

Earning and Learning: The Importance of Part-time Employment for Full-time Undergraduate University Student Finances in Australia

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Abstract

This paper draws upon the results of a sample survey of domestic (that is, not including overseas) undergraduate students at 19 of the 37 public universities in Australia to address the issue of paid employment during semester by full-time university students. The paper confirms that full-time undergraduate students in Australia are, on average, spending large amounts of time during semester in paid employment. It reports the incidence of paid employment during semester in the context of a range of social, financial and educational background characteristics of full-time students, and it explores the extent to which paid employment during semester may be having an adverse impact on university studies.

Introduction

In 2000, a total of 34 752 undergraduate students at 19 of the 37 public universities in Australia responded to a survey inviting them to provide details of their financial circumstances. The survey yielded a wealth of detail about relationships between the financial circumstances of the students and a range of outcome measures (Long and Hayden, 2001). In this paper, we address one of the most striking findings from the survey, that is, that full-time undergraduate university students in Australia are, on average, spending large amounts of time during semester in paid employment.

We examine the incidence of paid employment during semester in the context of a range of social, financial and educational background characteristics of full-time students, and we explore the extent to which paid employment during semester may be having an adverse impact on their university studies.

The Survey

Empirical interest in student finances in Australia dates back to the early 1970s, a time when the Commonwealth Government abolished university fees and replaced a system of scholarships awarded on the basis of academic merit with a system of income-support allowances determined on the basis of a family means test. The Government conducted its first survey of student finances in 1974 (Australian Department of Education, 1975). Follow-up surveys were conducted in 1979 (Commonwealth Department of Education, 1981) and 1984 (Department of Education and Training, 1987). The Australian Bureau of Statistics (1992) conducted a further survey in 1991 (see also Peut, Mitchell and Toth, 1994). Over recent years, however, the Government has resisted pressure to conduct another national survey – despite an accumulating body of evidence from a variety of sources that the financial circumstances of university students in Australia are deteriorating (for example, Abbot Chapman, 1998, McInnis, James and Hartley, 2000, Thies, Callaghan and Volders, 2000, Wilson, 2000).

In June 2000, the Australian Vice-Chancellors' Committee (AVCC), out of concern about the issue, invited its member universities to participate in a survey of the financial circumstances of domestic (that is, not including overseas) full-time and part-time undergraduate students. Nineteen universities agreed to participate – representing 51.4% of Australian public universities and accounting for 51.3% of all non-overseas undergraduate enrolments. A requirement of the survey was that the sample size from each

participating university should be sufficient to enable a report to that university on the financial circumstances of its students.

Each participating university was asked to provide, where possible, a list of names and addresses of 5,000 or more students, randomly selected from the population of non-overseas students enrolled in undergraduate or enabling courses at the university. Any incomplete entries were removed from the list, which was then sub-sampled to yield 4,800 names. Three smaller universities participating in the survey provided fewer than 4,800 names.

Questionnaires were sent in September-October 2000 to a total of 84 591 students on the final composite list. Apart from one university, which distributed questionnaires to its own students, administration of the questionnaires was organised centrally through a commercial mailing house.

A follow-up mail-out of questionnaires to non-respondents took place in October-November, and a reminder card was sent to remaining non-respondents in November 2000. A total of 34 752 students returned useable questionnaires – a response rate of 41.1 %.

The participating universities were self-selected. The established ‘Group of 8’ universities were represented in the sample proportionately to their representation in the Australian higher education system. The technology universities (principally the former ‘institutes of technology’) were overrepresented. Correspondingly, the remaining regional and metropolitan universities were marginally under-represented. The effect on the survey results of any differences between the 19 participating universities and the 37 public universities in the higher education system in Australia is difficult to determine. Any effect depends on the extent to which student finances differ across types of universities. The national nature of Australia’s higher education system and of schemes of student financial support should reduce between-university variation. On the other hand, student finances are also likely to be influenced by local labour markets. To the extent that these markets, especially youth labour markets, differ between universities, then the survey results concerning student finances are likely to be affected by any failure of the sample to represent adequately all types of universities.

Analysis of the responses required weighting of the data to compensate for the different probabilities of selection in each university. Additional weighting was required to compensate for differential response rates by age and gender within universities.

The Variables

Figure 1 provides an overview of the variables of interest in the survey. It also provides a structure for considering relationships between the variables. The various outcomes listed in the third column of Figure 1 are seen to be influenced by the *enrolment and financial characteristics* listed in the second column, which in turn are seen to be influenced by the *student background characteristics* listed in the first column. For each of the first and second columns, the variables listed are seen as being interrelated.

Figure 1. Schema of variables included in the analyses

Student Background	Enrolment & Financial Characteristics	Outcomes
Sex	Full-time or part-time enrolment	
Age	Field of study	
Country of Birth	Level of qualification	
Language spoken at home	Year began qualification	Choice of course
Indigenous	Receipt of government support	Choice of university
Family socioeconomic status	Living arrangements	Choice of mode of study
Type of school attended	Sources of financial support	Attendance at classes
Sole care giver	Participation in paid employment	
Dependent children	Income	
Disability	Budget surplus/deficit	
Moved to attend university	Payment of course fees	
	Loan to continue study	

The variables relate to questionnaire items and are, in most cases, self-explanatory. For this paper, a key variable is "participation in paid employment", which is based on students' responses to a question asking them about the average number of paid hours they worked per week during semester and during semester breaks.

Another important variable is 'receipt of government support', which relates to the extent of financial support being obtained from Commonwealth Government schemes designed to encourage equity of access to university study for students whose financial circumstances might otherwise prevent their participation in higher education. These schemes are means-tested, with strict definitions of 'dependent' and 'independent' beneficiaries. The boundaries at which students cease to be assessed for eligibility in terms of their parents' financial circumstances have always been contested. Currently there are three major schemes of financial support for university students – Austudy, Youth Allowance and Abstudy. The latter is available to persons of Aboriginal or Torres Strait Islander descent. Austudy is available to persons 25 years or older studying (usually) full-time.

Youth Allowance is a generic education and unemployment income-support scheme for persons under the age of 25. Young people studying at university can qualify for Youth Allowance payments if they fulfil eligibility criteria based on their parents' or partner's income or assets or, if they are declared 'independent', on their own income or assets. Other forms of government support are also available. There are, for instance, benefits for supporting parents, as well as disability pensions. The variable, 'budget surplus/deficit', refers to whether or not, once all estimates of income and expenditure had been taken into account for the year 2000, a student's final financial position was one of surplus or deficit. This variable is an indicator of financial difficulties – students with a deficit of income over expenditure are more likely to have to sacrifice their studies in order to improve their financial situation.

