at which  $\mathbf{y}$  was answered is not known with certainty. Out of 42,943 qualifying respondents, 389 were temporally ambiguous and excluded from analysis.<sup>2</sup>

The coefficient for  $\text{year}$  is interpreted as the secular trend for outcomes between 2019 and 2020. The coefficient for  $\text{period}$  is interpreted as a seasonal effect for employment from 23 March and onwards. The coefficient for the interaction of  $\text{year}$  and  $\text{period}$  is interpreted as the effect of social distancing restrictions.

The form of the regression model with controls was similar:

$$\hat{y}_i = \beta_0 + \beta_1 \text{year}_i + \beta_2 \text{period}_i + \beta_3 (\text{year}_i \times \text{period}_i) + \mathbf{x}_i \mathbf{B}$$

where  $\mathbf{x}_i \mathbf{B}$  is a vector of controls. The substantive interpretation of the controls is not of interest; they are introduced to control for year-to-year variation in the profile of respondents that may influence outcomes of interest and any variation in respondent profile by time to respond within year.

As the interpretation of the controls is not of substantive interest, lasso has been utilised (least absolute shrinkage and selection operator; Tibshirani 1996) to select the best fit using a cross-fit partialling out solution (Chernozhukov et al. 2018).

For full-time employment, general employment and labour force participation, the model without controls is fit using Stata's logit command and the model with controls is fit using Stata's xpo logit command (StataCorp 2020). In the tables, I report odds ratios.<sup>3</sup> The odds ratio is defined as:

$$\frac{\Pr(y = 1|x = 1)/\Pr(y = 0|x = 1)}{\Pr(y = 1|x = 0)/\Pr(y = 0|x = 0)}$$

<sup>2</sup> Qualifying cases were defined as analysis = 1 & survey = 1 & extquota = 0 & E942 = 0 & level = 1.

<sup>3</sup> For an extremely clear treatment of the interpretation of logit models, including odds ratios, refer to Long (1997).

Possible values for odds ratios range from zero to infinity. An odds ratio greater than one indicates that an increase in  $x$  is associated with an increase in the likelihood that  $y = 1$ . An odds ratio less than one indicates that an increase in  $x$  is associated with a decrease in the likelihood that  $y = 1$ . An odds ratio equal to one indicates that  $x$  is not associated with  $y$ . Assuming, for the sake of argument, that the dependent variable is employment, an odds ratio of 0.8 indicates that the odds of being employed are lowered by 20% (i.e.  $0.8 - 1 = -0.2$ ) for every increase in  $x$ . Similarly, an odds ratio of 1.2 would mean that the odds of being employed are increased by 20% (i.e.  $1.2 - 1 = 0.2$ ) for an increase in  $x$ .

For models of salary, the natural logarithm of full-time salary is used as the dependent variable, as it approaches normality more closely with that transformation than in its untransformed form.<sup>4</sup> The model without controls is fit using linear regression using Stata's `regress` command. The model with controls is fit using Stata's `xporegress` command. Although it is recognised that median salary is reported for GOS-L and the approach here is closer to a mean, the practice of using the natural logarithm of salary for modelling is in widespread use in econometrics and adjusts for the impact of the long right tail of salaries.

The controls included in each model are as follows:

- Age in years (and its square and cube, to allow for nonlinear effects). Age is included because of its importance with respect to labour market status and salary
- Gender, where male and unknown or non-conforming gender are the reference category.<sup>5</sup> Gender is included because of the gender wage gap and potential for employment discrimination.
- The interaction of age and gender (and the square and cube of age). The interaction of age and gender is included because of the widening gender wage gap by age and potential for employment discrimination.
- Aboriginal or Torres Strait Islander status, where non-Indigenous is the reference category. Indigenous status is included because of the potential for employment discrimination.
- Country of birth group, where countries are grouped as Australia (the reference category), main English-speaking countries (Canada, Ireland, New Zealand, South Africa, the United Kingdom and the United States) and all other countries. Country of birth group is included because of the potential for employment discrimination for culturally and linguistically diverse groups.

<sup>4</sup>The natural log of salary has skewness of  $-0.318$  (i.e. slightly left-skewed) and kurtosis of  $3.982$  (i.e. heavier tailed compared to normal kurtosis of 3).

<sup>5</sup>Due to the small number of cases ( $N = 7$ ), respondents with unknown or non-conforming gender are grouped with males in the reference category. The count of cases was restricted to cases eligible for analysis: `analysis = 1 & survey = 1 & extquota = 0 & E942 = 0 & level = 1`

