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Introduction

Australian Social Trends draws on a wide range of data, sourced both from ABS and other agencies, to present a picture of Australian society. This publication aims to inform decision-making, research and discussion on social conditions in Australia. It covers social issues of current and ongoing concern, population groups of interest, and changes in these over time.

The selection of articles aims to address current and perennial social concerns and to provide answers to key social questions. Some topics are revisited as new data become available. The aim of this approach is for each report to remain responsive to contemporary concerns, while accumulating a more comprehensive picture of Australian social conditions over time. For this reason, articles often include cross references to other relevant articles in the current issue, and in previous issues. All articles published since 1994 are available on the ABS web site: www.abs.gov.au.

Australian Social Trends is structured according to the ABS Wellbeing Framework which identifies areas of social concern, population groups and transactions among people and entities within their social environments (see *Measuring Wellbeing: Frameworks for Australian Social Statistics, 2001* – ABS cat. no. 4160.0). The broad areas of social concern are:

- population
- family and community
- health
- education and training
- work
- economic resources
- housing
- crime and justice
- culture and leisure
- other areas - including environment, religion, and transport and communication.

From March 2009 *Australian Social Trends* has been issued on a quarterly basis after being issued annually from 1994 to 2008. In the course of a year, articles will cover a wide range of the areas of social concern.

The articles focus strongly on people and social concerns. Each article aims to tell a story, providing a sense of the social and historical context in which a particular topic is embedded, moving from the general to the specific, and using statistics to bring light to the issue. Articles aim to balance 'what' analysis (relating the relevant statistical facts surrounding the issue, e.g. number, characteristics, change over time, sex, age and other differences), with 'why' analysis (providing context and explanation by highlighting relevant social changes and events and the chronologies of these). For example, an article on work may examine current labour force participation, how the labour market has changed over time, how different groups of people are affected by social and economic conditions, and how these factors may be linked to observed employment trends.

Relocation across the nation: internal migration and population growth

Between 2001 and 2006, more than one-third of Australians (or 6.6 million people) changed their address. While most (71%) people who moved relocated within their city or region, 1.9 million moved a greater distance to a different city or region. Such mobility is the most important factor in the different levels of population growth within Australia's regions.

Regions experiencing high levels of growth are of interest to policy makers and the wider community in terms of providing basic infrastructure (roads, power, sewerage) and adequate services (health, education), as well as the environmental pressures from increasing populations and development. Regions are often interested in attracting and retaining people, particularly skilled people who can add to the economic prosperity of the region.

**Between 2001 and 2006, close to 2 million
Australians moved regions.**

This article looks at the movements of people to particular cities and regions which had high rates of growth, with internal migration a significant component of that growth. It also examines some of the characteristics of the people moving to these places in terms of their age, education and labour force status, and

Data sources and definitions

The main source of data in this article is the 2006 Census of Population and Housing.

This article uses geographical units classified in the [Australian Standard Geographical Classification \(ASGC\)](#) (ABS cat. no. 1216.0).

Statistical Districts are predominantly urban areas located outside Capital Cities and are generally defined as having a population of 25,000 or more. Statistical Districts can consist of one or more urban areas located in close proximity to each other, and in some cases, may cross state boundaries.

Capital City is defined as the Capital City Statistical Division (SD) of each state and territory.

Major population regions are defined here as the eight Capital Cities and thirty-six Statistical Districts located across Australia. See Appendix 1 for a complete listing. The places featured in this article were the top ten in terms of the number of net migrants arriving (from elsewhere in Australia) between 2001 and 2006, and also had relatively fast average annual growth between 2003 and 2008.

compares them with people already living in these regions. For a more general overview of population mobility patterns in Australia see [A Picture of the Nation: the Statistician's Report, 2006, 'On the move'](#) (ABS cat. no. 2070.0).