The variable, 'payment of course fees', relates to whether or not the students had paid their Higher Education Contributions Scheme (HECS) fees 'up front'. Although there have been recent moves to introduce fees for undergraduate courses for Australian citizens or permanent residents, students paying full fees represent a very small fraction of total enrolments. The more usual way in which students pay for their courses is through the HECS, an income-contingent deferred-payment scheme introduced by the Commonwealth Government in 1989. The Government directly subsidises between one-half and two-thirds of course fees for students eligible for HECS. Repayment of HECS fees takes place compulsorily through the Australian Taxation Office and begins at certain defined income thresholds. Students can, however, elect to pay the contributions 'up front' and receive a 25% discount. Such an 'up front' payment of HECS fees would suggest that the student is not immediately financially 'at risk'.

Employment and Full-time Study

Table 1 presents details of the percentages of full-time students in paid employment, the hours of paid employment they undertake, and the perceived impact of their commitment to paid employment on attendance at classes and on their performance at university. There are some striking aspects to the results.

Table 1. Percentage of full-time students in paid employment, hours of paid work, and reported effect on studies, by student background characteristics and enrolment status

Sex	All students			Students employed during semester		
	Male %	Female %	Persons %	Male %	Female %	Persons %
In paid employment						
Any employment	75.8	80.0	78.1			
During semester	68.6	75.7	72.5			
Full time	3.7	2.7	3.1			
Part time	18.1	21.5	20.0			
Casual	46.3	51.0	48.9			
Between semesters	71.9	75.9	74.1			
Full time	12.9	10.2	11.4			
Part time	16.3	19.3	17.9			
Casual	42.2	45.6	44.1			
Mean hours of paid employment per week						
During semester				14.6	14.4	14.5
Between semesters				24.6	23.2	23.8
Missed classes because of paid employment						
Frequently	5.1	4.0	4.4	7.4	5.2	6.1
Sometimes	18.0	21.0	19.7	25.9	27.6	26.9
Rarely	17.8	20.0	19.0	25.5	26.0	25.8
No	34.2	34.4	34.3	41.2	41.2	41.2
Adverse effect of paid employment on university studies						
A great deal	11.4	10.9	11.1	16.4	14.2	15.2
Somewhat	38.9	44.7	42.0	55.4	58.3	57.1
Not at all	24.7	23.6	24.1	28.2	27.4	27.8
n =	10199	16646	26888	6639	12207	18875

First, the large majority (78.1%) of full-time students were in some form of paid employment during the year 2000. They were in paid employment both during semester (72.5% of full-time students) and between semesters (74.1 % of full-time students). Their employment was predominantly part-time or casual, though 3.1% of respondents managed somehow to combine full-time employment with full-time study during semester; and 11.4% were in full-time employment between semesters. Whether during semester or between semesters, female full-time students were more likely to be in paid employment. During semester, for example, 75.7% of full-time female students, but only 68.6% of male full-time students, were in paid employment.

Second, full-time students were in paid employment for an average of two days per week during semester (14.5 hours), and for an average of over three days per week between semesters (23.8 hours). There was little difference between the average number of hours in paid employment for male and female full-time students.

Third, 24.1% of all full-time students reported that they 'frequently' or 'sometimes' missed classes because of paid employment. Among those in paid employment during semester, the proportion (33%) was higher. There was little difference between male and female full-time students in this regard.

Fourth, a substantial 42% of all full-time students reported that paid employment during semester had a 'somewhat' adverse effect on their university studies, and a further 11.1% reported that paid employment during semester adversely affected their university studies 'a great deal'. Among all students in paid employment during semester, the proportions were appreciably higher – 57.1% and 15.2%, respectively.

A comparison with values from the 1984 survey of student finances (DEET, 1987) provides perspective on these findings. Table 2 presents details of the percentage of full-time students in paid employment, by age and sex, in 1984 and in 2000. The most remarkable feature of this comparison is the very substantial increase in the proportion of full-time students in paid employment during semester – up from 49.5% in 1984 to 72.5% in 2000. The increase may, in fact, be even greater than indicated. The 1984 survey

differentiated only between 'employment during the long vacation' and 'employment during the course'. The present investigation distinguished between 'employment during semester' and 'employment between semesters'. Hence values from the 1984 survey may include some between-semester employment in the June-July break that is not included in the 2000 values.

Table 2 also shows the age- and sex-specific paid employment rates for full-time students. These rates all show substantial increases between 1984 and 2000, which means that the increase between 1984 and 2000 was not due to any shift in the age or sex composition of the full-time undergraduate student population. Some categories, however, experienced larger changes than others. In particular, female students aged 30 years and older had lower levels of paid employment during semester than male students in 1984, but similar levels in the 2000 survey.

Table 2. Percentage of full-time students in paid employment during semester, 1984 and 2000

Sex Year of survey	Male		Female		Persons	
	1984 %	2000 %	1984 %	2000 %	1984 %	2000 %
Age						
17-19 years	46.3	67.5	50.9	76.1	48.7	72.4
20-24 years	48.6	71.6	56.2	80.1	52.1	76.2
25-29 years	46.9	66.8	38.9	70.0	43.5	68.3
30-39 years	49.3	58.4	36.4	57.5	42.2	57.9
40 years and older	35.5	50.9	17.9	53.0	24.5	52.2
Total	47.6	68.6	51.4	75.7	49.5	72.5

Source: DEET (1987) Table 40, p. 57 and current study.

The average hours of paid employment during semester also appear to have increased markedly. The 1984 survey estimated that full-time students worked an average of about 5 hours per week during the academic year (DEET, 1987: 68) (although the report warned that the estimate should be used 'with caution', apparently because it had been calculated from grouped data). The estimate included the employment of some full-time Technical and Further Education (TAFE) students, though

examination of other results presented in the report (DEET, 1987: 69) suggests that there was little difference between the average hours worked by TAFE students and the average hours worked by higher education students. Again, this estimate includes some component of between-semester employment in the June-July break.

In contrast, in the 2000 survey, full-time students in paid employment during semester worked an average of 14.5 hours per week. So, not only has the incidence of paid employment during semester increased by about one-half between 1984 and 2000, but also the average hours worked by students in paid employment has tripled.