- Non-English speaking background, where English-speaking background is the reference category. Non-English speaking background is included because of the potential for employment discrimination for culturally and linguistically diverse groups.
- Disability status, where the non-disabled form the reference groups. Disability is included because of the potential for employment discrimination and potential restrictions for certain fields of work for certain disabilities.
- Resident status, where Australian citizens form the reference category. Resident status is included because of the potential for employment discrimination for culturally and linguistically diverse groups.
- Area of study (using AREA45) where the natural and physical sciences form the reference category. Area of study is included because of its known relationship to employment and salary outcomes.
- Mode of attendance: internal, external, multi-modal and Open Universities Australia, where internal is the reference category. Mode of attendance is included because it is associated with employment outcomes.
- Type of attendance: full-time and part-time, where full-time is the reference category. A small number of respondents whose type of attendance is recorded in HEIMS as Open Universities ( $N = 5$ ).<sup>6</sup> Type of attendance is included because it is associated with employment outcomes.
- Type of degree: graduate entry bachelor's degree, honours bachelor's degree, pass bachelor's degree, associate degree, advanced diploma, diploma and other undergraduate award course, where graduate entry bachelor's degree is the reference category. Degree is included because of the likely impact on employment outcomes and salary.
- State in which the institution attended is located, where NSW is the reference category. In addition to Australia's states and territories, a category for institutions located in multiple jurisdictions is included.
- Higher education provider type: university or non-university higher education institution, where university is the reference category.
- Higher education provider group: Group of Eight, Australian Technology Network, Innovative Research Universities, Regional Universities Network and ungrouped, where the Group of Eight are the reference category.
- State of residence at the time the GOS-L was completed, where New South Wales is the reference category. In addition to Australia's states and territories, categories for resident overseas, don't know responses and those who skipped the item are included.

<sup>6</sup> The count of cases was restricted to cases eligible for analysis.

- Overall employment at the time of the GOS, where not employed is the reference category.
- Full-time employment at the time of the GOS, where not employed full-time is the reference category.
- Labour force participation at the time of the GOS, where not in the labour force is the reference category, is included as a possible control in the model of labour force participation.

## Full-time employment

Full-time employment in the 2020 GOS-L is not significantly impacted by COVID-19.<sup>7</sup> Although there is a slight decline in nominal terms in full-time employment for individuals who responded on or after 23 March in 2020 (Figure 2), these differences do not approach statistical significance in tabular form or either the model with or without controls (Table 6.1).<sup>8</sup>

With respect to the regression models, the odds ratio greater than one for year indicates a slight increase in full-time employment from 2019 to 2020, holding all other factors constant, the odds ratio greater than one for period indicates that full-time employment is higher for respondents on after 23 March, holding all other factors constant, and the odds ratio less than one for the interaction of year and period indicates that, as is seen in Figure 2, full-time employment was lower on or after 23 March 2020. Although the model does estimate that full-time employment was lower in 2020 after 23 March, the difference is not statistically significant due to the small number of cases it is based on.

<sup>7</sup> The population analysed was defined as analysis = 1 & survey = 1 & extquota = 0 & E942 = 0 & level = 1 & AVAILEMP\_L = 1.

<sup>8</sup> The proportion working full-time in 2020 does not differ significantly from before 23 March and on or after 23 March ( $F_{1,31962} = 1.36, p = .243$ ) nor does on or after 23 March differ significantly between 2019 and 2020 ( $F_{1,31962} = 1.10, p = .293$ ).