Net internal migration and high growth in selected major population regions

	August 2001 to August 2006				June 2008	
	People arriving	People leaving	Net internal migration	Net internal migration(a)	Population 2008(b)	Average annual growth rate(c)
	'000	'000	'000	%	'000	%
Brisbane	178.0	138.3	39.7	2.4	1945.6	2.2
Gold Coast-Tweed	89.7	55.2	34.5	7.2	558.9	3.3
Sunshine Coast	48.3	30.8	17.5	9.0	237.6	3.2
Hervey Bay	14.5	7.3	7.2	16.1	56.2	5.4
Townsville	30.9	24.5	6.5	4.9	162.7	3.0
Mandurah	15.2	9.1	6.2	10.0	78.6	4.3
Cairns	22.9	17.9	5.0	4.6	142.0	3.7
Toowoomba	22.9	18.8	4.2	3.9	125.3	2.0
Mackay	15.9	12.0	3.9	5.9	81.1	3.4
Bunbury	11.0	7.7	3.3	6.4	63.2	4.2

(a) The difference between arrivals and departures as a proportion of the population usually resident at census night 2006.

(b) Preliminary estimated resident population at 30 June 2008.

(c) Between 2003 and 2008 estimated resident population.

Source: 2006 Census of Population and Housing, [Regional Population Growth, Australia, 2007-08](#) (ABS cat. no. 3218.0)

High net internal migration and growth regions

In the five years to the 2006 Census, high levels of internal migration and population growth occurred in Queensland (mainly in the south-east region) and two coastal regions of south-west Western Australia (Mandurah and Bunbury). Internal migration to inland regions was much less significant than to coastal locations, yet there were a small number of inland locations, such as Bendigo and Ballarat in central Victoria, that experienced population increase as a result of net internal migration.

Movement to the coast has long been an important trend in internal migration patterns within Australia (see [Australian Social Trends 2004, 'Seachange - new residents in coastal areas'](#)). Many coastal regions in Australia (such as the Gold Coast-Tweed region) have experienced high levels of population growth as a result of positive net internal migration.

...Brisbane

According to census data, of all the major population regions, Brisbane received the largest influx of new residents, an addition of 178,000 people between 2001 and 2006. Taking account of the people leaving Brisbane, this resulted in a net increase of around 40,000 people.

Most new residents to Brisbane arrived from the east coast Capital Cities and other regional areas of Queensland. Sydney was the largest sole contributor of new residents to Brisbane, responsible for approximately 30,000 people over the period (17% of all arrivals). A number of new arrivals to the region had also come from Melbourne (nearly 15,000 people, or 8% of arrivals). Intrastate migration from elsewhere in Queensland also contributed to a lot of the growth in Brisbane.

...other regions of south-east Queensland

The south-east corner of Queensland (roughly stretching from Noosa on the Sunshine Coast, to the Gold Coast-Tweed region on the Queensland/New South Wales border) is a region characterised by rapid population growth and high rates of internal migration.

Between 2001 and 2006, the Gold Coast-Tweed region grew by over 34,000 people as a result of net internal migration. After the Gold Coast, the Sunshine Coast had the third highest net internal migration. In the five years to 2006, the Sunshine Coast experienced a net population increase of more than 17,000 people, equivalent to 9% of the 2006 census usual resident population.

Migration patterns

Population growth or decrease at the regional level is the result of natural increase (the difference between births and deaths), net overseas migration and net internal migration. Rapid and/or large changes in the size and structure of regional populations typically reflect high levels of positive or negative net internal migration.

Net internal migration is the difference between the number of people who changed their usual residence by moving into a region and the number who have changed their usual residence by moving out of that region during a specified time period. This difference can be positive or negative.

Measuring population growth

Two measures can be used to identify regions experiencing high levels of population growth over specified time periods:

- *Population change* measures change in the total number of people in a region.
- *Average annual growth rates* measure the average yearly growth of the population relative to its size at the beginning of the period.

For more information on migration patterns and population growth, see [Australian Demographic Statistics, September 2008](#) (ABS cat. no. 3101.0) and [Regional Population Growth Australia, 2007–08](#) (ABS cat. no. 3218.0).

Census data and internal migration

The census asks people where they usually lived one year and five years prior to the census date. This information can be compared with place of usual residence on census night to examine internal migration patterns within Australia.