Findings reported from two surveys of first-year students at a representative range of Australian universities provide additional evidence of the trend (McInnis, James and McNaught, 1995, McInnis, James and Hartley, 2000). They show that the average number of hours of paid employment for all full-time students in paid employment during semester increased by 14% between 1994 and 1999 – up from 11.04 hours per week in 1994 to 12.59 hours per week in 1999 (McInnis, James and Hartley, 2000: 39). The trend is also consistent with findings from a survey conducted at Deakin University (Thies, Callaghan and Volders, 2000: 20).

Estimates from the present survey (conducted in 2000) and from the McInnis survey (conducted in 1999) of the average hours spent in paid employment during semester by full-time students may be compared. The present survey found that full-time students in paid employment during semester worked for an average of 14.5 hours per week. The comparable estimate from the McInnis survey is 12.6 hours. The present survey found that full-time students (that is, including those not in paid employment during

semester) worked an average of 10.5 hours per week during semester. The comparable estimate from the McInnis survey is 6.5 hours. The estimates from the present survey are higher in each instance. One important reason for the difference is likely to be that the present survey included undergraduate students at all year levels, and not first-year students only (as is the case for the 1999 survey). Later in this paper, we show that the average number of hours of paid employment during semester tends to increase with the duration of studies. A second reason might be that full-time students were spending more time, on average, in paid employment during semester in 2000 than they were in 1999. This possibility is suggested by findings from a further survey conducted in 2001 (McInnis and Hartley, 2001) indicating that students in paid employment during semester in 2001 worked an average of 14.7 hours in the most recent week in which they were employed. This estimate is higher than the estimate of 14.5 hours from the present survey. In short, there may be a continuing upward trend during recent years in the average number of hours per week being devoted by full-time students to paid employment during semester.

Student Profiles

Identifying the characteristics of students most likely to be in paid employment, and to report an adverse effect on their studies of that employment, is important for the review and development of policies on student finances. Tables 3 to 8 present results that show variation in these characteristics among different categories of students.

Table 3 shows paid employment rates during semester for all full-time students in the year 2000, disaggregated by sex and then by each of the variables listed in Figure 1. This format is continued in Tables 4 to 8. Note that the figures in italics in each of Tables 3 to 8 are statistical significance levels for differences across categories within each of the variables reported.

Table 3. Students in paid employment during semester by sex, enrolment status and student characteristics – all full-time students

	Male %	Female %	All %		Male %	Female %	All %
All persons	68.6	75.7	72.5				
Age in years				Financially dependent on			
Under 25	70.1	78.5	74.7	No one	73.4	77.5	75.6
25 to 34	65.3	66.6	65.9	Spouse	60.2	64.2	62.9
35 to 44	55.5	56.3	56.0	Parent or other relative	66.0	76.4	71.7
45 and over	41.6	48.4	46.0	<i>Earnings of supporter</i>			
Country of birth				Centrelink	44.9	57.4	51.3
Australia	72.5	78.8	76.0	Less than \$30,000	58.0	67.3	63.3
Overseas	54.1	61.9	58.0	\$30,001 - \$50,000	67.0	74.9	71.5
Main language spoken at home				More than \$50,000	73.3	81.8	77.9
English	72.5	78.5	75.9	Don't know	61.0	71.6	67.3
Other	46.8	54.9	50.6	<i>Source of earnings of supporter</i>			
Aboriginal or Torres Strait Is.				Full-time employment	69.1	78.1	74.2
Indigenous	49.2	67.5	61.6	Self-employed	63.6	69.5	67.0
Non-Indigenous	68.7	75.9	72.7	Pensioner, student, etc.	47.1	59.5	53.4
Family socioeconomic status				Part-time employment	66.0	71.3	68.9
High	72.0	81.3	76.9	Field of study			
Upper middle	72.5	77.9	75.3	Agriculture	66.6	75.6	71.0
Middle	71.5	77.5	74.9	Building	71.4	76.3	73.0
Lower middle	66.8	73.6	70.7	Engineering/Surveying	61.3	67.7	62.5
Lower	56.3	67.9	63.0	Law	75.2	81.1	78.7
Type of school last attended				Health	69.1	75.7	73.8
Government	63.9	72.0	68.4	Education	69.8	75.6	74.2
Catholic	73.3	79.8	77.1	Science	63.1	71.1	66.5
Independent	75.6	82.0	78.9	Business	73.3	76.5	74.9
Sole care giver				Arts/Humanities	68.5	76.4	73.3
Yes	47.2	51.4	50.5	Arts/Social Sciences	75.1	76.9	76.5
No	68.9	76.8	73.2	Level of qualification			
Dependent child(ren)				Degree	68.4	75.7	72.4
Yes	54.5	47.1	49.5	Adv Dip/Dip/Assoc Degree	78.9	74.0	76.2
No	68.9	77.6	73.6	Assoc Dip/Certificate	100.0	100.0	100.0
Disability				Enabling	73.9	69.9	71.9
Yes	55.7	69.0	63.6	Year began qualification			
No	69.3	76.2	73.1	Began in 2000	64.4	72.9	69.2
Move to attend university				Began in 1998/9	70.0	76.9	73.9
Moved	58.3	66.2	62.7	Began before 1998	71.6	77.8	74.8
Did not move	71.6	78.6	75.4	Loan to continue study			
Government support				Yes	68.5	73.4	71.2
None	77.1	82.2	79.9	No	68.6	76.0	72.7
None, but applied	74.9	82.4	79.2	Surplus/deficit			
Youth Allow/Austudy/Abstudy	58.9	69.8	64.8	Deficit	67.3	75.5	71.8
Pension or equivalent	37.8	40.6	40.0	Surplus	76.2	80.7	78.6
Family allowance/Other	44.4	46.7	46.0	Income			
Living arrangements				Less than \$10,000	64.2	75.9	70.6
With parents	71.9	81.4	77.0	\$10,000 - \$19,999	87.1	89.4	88.3
With partner/spouse	65.5	64.4	64.8	\$20,000 - \$29,999	92.0	87.4	89.7
With children	62.5	43.9	45.6	\$30,000 - \$39,999	87.5	89.1	88.4
Alone	55.6	70.1	63.2	\$40,000 or more	87.6	87.2	87.5
Shared rental accommodation	66.8	74.9	71.3	Paid course fees up front			
University college	49.2	51.7	50.6	Paid	69.7	77.2	73.8
Informal/other	55.1	65.0	60.7	Did not pay	68.2	75.2	72.1
n =	10,199	16,646	26,888	n =	10,119	16,646	26,888

As can be seen from Table 3, most (72.5%) full-time students were in paid employment during semester in 2000. Not surprisingly, students in paid employment during semester were better represented among higher income-earning brackets (for example, among students earning \$20 000 to \$29 999 per year, 89.7% were in paid employment during semester). A correlation between earning higher incomes and both the incidence of participation in paid employment during semester and the number of hours worked is evident in each of Tables 3 to 8. Because of the obvious circularity in this relationship, that is, the more students are in paid employment, the greater the income, and because this relationship is not as informative as others from an equity perspective, no reference is made to the relationship in the analysis of results shown in Tables 4 to 8.