Figure 2 Full-time employment rate by year and time of response

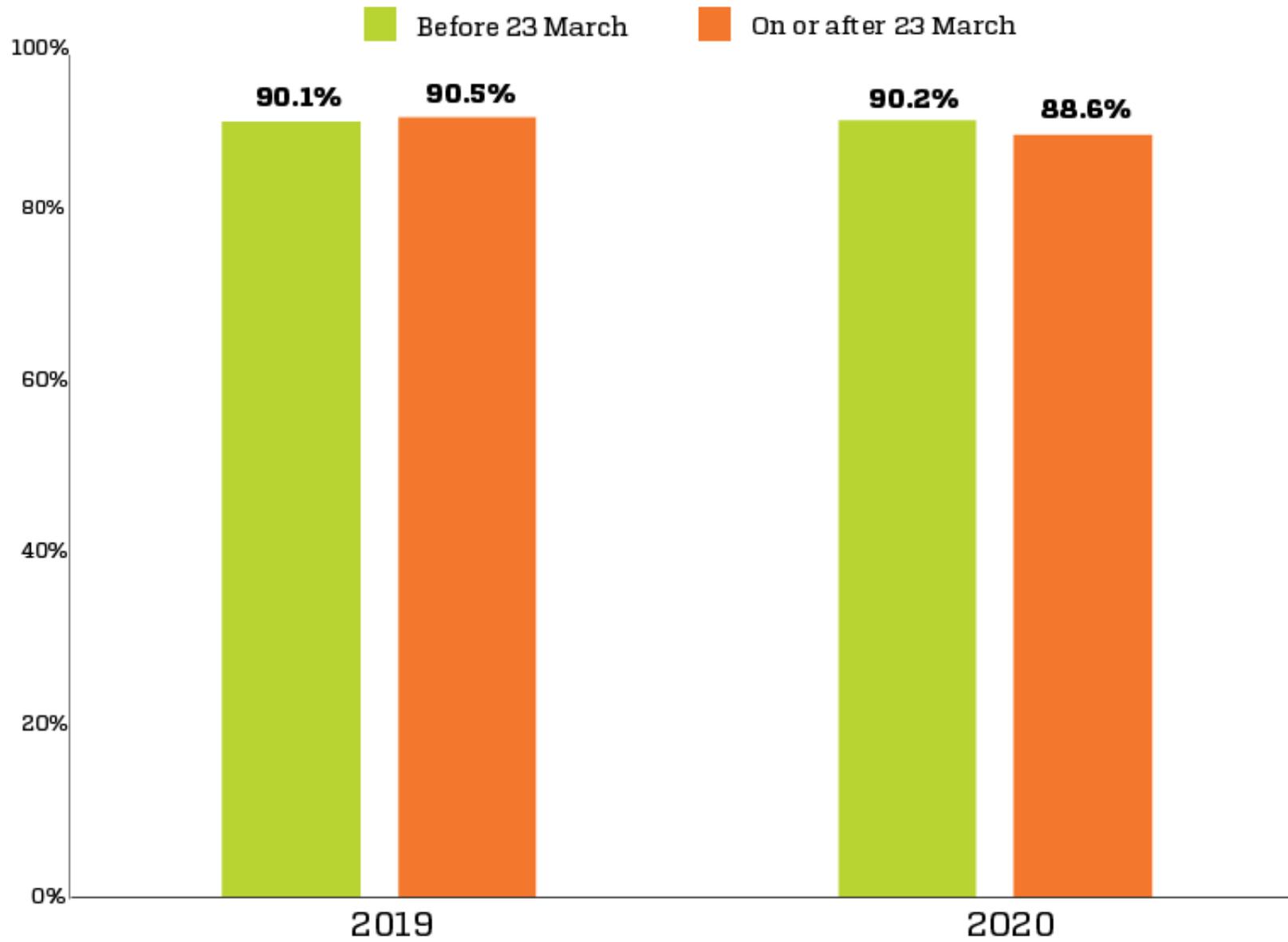


Table 6.1 Odds ratios of the logistic regression of full-time employment on selected variables

Variable	No controls Odds ratio	SE	Controls Odds ratio	SE
Year	1.006	.038	1.019*	.048
Period	1.052	.164	1.091	.177
Year × Period	.805	.166	.769	.166
Constant	9.102***	.241	-	-
Log likelihood	-10,313.747		-	
N	31,958		31,958	
Wald $\chi^2$	1.64		4.90	
Wald $p$	.651		.180	

Notes: Wald test shown for year, period and their interaction. \*  $p \leq .05$ ; \*\*\*  $p \leq .001$ . For the model with controls, 24 of 126 controls were selected and ten folds were used in the cross-fit.

## Overall employment

Overall employment in the 2020 GOS-L is not significantly impacted by COVID-19.<sup>9</sup> Although there is a slight decline in nominal terms in overall employment for individuals who responded on or after 23 March in 2020 (Figure 3), these differences do not approach statistical significance in tabular form or either the model with or without controls (Table 6.2).<sup>10</sup>

With respect to the regression models, the odds ratio essentially equal to one for the model without controls indicates that there was essentially no change in overall employment between 2019 and 2020, holding period and the interaction of period and year constant. The coefficient greater than one for year in the model with controls indicates a slight increase in overall employment from 2019 to 2020, holding all other factors constant.

The odds ratio greater than one for period in the models with and without controls indicates that overall employment is higher for respondents on after 23 March, holding all other factors constant. The odds ratio less than one for the interaction of year and period in both the models indicates that overall employment was lower on or after 23 March 2020, holding other factors constant. It should be noted, again, that none of these coefficients were statistically significant: in other words, no change across period and year could be reliably detected.

<sup>9</sup> The population analysed was defined as analysis = 1 & survey = 1 & extquota = 0 & E942 = 0 & level = 1 & AVAILEMP\_L = 1.

<sup>10</sup> The proportion working in 2020 does not differ significantly from before 23 March and on or after 23 March ( $F_{1,39355} = .21, p = .649$ ) nor does on or after 23 March differ significantly between 2019 and 2020 ( $F_{1,39355} = .80, p = .370$ ).