There are some limitations in using census data to determine patterns of internal migration. Movements of people within Australia could only be determined for those who were counted in the 2006 census and stated a place of usual residence in Australia in 2001 or 2005. People who made multiple moves between these periods would only be counted as moving once (or not at all if they moved back to where they came from).

Additionally, 7% of the census population aged five years and over did not state their usual address in 2001. These people have been excluded from this analysis, and therefore the migration numbers may undercount the actual number of people who moved between 2001 and 2006.

A large number of new residents to Gold Coast-Tweed and the Sunshine Coast came from the east coast Capital Cities. Over half of the new residents who moved to these regions between 2001 and 2006 came from Sydney, Brisbane and Melbourne. Brisbane accounted for around one-quarter of arrivals to both locations. Close to one-fifth had come from Sydney and around 8% were from Melbourne.

Hervey Bay, on the south-east Queensland coast, north of Noosa, experienced the highest average annual growth rate of the major population regions between 2003 and 2008, at 5.4%. This growth occurred as a result of high

rates of net internal migration to the region. In the five years to 2006, Hervey Bay had almost twice as many arrivals from elsewhere in Australia (14,000) as departures (7,000), equivalent to a net population increase of 16% since 2001.

A large portion of the growth in Hervey Bay was due to an influx of people from other regions in Queensland, with many arriving from Brisbane (nearly 3,000 people, or 18% of arrivals), the Gold-Coast Tweed (7%) and other regional areas of Queensland such as Toowoomba, the Sunshine Coast and the Hervey Bay hinterland. A significant number of arrivals to Hervey Bay also came from Sydney and Melbourne (16% in total).

...Mandurah

In the five years to 2008, Mandurah, a coastal city around 75 km south of Perth, had the second highest annual average growth rate of the major population regions. Contributing to this rate of growth, the region received more than 15,000 new arrivals between 2001 and 2006, and grew by over 6,000 residents as a result of net internal migration.

Due to its proximity to Perth, it is unsurprising that the majority of arrivals to Mandurah were from the capital city. In 2006, more than half (56%) of new arrivals had come from Perth. A number of arrivals to Mandurah also came from other regional areas in Western Australia including the Kalgoorlie/Boulder and Pilbara regions.

Growth in inland regions

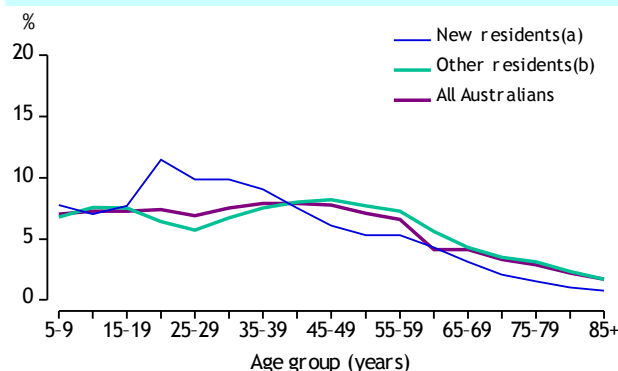
Over the five years to 2006, a number of inland regions lost more people than they gained as a result of net internal migration. Overall, levels of growth in the inland regions were much less significant than elsewhere.

Bendigo and Ballarat in central Victoria were exceptions to this general trend and were the only two inland regions that experienced positive net internal migration of more than 2,000 people between 2001 and 2006. Almost all the growth in these regions was due to internal migration from elsewhere in Victoria. In the five years to 2006, half of all arrivals to Bendigo (6,000 people of nearly 13,000 arrivals) were from country Victoria and one-quarter arrived from Melbourne.

Who moves?

Regional population growth brings with it social and economic change. Changing populations can put pressure on existing infrastructure and local environments, as well as contributing to local economies and impacting on the social fabric of a community.

Age distribution of selected major population regions – 2006



(a) People living in one of the selected regions on census night whose usual address five years earlier was elsewhere in Australia.

(b) People living in one of the selected regions on census night whose usual address five years earlier was the same.