From Table 3, it can also be seen that full-time students in paid employment during semester were better represented among students living at home with their parents (77%), students who in Year 2000 expected to have a budget surplus (78.6%), students who were financially self-reliant (75.6%), Australian-born students (76%), students from English-speaking homes (75.9%), and students from higher family socioeconomic-status backgrounds (for example, among students in the highest category of family socioeconomic status, 76.9% were in paid employment during semester). They were better represented among students who received no government income support (79.9%), and they were equally well represented among students who failed to obtain government income support (79.2%), presumably because they could not satisfy the relevant means test.

Of note from Table 3 is the lower-than-average incidence of paid employment during semester among full-time students receiving Youth Allowance, Austudy or Abstudy benefits (58.9% for males, and 69.8% for females). The incidence of paid employment during semester among full-time students receiving a pension or equivalent (37.8% for males, and 40.6% for females), or receiving family or other allowances (44.4% for males, and 46.7% for females), was even lower. These findings suggest the possibility that students covered by government income support schemes feel less pressure to find paid employment during semester. All the same, a majority of full-time students receiving Youth Allowance, Austudy or Abstudy payments were in paid employment during semester. Table 4 shows, for all full-time students in paid employment during semester, the average number of hours of paid employment per week. The average for all students in paid employment was 14.5 hours. Groups of students among whom longer hours of paid employment during semester were the norm included students living with a partner or spouse (17.3 hours), older students (for example, students aged 35 to 44 in paid employment during semester worked an average of 17.4 hours per week), students living alone (16.6 hours), students who are financially self-reliant (16.5 hours), students who receive no government income support (15.9 hours), and students who are sole care givers (15 hours). Full-time students undertaking longer hours of paid employment during semester were also more likely to report a budget surplus (15.1 hours).

Table 4. Mean hours of paid employment per week during semester by sex, enrolment status and student characteristics – all full-time students in paid employment during semester

	Male	Female	All		Male	Female	All
All persons	14.6	14.4	14.5				
Age in years				Financially dependent on			
Under 25	14.1	14.0	14.1	No one	16.7	16.3	16.5
25 to 34	17.1	16.5	16.8	Spouse	14.5	14.9	14.8
35 to 44	17.8	17.2	17.4	Parent or other relative	12.9	13.0	13.0
45 and over	15.3	16.7	16.3	<i>Earnings of supporter</i>			
Country of birth				Centrelink	12.7	12.2	12.4
Australia	14.5	14.4	14.4	Less than \$30,000	13.3	13.5	13.4
Overseas	15.0	14.3	14.6	\$30,001 - \$50,000	12.7	13.1	12.9
Main language spoken at home				More than \$50,000	13.0	13.5	13.3
English	14.5	14.4	14.4	Don't know	13.3	12.8	12.9
Other	15.3	14.4	14.8	<i>Source of earnings of supporter</i>			
Aboriginal or Torres Strait Is.				Full-time employment	13.0	13.3	13.2
Indigenous	13.8	18.0	17.0	Self-employed	12.5	13.3	13.0
Non-Indigenous	14.6	14.3	14.4	Pensioner, student, etc.	12.7	13.0	12.9
Family socioeconomic status				Part-time employment	13.6	11.7	12.5
High	13.6	13.7	13.6	Field of study			
Upper middle	14.3	14.0	14.2	Agriculture	19.4	15.0	17.0
Middle	14.8	14.4	14.6	Building	16.7	14.4	15.8
Lower middle	14.8	14.6	14.7	Engineering/Surveying	12.6	13.8	12.8
Lower	15.6	15.2	15.3	Law	15.4	15.8	15.6
Type of school last attended				Health	14.8	13.5	13.9
Government	14.5	14.4	14.4	Education	13.2	13.6	13.6
Catholic	14.7	14.8	14.8	Science	13.8	12.8	13.3
Independent	14.4	13.7	14.0	Business	16.1	15.4	15.7
Sole care giver				Arts/Humanities	14.1	14.7	14.5
Yes	19.4	13.9	15.0	Arts/Social Sciences	14.7	14.7	14.7
No	14.5	14.3	14.4	Level of qualification			
Dependent child(ren)				Degree	14.5	14.3	14.4
Yes	16.6	15.8	16.1	Adv Dip/Dip/Assoc Degree	24.3	17.5	20.6
No	14.5	14.3	14.4	Assoc Dip/Certificate	6.4	12.7	8.9
Disability				Enabling	19.6	18.5	18.8
Yes	14.2	13.9	14.0	Year began qualification			
No	14.6	14.4	14.5	Began in 2000	14.0	13.8	13.9
Move to attend university				Began in 1998/9	14.5	14.3	14.4
Moved	13.2	13.5	13.4	Began before 1998	15.6	15.5	15.5
Did not move	14.9	14.5	14.7	Loan to continue study			
Government support				Yes	14.7	14.6	14.6
None	16.1	15.6	15.9	No	14.6	14.3	14.4
None, but applied	14.6	14.8	14.7	Surplus/deficit			
Youth Allow/Austudy/Abstudy	12.3	12.6	12.5	Deficit	14.0	14.0	14.0
Pension or equivalent	11.8	11.3	11.4	Surplus	15.4	14.9	15.1
Family allowance/Other	15.0	13.4	13.8	Income			
Living arrangements				Less than \$10,000	11.1	11.9	11.6
With parents	14.4	14.0	14.1	\$10,000 - \$19,999	15.9	16.0	16.0
With partner/spouse	16.6	17.7	17.3	\$20,000 - \$29,999	24.8	24.3	24.6
With children	19.0	13.2	13.9	\$30,000 - \$39,999	33.5	31.2	32.4
Alone	15.7	17.3	16.6	\$40,000 or more	34.6	32.1	33.6
Shared rental accommodation	14.6	14.0	14.3	Paid course fees up front			
University college	12.8	11.6	12.1	Paid	14.8	14.1	14.4
Informal/other	15.1	15.5	15.3	Did not pay	14.5	14.4	14.5
n =	6,639	12,207	18,875	n =	6,639	12,207	18,875

Students in paid employment during semester who received pensions or income-support allowances (Youth Allowance, Austudy or Abstudy) tended on average to be in paid employment for fewer hours per week during semester (12.5 hours) than those who received no government income support (15.9 hours). Younger students living in a university college (12.1 hours), or at home with their parents (14.1 hours), also tended on average to be in paid employment for fewer hours per week during semester. Males who were sole care givers (19.4 hours) and males with dependent children (16.6 hours) appeared on average to be employed for particularly long hours during semester. Female students of Indigenous background (18 hours) also appeared on average to be employed for long hours.