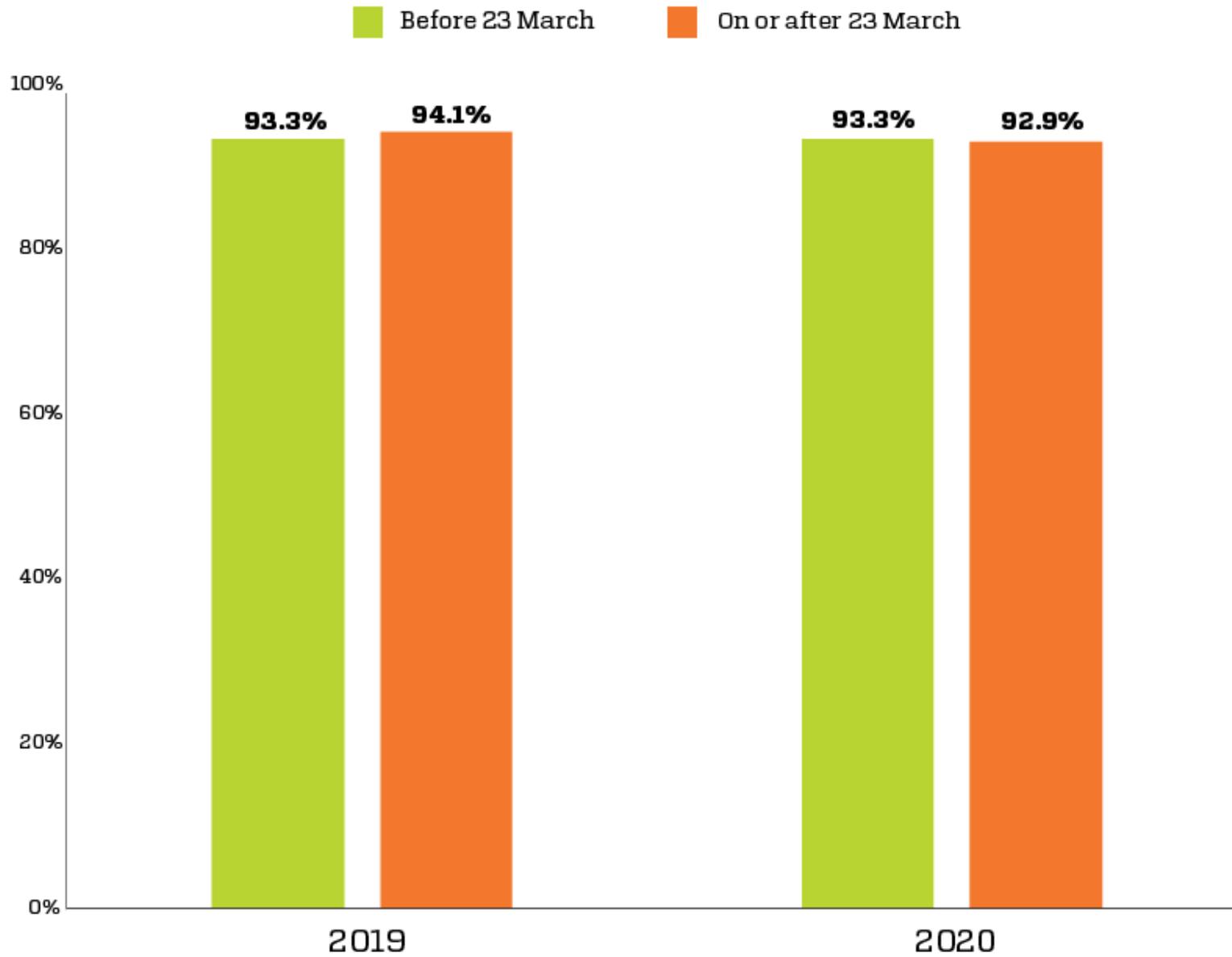
These findings are consistent with those from the Australian Bureau of Statistics (ABS) of no changes in the unemployment rate from February to March 2020 (ABS 2020a) compared to a dramatic increase in April 2020 (ABS 2020b), noting however that the ABS reference period is the first two weeks of the month.

Table 6.2 Odds ratios of the logistic regression of overall employment on selected variables

Variable	No controls Odds ratio	SE	Controls Odds ratio	SE
Year	.999	.041	1.041	.049
Period	1.137	.196	1.178	.207
Year × Period	.820	.187	.818	.192
Constant	13.995***	.400	-	-
Log likelihood	-9,639.411		-	
<i>N</i>	39,351		39,167	
Wald $\chi^2$	.81		1.43	
Wald DF	3		3	
Wald <i>p</i>	.847		.699	

Notes: The Wald test shown for year, period and their interaction. \*\*\*  $p \leq .001$ . For the model with controls, 26 of 126 controls were selected and ten folds were used in the cross-fit.

Figure 3 Overall employment rate by year and time of response



## Labour force participation

Labour force participation in the 2020 GOS-L is not significantly impacted by COVID-19.<sup>11</sup> Although there is a slight decline in nominal terms in labour force participation for individuals who responded on or after 23 March in 2020 (Figure 4), these differences do not approach statistical significance in tabular form or either the model with or without controls (Table 6.3).<sup>12</sup>

Turning to the regression models, the odds ratio lower than one indicates a decline in labour force participation between 2019 and 2020, holding all other factors constant. The odds ratio greater than one for period indicates that, holding other factors constant, labour force participation was higher on or after 23 March than prior to 23 March. The odds ratio less than one for the interaction of year and period indicates that labour force participation was lower on or after 23 March 2020, holding other factors constant. Again, it should be noted that the none of these coefficients in either model was statistically significant. In other words, there was no detectable change across year or period.

Table 6.3 Odds ratios of the logistic regression of labour force participation on selected variables