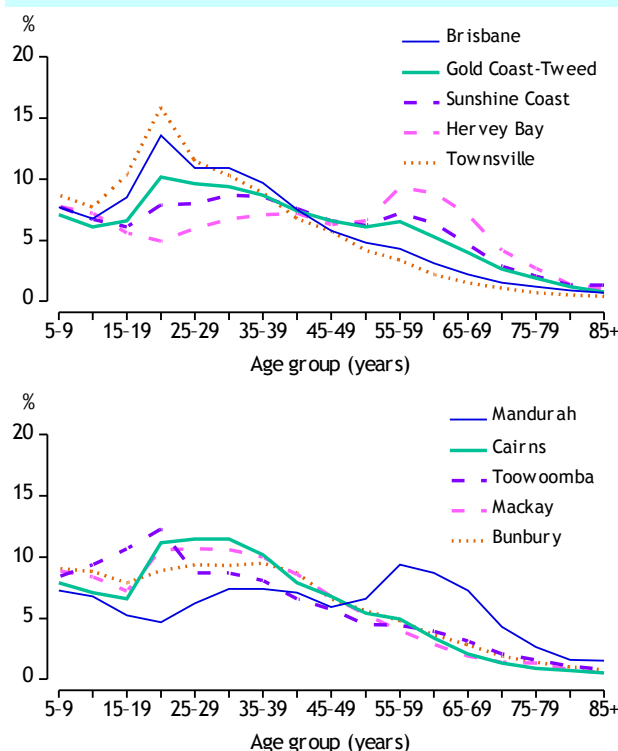
Source: 2006 Census of Population and Housing

...age profile

Age is strongly associated with mobility. Younger people are more mobile as they are less likely to own their own home or to have a family.

New residents who moved to the selected high growth regions during the five years before the 2006 census had a younger age profile than the Australian population as a whole, and were

Age distribution of arrivals(a) to selected major population regions – 2006



(a) People living in the selected regions on census night whose usual address five years earlier was elsewhere in Australia.

Source: 2006 Census of Population and Housing

younger than people who were already resident in these regions. Overall, more than 40% of new residents were aged 20–39 years, compared with 26% of existing residents, and 30% of all Australians. Less than 9% of new residents were aged 65 years and over, while close to 15% of people already resident were this age in 2006.

As an exception to the general trend of movers being a younger group, the age profiles of arrivals to Hervey Bay and Mandurah were older: people aged 60 years and over accounted for more than one-quarter of new residents to both locations, and around one-quarter were aged 20–39 years. This is a reflection of older people retiring to popular coastal locations.

...education

On the whole, new residents to the high growth regions had higher educational qualifications than people who had not moved. In 2006, of all new residents aged 25–64 years who had moved to the selected regions in the year prior to the census, 57% had a non-school qualification while just over half of other residents did (52%). When examining internal migration between 2001 and 2005, a similar pattern was evident.

For young people, the ages between 18 and 24 are years of transition as they move from school to further education, and from education into the workforce. Young people of this age group are also highly mobile, often as a result of furthering their educational or work opportunities (see [Australian Social Trends 2003, 'Youth migration within Australia'](#)).

In 2006, new residents aged 18–24 years who had moved in the year prior to the census were more likely to have completed a non-school qualification than other residents of the same

age (40% and 34% respectively). The new residents were also less likely to be attending an educational institution than the existing residents that age (31% compared with 35%). This suggests that young people are more likely to move after completing an educational qualification.

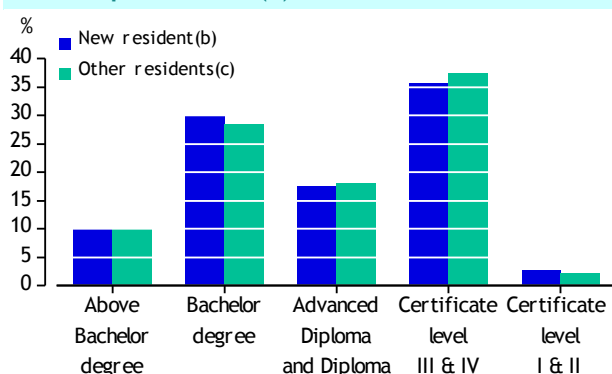
Not surprisingly, young people aged 18–24 who had moved were less likely to be living with their parents (14%), than other residents of the same age (47%) and this pattern was similar for both those with and without a non-school qualification. For more information on young people's living arrangements and how they relate to work and study, see the article in this edition of [Australian Social Trends \(June 2009\), 'Home and away: the living arrangements of young people'](#).