Tables 5 and 6 concern the incidence of full-time students who are in paid employment during semester missing classes 'sometimes' or 'frequently' because of their employment commitments. As Table 5 shows, one in four (24.1%) of all full-time students 'sometimes' or 'frequently' missed classes because of paid employment. Compared with all full-time students, students who missed classes because of employment were better represented among students who had taken a loan to continue their studies (35.5%), were living in rental accommodation (32.6%), had applied unsuccessfully for government income support (33.1%), were in the later years of their course (31.4%), and were financially self-reliant (31.1%).

Table 5. Missed class 'frequently' or 'sometimes' due to work by sex, enrolment status and student characteristics – all full-time students

	Male %	Female %	All %		Male %	Female %	All %
All persons	23.1	24.9	24.1				
Age in years				Financially dependent on			
Under 25	22.3	25.5	23.9	No one	30.5	31.5	31.1
25 to 34	29.9	26.7	28.4	Spouse	23.0	24.5	24.0
35 to 44	22.2	21.1	21.5	Parent or other relative	18.0	20.8	19.5
45 and over	7.2	10.9	9.6	<i>Earnings of supporter</i>			
Country of birth				Centrelink	12.2	16.9	14.6
Australia	24.3	26.3	25.4	Less than \$30,000	20.6	21.7	21.3
Overseas	18.5	18.7	18.6	\$30,001 - \$50,000	20.7	22.8	21.9
Main language spoken at home				More than \$50,000	19.1	22.3	20.8
English	24.5	26.0	25.4	Don't know	15.0	18.1	16.8
Other	15.1	16.2	15.6	<i>Source of earnings of supporter</i>			
Aboriginal or Torres Strait Is.				Full-time employment	19.2	21.6	20.5
Indigenous	15.8	23.1	20.8	Self-employed	15.6	19.8	18.1
Non-Indigenous	23.0	24.9	24.1	Pensioner, student, etc.	13.4	18.1	15.7
Family socioeconomic status				Part-time employment	26.1	23.2	24.4
High	22.8	23.8	23.3	Field of study			
Upper middle	22.2	24.9	23.7	Agriculture	25.9	25.8	25.8
Middle	25.0	26.2	25.6	Building	28.8	16.6	24.2
Lower middle	24.0	25.9	25.1	Engineering/Surveying	18.7	21.6	19.2
Lower	19.8	22.8	21.5	Law	31.4	32.2	31.9
Type of school last attended				Health	21.6	24.5	23.6
Government	20.6	23.1	22.0	Education	26.9	24.2	24.9
Catholic	25.3	27.8	26.7	Science	19.9	21.3	20.5
Independent	26.8	27.1	27.0	Business	25.6	25.0	25.3
Sole care giver				Arts/Humanities	23.0	25.9	24.7
Yes	23.7	18.2	19.4	Arts/Social Sciences	23.8	27.7	26.8
No	22.9	25.0	24.1	Level of qualification			
Dependent child(ren)				Degree	23.0	25.0	24.1
Yes	19.3	16.6	17.5	Adv Dip/Dip/Assoc Degree	21.5	16.9	18.9
No	23.1	25.3	24.3	Assoc Dip/Certificate	51.5	0.0	31.2
Disability				Enabling	37.9	21.4	28.0
Yes	24.1	29.8	27.4	Year began qualification			
No	22.8	24.6	23.8	Began in 2000	17.1	19.4	18.4
Move to attend university				Began in 1998/9	23.9	26.1	25.1
Moved	24.0	26.7	25.5	Began before 1998	30.6	32.2	31.4
Did not move	22.8	24.4	23.7	Loan to continue study			
Government support				Yes	34.2	36.4	35.5
None	23.6	23.9	23.8	No	21.7	23.4	22.6
None, but applied	28.1	36.8	33.1	Surplus/deficit			
Youth Allow/Austudy/Abstudy	22.0	24.7	23.5	Deficit	24.8	27.0	26.1
Pension or equivalent	12.9	13.6	13.4	Surplus	21.7	23.0	22.4
Family allowance/Other	17.1	11.6	13.1	Income			
Living arrangements				Less than \$10,000	17.5	21.5	19.7
With parents	21.3	23.7	22.6	\$10,000 - \$19,999	34.0	34.7	34.3
With partner/spouse	25.4	24.4	24.8	\$20,000 - \$29,999	46.0	38.5	42.2
With children	43.8	13.8	16.6	\$30,000 - \$39,999	48.0	43.3	45.9
Alone	22.0	31.2	26.8	\$40,000 or more	32.4	36.2	33.7
Shared rental accommodation	31.8	33.3	32.6	Paid course fees up front			
University college	13.9	15.6	14.8	Paid	16.8	19.7	18.4
Informal/other	25.9	22.9	24.2	Did not pay	25.0	26.4	25.8
n =	10,199	16,646	26,888	n =	10,199	16,646	26,888

The contrast between students receiving government income support (Youth Allowance, Austudy, Abstudy) and students who applied unsuccessfully for this support was marked. Students who received government income support were much less likely to report missing classes 'sometimes' or 'frequently' because of paid employment (22% for males, and 24.7% for females) than were students who were unsuccessful in obtaining government income support (28.1% for males, and 36.8% for females). The difference was especially strong among female students. Table 6 shows, for all full-time students in paid employment during semester, the incidence of missing classes 'sometimes' or 'frequently' because of paid employment. One in three (33%) of all students in paid employment during semester missed classes 'sometimes' or 'frequently' because of their work. The number of hours of paid employment per week during semester was clearly a major driver of the likelihood of missing classes because of employment. For example, one in two (55.5%) of all students in paid employment during semester who worked 30 to 39 hours per week missed classes 'sometimes' or 'frequently' because of employment. The incidence of missing classes was only marginally lower (47.3%) among students employed for 20 to 29 hours per week.