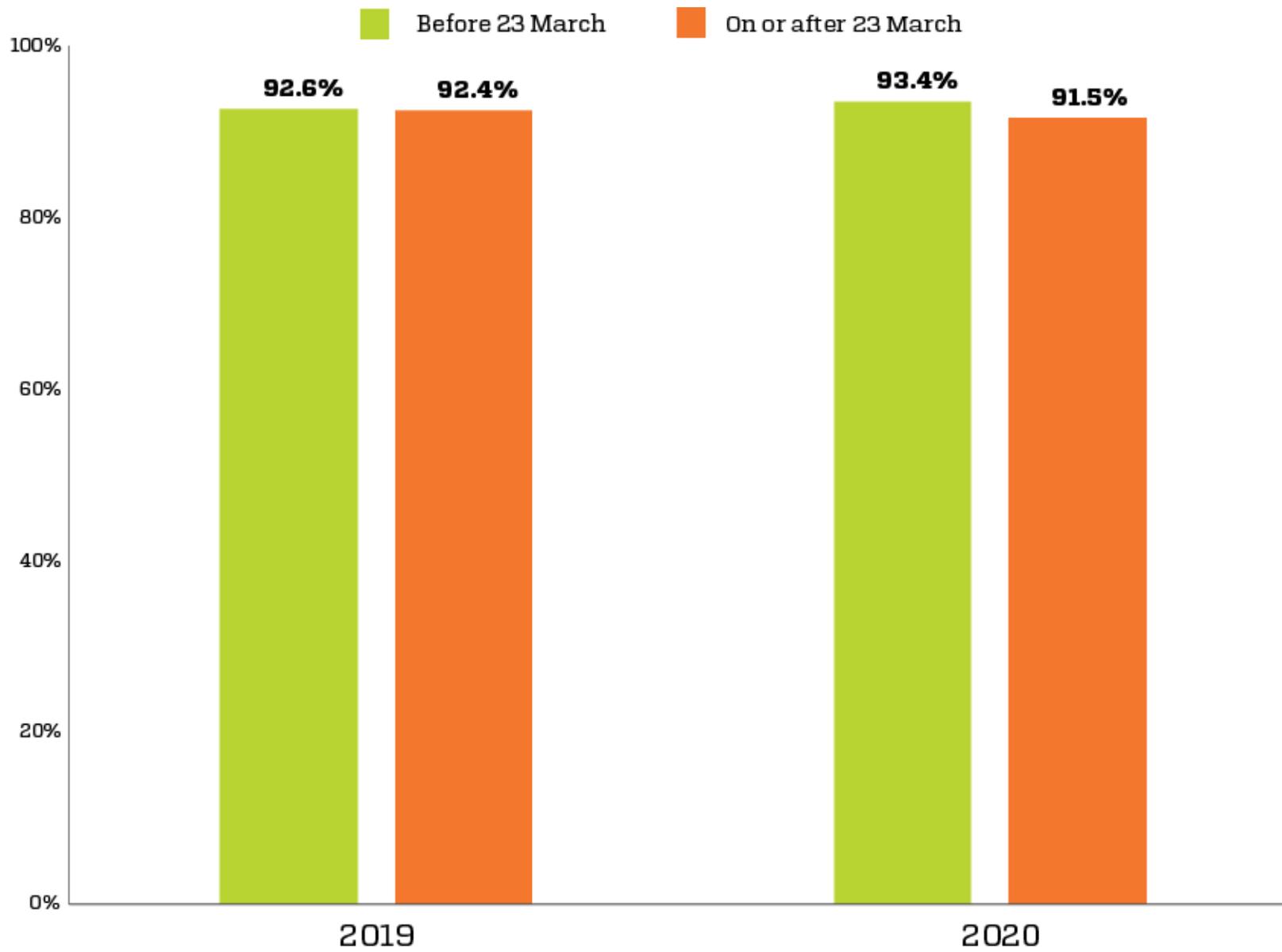
Variable	No controls Odds ratio	SE	Controls Odds ratio	SE
Year	.999	.041	1.041	.049
Period	1.140	.180	1.135	.192
Year × Period	.781	.161	.759	.168
Constant	12.478***	.327	-	-
Log likelihood	-11,350.312		-	
N	42,549		42,350	
Wald $\chi^2$	2.44		3.24	
Wald DF	3		3	
Wald $p$	.487		.356	

Notes: The Wald test shown for year, period and their interaction. \*\*\*  $p \leq .001$ . For the model with controls, 29 of 128 controls were selected and ten folds were used in the cross-fit.

<sup>11</sup> The population analysed is defined as analysis = 1 & survey = 1 & extquota = 0 & E942 = 0 & level = 1.

<sup>12</sup> The proportion in the labour force in 2020 does not differ significantly from before 23 March and on or after 23 March ( $F_{1,42553} = .71, p = .399$ ) nor does the proportion in the labour force on or after 23 March differ significantly between 2019 and 2020 ( $F_{1,42553} = 1.89, p = .169$ ).

Figure 4 Labour force participation rate by year and time of response



## Full-time salary

Full-time salary in the 2020 GOS-L is not significantly impacted by COVID-19.<sup>13</sup> Although there is a significant decline in median salary for individuals who responded on or after 23 March in 2020, there is no difference in median salary by year for individuals who responded on or after 23 March: that is to say that the drop in salary appears to be associated with late response rather than a result of COVID-19 (Figure 5); see, however, the models.<sup>14</sup> These differences do not approach statistical significance in either the model with or without controls (Table 6.4).

In the model without controls, the positive and significant coefficient for year indicates that salaries increased between 2019 and 2020. However, the fact that the coefficient for year is essentially zero once controls were introduced suggests that the effect was purely a function of the changing profile of graduates. In both models, the coefficient for period is negative and not significant, holding all other factors constant. Salaries for individuals who responded after 23 March is estimated to be lower but the degree of change cannot be reliably differentiated from zero. The negative coefficient for the interaction of year and period in the model without controls indicates that salaries were estimated to be lower on or after 23 March 2020, holding period and year constant, although the degree of change is not statistically significant. The fact that the coefficient for the interaction effect returns to what is effectively zero indicates that any change was due to a shift in the composition of the population of graduates who were employed full-time rather than an effect of late response in 2020.