...work

The length of time that a person has lived in a region is related to their employment status. In general, more recent arrivals were less likely to be working and had higher unemployment rates than those people who have been living in a region for longer, especially for older age groups.

Overall, new arrivals were less likely than other residents to be working, but this differs according to how long they had lived in the new location. Of those people aged 15–64 who had moved to the regions in the year prior to the census, 69% were employed, compared with close to three-quarters (74%) of other residents of the same age. The difference between the proportion of new and other residents who were employed was less marked for those who had arrived in the four years to 2005, with around three-quarters of all residents working in 2006 (73% of new arrivals and 75% of other residents).

People aged 25–64 years: level of highest non-school qualification(a) – 2006



(a) For more information regarding non-school qualifications and the census, see *Census Dictionary 2006* (ABS cat. no. 2901.0).

(b) People living in one of the selected regions on census night whose usual address one year earlier was elsewhere in Australia.

(c) People living in one of the selected regions on census night whose usual address one year earlier was the same.

Source: 2006 Census of Population and Housing

Of new residents aged 55–64 years who arrived in the year prior to the census, the proportion who were employed was substantially lower (42%) than for other residents that age (57%). Similarly, of people who moved to the selected regions between 2001 and 2005, 45% were employed. Consistent with this pattern, new residents aged 55–64 years who arrived in the four years to 2005 were more likely than other residents to not be in the labour force (52% and 40% respectively), suggesting that movers in this age group were more likely to be retired.

New residents in the high growth regions had high rates of unemployment, especially the most recent arrivals. The unemployment rate for new residents aged 15–64 years who moved in the year prior to the census was 10%, considerably higher than that of other residents, at only 4%. People who arrived from 2001 to 2005 were still more likely than other residents to be unemployed (6%), but to a lesser extent.

Selected labour force indicators in the selected high growth regions – 2006

	2001-05		2005-06	
	New residents(a)	Other residents(b)	New residents(c)	Other residents(d)
	%	%	%	%
Proportion employed(e)				
People aged 15-64 years	72.9	74.8	68.6	74.3
People aged 55-64 years	45.1	58.0	42.0	56.5
Employed part-time(f)	27.6	29.5	25.8	29.3
Unemployment rate				
People aged 15-64 years	5.7	4.0	10.0	4.2
People aged 55-64 years	6.6	2.8	11.3	3.1

(a) People living in one of the selected regions on census night 2006 who arrived from elsewhere in Australia between 2001 and 2005.

(b) People living in one of the selected regions on census night 2006 and who also lived in that region in 2001.

(c) People living in one of the selected regions on census night 2006 who arrived from elsewhere in Australia in the 12 months to census night.

(d) People living in one of the selected regions on census night 2006 whose usual address one year earlier was the same.

(e) The number of employed people as a proportion of the population, excluding those who did not state their labour force status.

(f) Of all employed people aged 15-64 years.

Source: 2006 Census of Population and Housing

Differences in the unemployment rate of new and longer term residents increased with age over both time periods. The unemployment rate for new residents aged 55–64 years who migrated between 2001 and 2005 was 7%, compared with 3% for other residents. More recent arrivals of the same age group had an unemployment rate of 11%, eight percentage points higher than other residents (3%).

High rates of unemployment and lower levels of employment among new residents (especially those more recent new residents) could be related to the difficulties in finding work after moving to a new region, and the lack of those networks that are important in job seeking (see [Australian Social Trends 2002, 'Searching for work'](#)).

However, the decrease in unemployment rate for those arrivals who have been in a region longer could also be influenced by unsuccessful job seekers leaving the region or leaving the labour force. Some people may move to a new region in the hope of finding work and improving their job prospects rather than moving as a result of gaining a job.