Table 6. Missed class 'frequently' or 'sometimes' due to work by sex, enrolment status and student characteristics – all full-time students in paid employment during semester

	Male %	Female %	All %		Male %	Female %	All %
All persons	33.3	32.8	33.0				
Age in years				Financially dependent on			
Under 25	31.4	32.0	31.8	No one	41.4	40.5	40.9
25 to 34	45.4	39.4	42.5	Spouse	38.2	37.7	37.8
35 to 44	39.5	37.6	38.3	Parent or other relative	26.8	27.1	27.0
45 and over	16.0	22.4	20.3	<i>Earnings of supporter</i>			
Country of birth				Centrelink	25.4	28.0	26.9
Australia	33.3	33.3	33.3	Less than \$30,000	35.6	32.3	33.6
Overseas	33.2	29.7	31.3	\$30,001 - \$50,000	30.2	30.4	30.4
Main language spoken at home				More than \$50,000	25.6	27.2	26.5
English	33.6	33.1	33.3	Don't know	24.5	25.1	24.8
Other	30.8	28.9	29.8	<i>Source of earnings of supporter</i>			
Aboriginal or Torres Strait Is.				Full-time employment	27.1	27.5	27.3
Indigenous	32.1	33.8	33.4	Self-employed	24.7	28.1	26.8
Non-Indigenous	33.1	32.7	32.9	Pensioner, student, etc.	28.0	30.3	29.2
Family socioeconomic status				Part-time employment	39.8	32.7	35.7
High	31.3	29.3	30.2	Field of study			
Upper middle	30.3	31.7	31.1	Agriculture	40.3	34.1	37.0
Middle	34.3	33.7	33.9	Building	40.2	21.8	33.1
Lower middle	35.4	34.9	35.1	Engineering/Surveying	30.0	31.5	30.3
Lower	34.9	33.6	34.1	Law	42.1	39.7	40.7
Type of school last attended				Health	31.2	32.2	31.9
Government	31.9	31.8	31.8	Education	38.5	31.8	33.3
Catholic	34.0	34.7	34.4	Science	30.8	29.7	30.3
Independent	35.0	33.1	34.0	Business	34.5	32.5	33.5
Sole care giver				Arts/Humanities	33.2	33.6	33.4
Yes	49.5	34.8	37.6	Arts/Social Sciences	31.3	36.0	34.8
No	32.9	32.5	32.7	Year began qualification			
Dependent child(ren)				Began in 2000	26.3	26.4	26.3
Yes	35.5	35.1	35.2	Began in 1998/9	33.7	33.8	33.8
No	33.0	32.5	32.7	Began before 1998	42.2	41.1	41.6
Disability				Study leave available			
Yes	42.2	42.7	42.5	No	32.6	34.3	33.5
No	32.6	32.2	32.3	Paid leave	37.8	34.7	36.2
Move to attend university				Unpaid leave	36.0	35.7	35.8
Moved	40.5	39.9	40.1	Flexible hours	33.2	31.7	32.3
Did not move	31.5	31.0	31.2	Hours of work per week			
Government support				1 - 9	21.8	20.0	20.8
None	30.3	29.0	29.6	10 - 19	32.9	32.6	32.7
None, but applied	36.8	44.5	41.3	20 - 29	47.5	49.5	48.7
Youth Allow/Austudy/Abstudy	37.0	35.0	35.8	30 - 39	54.4	56.3	55.5
Pension or equivalent	34.2	33.5	33.6	40 - 49	49.8	38.5	45.2
Family allowance/Other	38.4	24.4	28.2	50 or more	52.9	39.1	45.7
Living arrangements				Loan to continue study			
With parents	29.3	29.1	29.2	Yes	49.5	48.9	49.2
With partner/spouse	38.7	37.6	38.0	No	31.2	30.7	30.9
With children	70.1	31.1	36.1	Income			
Alone	39.4	44.3	42.2	Less than \$10,000	26.7	28.1	27.5
Shared rental accommodation	46.9	44.1	45.2	\$10,000 - \$19,999	38.9	38.8	38.8
University college	27.0	29.9	28.6	\$20,000 - \$29,999	50.2	44.4	47.3
Informal/other	46.5	35.2	39.7	\$30,000 - \$39,999	55.5	48.5	52.2
Surplus/deficit				\$40,000 or more	36.9	41.8	38.6
Deficit	36.5	35.6	36.0	Paid course fees up front			
Surplus	28.2	28.4	28.3	Paid	24.1	25.5	24.9
				Did not pay	36.1	34.9	35.4
n =	6,841	12,468	19,338	n =	6,841	12,468	19,338

Compared with all full-time students in paid employment during semester, students who missed classes 'sometimes' or 'frequently' because of employment were generally not well off: they were better represented among students who had to take a loan to continue their studies (49.2%), who were financially self-reliant (40.9%), who had failed to obtain government income support (41.3%), and who were experiencing a budget deficit (36 %). They were also better represented among students living alone

(44.3%), students living in shared rental accommodation (42.2%), students aged 25 to 34 (42.5%), and students in the later years of their course (41.6%).

Among both males and females, full-time students with a disability who were in paid employment during semester reported a higher incidence of missing classes because of their employment commitments (42.2% for males, and 42.7% for females). Males living with children (70.1%), males who were sole care givers (49.5%), and males with dependent children (35.5%) reported especially high incidences of missing classes because of paid employment.

Table 7 shows, for all full-time students, the incidence of claims that their studies had been adversely affected 'a great deal' by paid employment during semester. One in 10 (11.1%) of all full-time students claimed that it was. Students not in paid employment during semester would not, of course, have been able to make this claim. Table 8 presents, therefore, a more informative statistic, that is, that 15.2% of all full-time students in paid employment during semester claimed that their studies were adversely affected 'a great deal' because of paid employment.

Table 7. Study adversely affected 'a great deal' due to work by sex, enrolment status and student characteristics – all full-time students