<sup>13</sup> The population analysed is defined as analysis = 1 & survey = 1 & extquota = 0 & E942 = 0 & level = 1 & TRIMSAL\_L = 1 & FULLEMP\_L = 1.

<sup>14</sup> Median test for time in 2020:  $\chi^2=6.722, DF=1, p=.010$ . Median test for year on or after 23 March:  $\chi^2=.703, DF=1, p=.402$ .

Figure 5 Median salary by year and time of reponse

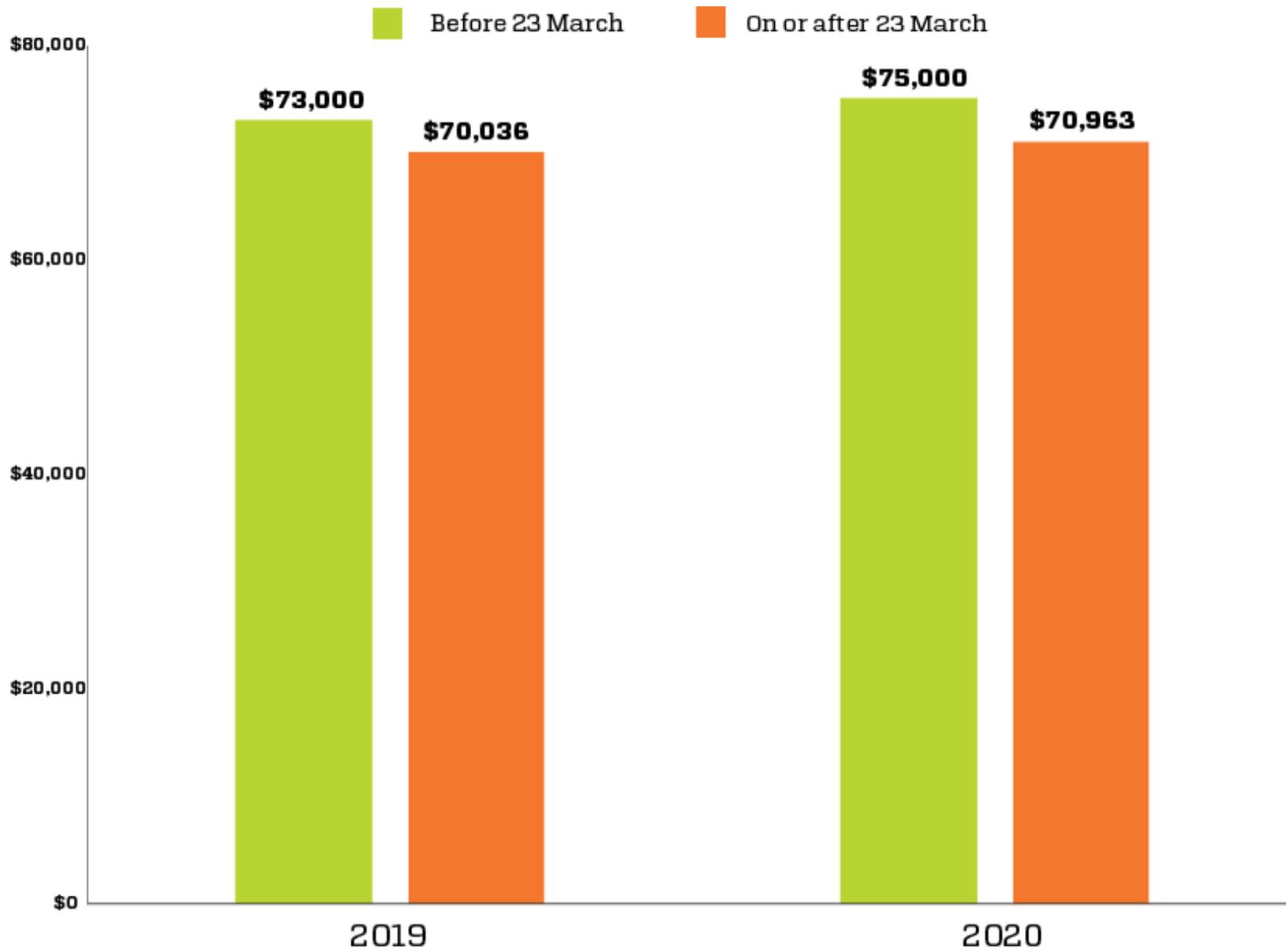


Table 6.4 Coefficients of the linear regression of full-time salary on selected variables

Variable	No controls Odds ratio	SE	Controls Odds ratio	SE
Year	.032***	.004	.001	.004
Period	-.020	.017	-.017	.015
Year × Period	-.013	.023	-.001	.021
Constant	11.185***	.003	-	-
R <sup>2</sup>	.003		-	
N	22,941		22,845	
Wald $\chi^2$	-		2.96	
Wald F	21.91		-	
Wald DF1	3		3	
Wald DF2	22,937		-	
Wald p	.487		.398	

Notes: The Wald test shown for year, period and their interaction. \*\*\*  $p \leq .001$ . For the model with controls, 48 of 126 controls were selected and ten folds were used in the cross-fit.