According to the census, the period of time a resident had lived in a high-growth region (whether they were a new arrival or not), had little effect on the industry in which they were employed. As 'new' residents who had arrived in the four years to 2005 were more likely to be working than more recent arrivals, the following analysis is based on those people who arrived in the high growth regions between 2001 and 2005.

Similar proportions of employed new and existing residents aged 15–64 were working in Retail trade (both 13%); Health care and social assistance (10% new residents and 11% other residents); and Construction (9% new, 10% other). New residents were slightly more likely to be working in Public administration and safety (8% new residents, 7% other), and Accommodation, cafes and restaurants (9% compared with 7%).

Summary

People may move regions for a number of different reasons, often related to lifestyle, employment or the desire to be near other family members. Young adults are the most mobile population, with 17% of people aged 20-39 years in 2006 having moved regions in the five years prior to the census.

The ten fastest growing regions with high levels of internal migration, featured in this article, accounted for 20% of the total population of the major regions, yet received 36% of all people who moved regions. While people moving to these regions were slightly more likely to have a non-school qualification, they also tended to have slightly higher levels of unemployment; perhaps indicating that much of the attraction of these places is lifestyle rather than employment opportunities.

Appendix 1: Internal migration indicators, major population regions

	2006 Census of Population and Housing							June 2008	
	Internal migration – 2001 to 2006				New residents arriving:			Population 2008(d)	Average annual growth rate(e)
					2001-06(b)		2005-06(c)		
	Arrivals	Departures	Net internal migration	Net internal migration(a)	Aged 20-39 years	Aged 60 years and over	15-64 years employed		
	psns	psns	psns	%	%	%	%	psns	%
Brisbane (QLD)	178,015	138,312	39,703	2.4	45.1	9.5	69.3	1,945,639	2.2
Gold Coast-Tweed (QLD/NSW)	89,706	55,171	34,535	7.2	37.9	15.8	67.7	558,888	3.3
Sunshine Coast (QLD)	48,313	30,827	17,486	9.0	33.2	18.7	67.0	237,562	3.2
Newcastle (NSW)	48,512	39,998	8,514	1.8	41.5	13.7	60.2	531,191	1.1
Hervey Bay (QLD)	14,509	7,283	7,226	16.1	24.6	25.4	51.5	56,165	5.4
Townsville (QLD)	30,903	24,452	6,451	4.9	46.6	6.5	72.8	162,730	3.0
Mandurah (WA)	15,249	9099	6,150	10.0	25.6	26.0	59.8	78,612	4.3
Cairns (QLD)	22,920	17,880	5,040	4.6	44.5	8.9	72.2	142,001	3.7
Toowoomba (QLD)	22,965	18,785	4,180	3.9	37.8	12.6	65.7	125,339	2.0
Mackay (QLD)	15,907	12,033	3,874	5.9	41.9	8.8	75.6	81,148	3.4
Bunbury (WA)	10,985	7,710	3,275	6.4	37.0	11.6	71.9	63,202	4.2
Perth (WA)	90,694	87,692	3,002	0.2	43.4	8.4	70.6	1,602,559	2.2
Bendigo (VIC)	12,759	9,793	2,966	3.9	43.2	10.9	60.8	88,031	1.6
Ballarat (VIC)	12,767	10,235	2,532	3.2	43.4	11.2	59.7	91,787	1.5
Port Macquarie (NSW)	9,111	6,644	2,467	6.6	30.9	23.0	57.1	42,900	1.5
Bundaberg (QLD)	12,708	10,250	2,458	4.5	29.6	20.6	58.1	66,176	2.4
Geelong (VIC)	18,446	16,100	2,346	1.5	44.6	11.8	64.1	172,300	1.2
Coffs Harbour (NSW)	10,048	7,706	2,342	5.3	33.8	16.7	56.3	51,538	1.5
Hobart (TAS)	19,537	17,215	2,322	1.2	41.6	11.2	63.0	209,287	0.9
Canberra-Queanbeyan (ACT/NSW)	44,733	42,698	2,035	0.6	54.6	5.6	78.7	395,126	1.3
Launceston (TAS)	12,521	10,854	1,667	1.8	40.5	13.0	58.5	104,649	0.8
Albury-Wodonga (NSW/VIC)	14,233	12,909	1,324	1.5	45.6	9.0	65.8	102,894	1.1
Gladstone (QLD)	8,762	7,482	1,280	3.2	42.4	5.7	69.3	48,796	3.3
Burnie-Devonport (TAS)	9,924	8,685	1,239	1.7	34.2	16.9	55.2	81,144	0.7
Wagga Wagga (NSW)	10,443	9,335	1,108	2.2	47.8	7.5	68.2	56,911	1.5
Bathurst (NSW)	6,359	5,448	911	3.2	43.8	9.6	53.5	32,942	1.1
Tamworth (NSW)	7,417	6,826	591	1.5	39.3	12.0	65.6	45,615	1.1
Rockhampton (QLD)	12293	11,732	561	0.9	39.4	8.8	67.0	75,497	1.8