	Male %	Female %	All %		Male %	Female %	All %
All persons	11.4	10.9	11.1				
Age in years				Financially dependent on			
Under 25	10.7	10.4	10.5	No one	15.2	14.7	14.9
25 to 34	15.2	14.9	15.1	Spouse	14.9	11.9	12.9
35 to 44	15.6	11.3	13.0	Parent or other relative	8.5	8.3	8.4
45 and over	6.6	9.7	8.6	<i>Earnings of supporter</i>			
Country of birth				Centrelink	7.1	8.2	7.7
Australia	11.9	11.3	11.6	Less than \$30,000	10.7	9.8	10.2
Overseas	9.5	8.8	9.1	\$30,001 - \$50,000	10.1	9.5	9.8
Main language spoken at home				More than \$50,000	9.0	8.6	8.8
English	11.8	11.1	11.4	Don't know	6.7	7.1	6.9
Other	9.3	8.4	8.8	<i>Source of earnings of supporter</i>			
Aboriginal or Torres Strait Is.				Full-time employment	9.3	8.7	9.0
Indigenous	6.1	15.5	12.5	Self-employed	7.5	8.4	8.0
Non-Indigenous	11.4	10.7	11.0	Pensioner, student, etc.	7.7	8.8	8.2
Family socioeconomic status				Part-time employment	12.8	9.6	11.0
High	9.5	9.5	9.5	Field of study			
Upper middle	12.0	9.9	11.0	Agriculture	6.8	10.7	8.8
Middle	11.6	10.9	11.2	Building	15.6	12.4	14.4
Lower middle	11.4	11.4	11.4	Engineering/Surveying	8.9	9.8	9.0
Lower	12.0	12.9	12.5	Law	17.2	15.0	16.1
Type of school last attended				Health	11.0	10.5	10.6
Government	10.4	10.6	10.5	Education	12.8	8.0	9.1
Catholic	12.6	11.7	12.1	Science	10.0	9.4	9.7
Independent	12.2	10.6	11.4	Business	13.0	12.7	12.8
Sole care giver				Arts/Humanities	10.9	11.3	11.1
Yes	15.6	11.2	12.1	Arts/Social Sciences	11.5	10.7	11.0
No	11.3	10.7	11.0	Level of qualification			
Dependent child(ren)				Degree	11.4	10.9	11.2
Yes	13.3	8.9	10.4	Adv Dip/Dip/Assoc Degree	10.2	6.9	8.4
No	11.3	11.0	11.1	Assoc Dip/Certificate	0.0	73.2	28.8
Disability				Enabling	12.9	11.7	12.1
Yes	14.3	14.0	14.1	Year began qualification			
No	11.2	10.6	10.9	Began in 2000	8.7	9.0	8.9
Move to attend university				Began in 1998/9	11.4	11.0	11.2
Moved	11.4	12.3	11.9	Began before 1998	15.5	13.9	14.7
Did not move	11.3	10.4	10.8	Loan to continue study			
Government support				Yes	18.5	18.5	18.5
None	12.0	10.1	11.0	No	10.5	9.9	10.2
None, but applied	15.9	17.6	16.9	Surplus/deficit			
Youth Allow/Austudy/Abstudy	10.1	10.5	10.3	Deficit	13.0	11.9	12.4
Pension or equivalent	12.4	8.7	9.5	Surplus	9.4	9.4	9.4
Family allowance/Other	8.2	7.2	7.5	Income			
Living arrangements				Less than \$10,000	8.0	8.4	8.3
With parents	10.3	9.5	9.9	\$10,000 - \$19,999	16.6	15.8	16.1
With partner/spouse	15.3	13.1	14.0	\$20,000 - \$29,999	29.5	22.0	25.6
With children	23.5	8.8	10.2	\$30,000 - \$39,999	21.9	28.6	25.6
Alone	12.1	18.8	15.6	\$40,000 or more	17.9	19.5	18.4
Shared rental accommodation	14.5	14.9	14.7	Paid course fees up front			
University college	6.9	5.4	6.1	Paid	9.2	8.5	8.9
Informal/other	16.1	11.7	13.7	Did not pay	12.1	11.5	11.8
n =	10,199	16,646	26,888	n =	10,199	16,646	26,888

As shown in Table 7, compared with all full-time students, the students who claimed that their studies had been adversely affected 'a great deal' by employment during semester were better represented among male students living with children (23.5%), students who had to take a loan to continue their studies (18.5%), students who had applied unsuccessfully for government income support (16.9%), students living alone (15.6%), male students who were sole care givers (15.6%), and students aged 25 to 34 (15.1%). Students who applied for but were refused government income support were among those most likely to say that paid employment adversely affected their studies 'a great deal' (17.6% for females, and 15.9% for males).

Patterns from Table 7 tend to be replicated in Table 8, but the percentages in Table 8 are more meaningful because they represent proportions of all full-time students actually engaged in paid employment during semester. Among this group, students who claimed that their studies had been adversely affected 'a great deal' by work during semester were better represented among male students living with children (37.6%), male students who were sole care givers (33.4%), students working more than 20 hours per week (for example, among students employed for 20 to 29 hours per week, the rate was 28%), students who had to take a loan to continue their studies (25.5%), male students with a disability (25.4%), students living alone (24.5%), male students with dependent children (24.4%), students (especially males) on a pension or equivalent (23.7%), students aged 35 to 44 (23%) and 25 to 34 (22.5%), and students who had applied unsuccessfully for government income support (21.3%).

These figures, together with additional data from Table 8, permit the following generalisations about the impact on studies of an involvement in paid employment during semester. First, full-time students who are financially self-reliant are almost twice as likely as full-time students who are financially dependent on their parents or other relatives to experience an adverse impact of employment on studies. Second, full-time students who live in a university college or who live at home with their parents are only half as likely as full-time students living alone or with children to experience an adverse impact of employment on studies. Third, full-time students who are in paid employment for longer hours during semester and who earn higher incomes are three to four times more likely than students in paid employment for shorter hours and earning lower incomes to experience an adverse impact of employment on studies. Fourth, full-time students who applied for but were unsuccessful in obtaining government financial support are one-half times more likely than full-time students who receive no government income support to experience an adverse impact of employment on studies.

Table 8. Study adversely affected 'a great deal' due to work by sex, enrolment status and student characteristics – full-time students in paid employment during semester