## Hours worked

The Australian Bureau of Statistics (2020a) notes that hours worked are an early labour market impact of major economic disruption. However, consistent with other measures tested, hours worked for responses on or after 23 March do not differ significantly between 2019 and 2020, nor do responses prior to 23 March and on or after 23 March in 2020 for either full-time employees (Figure 6) or part-time employees (Figure 7).<sup>15</sup> This strengthens the body of evidence that GOS-L 2020 was not significantly impacted by COVID-19.

<sup>15</sup> Full-time employees: comparison of mean hours worked between 2019 and 2020 for responses on or after 23 March ( $F_{1,28127}=1.15$ ;  $p=.283$ ); comparison of mean hours worked between those prior to 23 March and those on or after 23 March in 2020 ( $F_{1,28127}=2.01$ ;  $p=.156$ ). Part-time employees: comparison of mean hours worked between 2019 and 2020 for responses on or after 23 March ( $F_{1,7427}=.70$ ;  $p=.401$ ); comparison of mean hours worked between those prior to 23 March and those on or after 23 March in 2020 ( $F_{1,7427}=.03$ ;  $p=.855$ ).

Figure 6 Actual hours worked by full-time employees by year and period

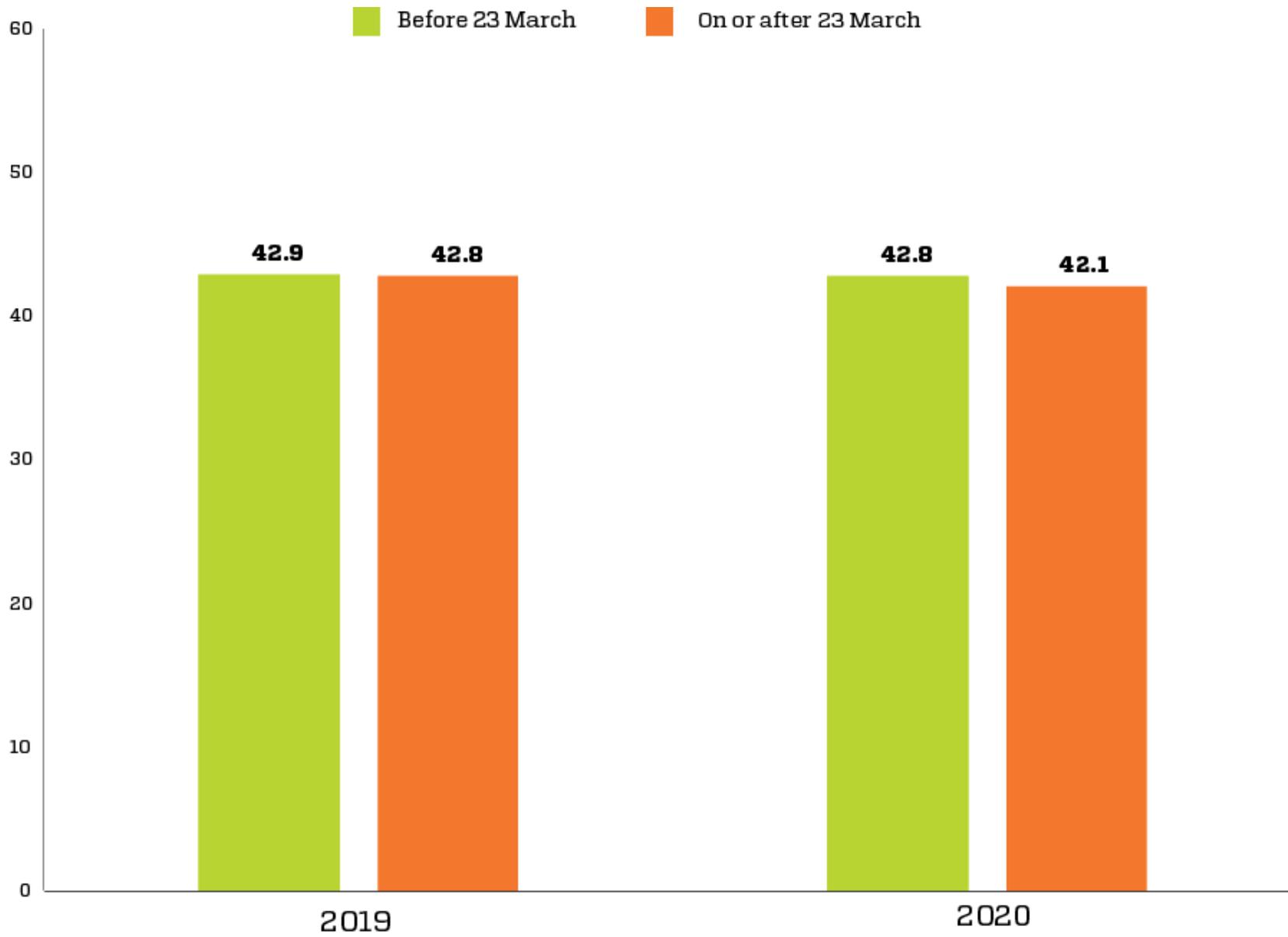
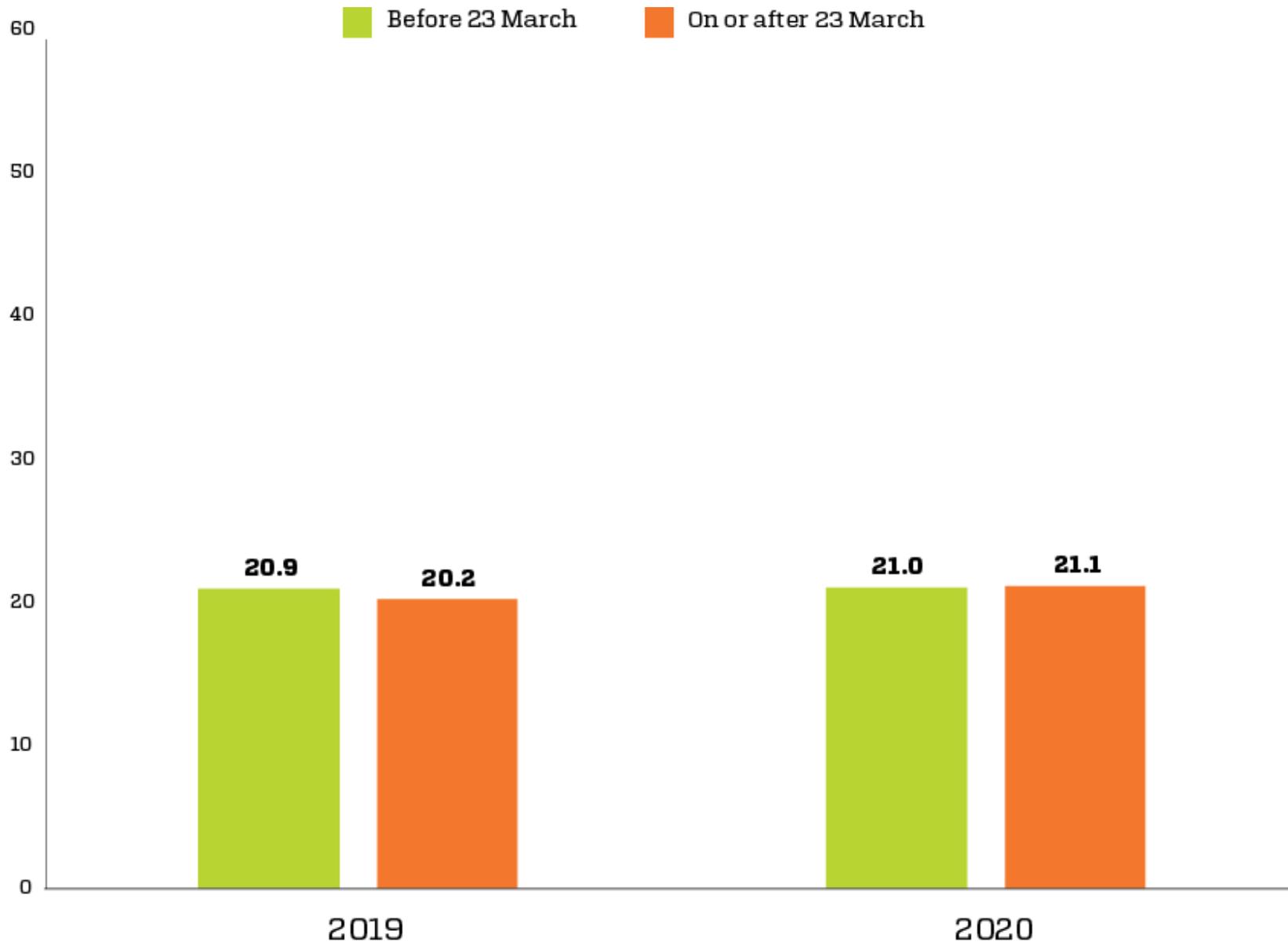


Figure 7 Actual hours worked by part-time employees by year and period



## Summary

This analysis examines the impact of COVID-19 on key labour market outcomes of undergraduates in the 2020 GOS-L : full-time employment, general employment, labour market participation, full-time salary and hours worked. There is no evidence of a statistically significant effect on any of these measures on GOS-L results. The lack of impact is due to the GOS-L field period. The overwhelming majority (95%) of responses were received prior to the onset of extensive social distancing restrictions, shut-downs of non-essential services trading restrictions from 23 March onwards. Even for the 5% of responses received on or after 23 March, the restrictions increased progressively, albeit quickly. As a result, those who responded closer to 23 March had less opportunity to experience labour market impacts. There is also a lag between the introduction of these restrictions and the labour market impact, further attenuating the impact. As noted earlier, this was an extremely near miss: had the survey been released to field even a week or two later, it is likely that the impact on labour market outcomes would have been sizeable. Unless there is a rapid and sizeable economic recovery, however, the 2021 GOS-L will likely be impacted by COVID-19.

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