	Male %	Female %	All %		Male %	Female %	All %
All persons	16.4	14.2	15.2				
Age in years				Financially dependent on			
Under 25	15.1	13.1	13.9	No one	20.7	18.7	19.6
25 to 34	23.4	21.6	22.5	Spouse	24.8	18.3	20.3
35 to 44	28.2	19.7	23.0	Parent or other relative	12.5	10.7	11.4
45 and over	15.9	20.1	18.7	<i>Earnings of supporter</i>			
Country of birth				Centrelink	15.4	13.3	14.2
Australia	16.3	14.2	15.1	Less than \$30,000	17.8	14.4	15.8
Overseas	17.0	14.1	15.1	\$30,001 - \$50,000	14.9	12.6	13.6
Main language spoken at home				More than \$50,000	12.0	10.6	11.2
English	16.1	14.0	14.9	Don't know	10.9	9.6	10.0
Other	19.3	15.0	17.1	<i>Source of earnings of supporter</i>			
Aboriginal or Torres Strait Is.				Full-time employment	13.1	11.1	11.9
Indigenous	12.4	21.2	18.9	Self-employed	11.4	11.7	11.6
Non-Indigenous	16.4	14.0	15.0	Pensioner, student, etc.	16.4	14.3	15.2
Family socioeconomic status				Part-time employment	19.6	13.3	16.0
High	13.0	11.6	12.2	Field of study			
Upper middle	16.4	12.7	14.4	Agriculture	9.6	14.2	12.0
Middle	16.1	14.1	14.9	Building	21.9	16.5	19.8
Lower middle	16.9	15.2	15.9	Engineering/Surveying	14.1	14.6	14.2
Lower	20.4	18.5	19.2	Law	21.5	18.3	19.8
Type of school last attended				Health	15.7	13.8	14.3
Government	16.0	14.4	15.1	Education	17.9	10.3	12.0
Catholic	17.0	14.6	15.6	Science	15.4	13.1	14.4
Independent	16.0	12.9	14.4	Business	17.7	16.4	17.0
Sole care giver				Arts/Humanities	15.6	14.5	14.9
Yes	33.4	21.9	24.2	Arts/Social Sciences	15.2	13.8	14.2
No	16.2	13.8	14.8	Year began qualification			
Dependent child(ren)				Began in 2000	13.3	12.2	12.6
Yes	24.4	19.1	21.1	Began in 1998/9	16.1	14.2	15.1
No	16.2	13.9	14.9	Began before 1998	21.4	17.7	19.5
Disability				Study leave available			
Yes	25.4	19.3	21.5	No	17.2	16.0	16.5
No	16.0	13.8	14.7	Paid leave	22.7	18.4	20.4
Move to attend university				Unpaid leave	20.9	16.1	18.0
Moved	19.3	18.1	18.6	Flexible hours	15.6	13.2	14.2
Did not move	15.7	13.2	14.2	Hours of work per week			
Government support				1 - 9	7.5	6.8	7.2
None	15.5	12.4	13.7	10 - 19	14.4	12.6	13.3
None, but applied	21.1	21.3	21.3	20 - 29	30.6	26.0	28.0
Youth Allow/Austudy/Abstudy	16.7	14.6	15.5	30 - 39	34.7	32.0	33.2
Pension or equivalent	32.8	21.5	23.7	40 - 49	33.4	26.3	30.7
Family allowance/Other	18.6	15.4	16.2	50 or more	25.3	19.5	22.3
Living arrangements				Loan to continue study			
With parents	14.1	11.6	12.7	Yes	26.9	24.5	25.5
With partner/spouse	23.3	20.0	21.4	No	15.1	12.9	13.8
With children	37.6	20.3	22.5	Income			
Alone	21.8	26.4	24.5	Less than \$10,000	12.3	10.9	11.5
Shared rental accommodation	21.7	19.2	20.3	\$10,000 - \$19,999	18.9	17.6	18.2
University college	12.7	10.1	11.2	\$20,000 - \$29,999	31.6	25.3	28.4
Informal/other	29.5	18.1	22.6	\$30,000 - \$39,999	25.3	32.2	29.2
Surplus/deficit				\$40,000 or more	20.5	22.4	21.1
Deficit	19.0	15.6	17.0	Paid course fees up front			
Surplus	12.2	11.6	11.9	Paid	13.1	10.9	11.9
				Did not pay	17.5	15.2	16.2
n =	6,833	12,445	19,307	n =	6,833	12,445	19,307

Conclusions

The key findings reported in this paper relate to the very substantial increase during the past two decades both in the incidence of paid employment during semester and in the average number of hours worked per week by full-time students at Australian universities. It is estimated that as many as seven out of ten of all domestic (that is, not including overseas) full-time undergraduate students are in paid employment during semester, working for an average of 14.5 hours per week. Comparisons with findings from other recent survey data suggest not only that these estimates are reasonably accurate but also that the average number of hours of paid employment per week during semester may have risen further during the last few years (see, for example, McInnis, James and McNaught, 1995, McInnis, James and Hartley, 2000, McInnis and Hartley, 2001).

The need to be financially self-reliant, that is, not being willing or able to rely financially on parents and other relations, or on a spouse, is consistently a distinguishing characteristic of full-time students who undertake paid employment during semester for longer hours than the average, who miss classes 'frequently' or 'sometimes' because of employment, and who report that their studies are adversely affected 'a great deal' by employment. These students come from all age groups represented among full-time undergraduate university students, but there is a significantly greater likelihood of their being over the age of 25, and therefore of having other responsibilities, including the care of dependent children. They are less likely to be living at home with their parents or in a university college, and more likely to be living in shared rental accommodation, alone, with children, or with a partner or spouse. They are also more likely to be in the later years of their course.

It is estimated that about one-third of all full-time students in paid employment during semester miss classes 'sometimes' or 'frequently' because of their employment commitments, and that, for about 15% of all full-time students in paid employment during semester, studies are adversely affected 'a great deal' because of employment. These percentages are relatively high and are strongly associated with long hours of employment per week during semester, prompted most likely by the need to remain financially self-reliant in the absence of any financial support from parents or relations, or from the Commonwealth Government.

That government income support programs have beneficial effects in terms of reducing the incidence of paid employment during semester and in lessening the potential for paid employment to have an adverse impact on studies is evident from the findings reported in the paper. Also evident, however, is the existence of a relatively disadvantaged group of students on the margin of obtaining government financial support but who missed out. This group is distinctive for its higher rates of paid employment during semester and a higher incidence of reported adverse impact of employment on studies. These findings support the argument by Birrell and colleagues (Birrell, Dobson and Smith, 1999, Birrell *et al.*, 2000) that the restrictiveness of the means test on eligibility for Youth Allowance payments is impacting unfairly on students from households with modest incomes – though, in view of the greater likelihood of an adverse impact of employment on studies among students aged 25 and over, it would appear that the restrictiveness of the means test on eligibility for Austudy is at least as much of a problem. Certain groups of full-time students, principally male students with responsibilities for children – particularly if sole carers, students with a disability – particularly male students, and female students of Indigenous background, stand out as being more likely to experience an adverse impact of paid employment during semester on their studies. The number of cases from these groups included in the survey is relatively small, however, and sampling variability levels are high. It may be, though, that the financial circumstances of full-time students in these groups warrant further investigation.

Finally, it should be acknowledged that relationships between employment, student background, financial arrangements and any impact on university studies present some unique difficulties of interpretation. The population of students for the survey reported in this paper is, for example, already the result of social selection processes that lead to university entry. The relationships identified are in part a function, therefore, of these social selection processes. Further, the findings may reflect in ways that cannot readily be identified the influence of prior or parallel government income support programs explicitly allocated on criteria of need.

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