Appendix 1: Internal migration indicators, major population regions (continued)

	2006 Census of Population and Housing							June 2008	
	Internal migration – 2001 to 2006				New residents arriving:			Population 2008(d)	Average annual growth rate(e)
	Arrivals	Departures	Net internal migration	Net internal migration(a)	2001-06(b)		2005-06(c)		
					Aged 20-39 years	Aged 60 years and over	15-64 years employed		
	psns	psns	psns	%	%	%	%	psns	%
Nowra-Bomaderry (NSW)	6,248	5,698	550	1.9	35.4	18.3	58.2	33,212	1.4
Lismore (NSW)	6,755	6,345	410	1.5	42.0	10.4	54.7	31,926	0.8
Warrnambool (VIC)	4,747	4,338	409	1.4	46.4	9.5	64.4	32,712	1.5
Mildura (VIC)	6,101	5,921	180	0.4	40.7	11.0	61.6	49,280	1.4
Geraldton (WA)	5,733	5,695	38	0.1	36.2	10.2	62.1	35,361	2.1
La Trobe Valley (VIC)	7,551	8,392	-841	-1.2	40.3	14.6	52.1	78,531	1.0
Dubbo (NSW)	5,646	6,643	-997	-3.2	42.6	11.0	67.2	36,653	0.7
Shepparton (VIC)	5,714	6,729	-1,015	-2.4	45.8	10.2	62.2	47,710	0.9
Orange (NSW)	5,689	7,166	-1,477	-4.5	42.0	10.0	61.4	37,991	0.5
Wollongong (NSW)	21,592	23,336	-1,744	-0.7	44.3	12.1	62.2	284,169	0.7
Kalgoorlie-Boulder (WA)	6,240	8,956	-2,716	-11.1	51.2	3.3	73.6	31,509	1.1
Darwin (NT)	21,273	24,224	-2,951	-3.2	51.0	4.1	79.2	120,652	2.3
Adelaide (SA)	61,980	72,227	-10,247	-1.0	44.3	9.8	63.3	1,172,105	0.9
Melbourne (VIC)	141,644	161,462	-19,818	-0.6	54.0	8.0	68.9	3,892,419	1.7
Sydney (NSW)	123,231	246,591	-123,360	-3.3	54.6	8.6	69.8	4,399,722	1.0

(a) The difference between internal arrivals and departures as a proportion of the population usually resident on census night 2006.

(b) As a proportion of new residents who moved to the selected high growth regions in the five years prior to the 2006 Census.

(c) As a proportion of new residents aged 15-64 years who moved to the selected high growth regions in the year prior to the 2006 Census.

(d) Preliminary Estimated Resident Population as at 30 June 2008.

(e) Average annual growth rate is measured on the five years to 2008, based on Estimated Resident Population for 2003 and 2008.

Source: 2006 Census of Population and Housing, [Regional Population Growth Australia 2007-08](#) (ABS cat. no. 3218.0)

Health literacy

The ability to access and use health information is a fundamental skill which allows people to make informed decisions and helps them to maintain their basic health. On a broader level, adequate levels of health literacy may help to reduce some of the costs in the health system, prevent illness and chronic disease, and reduce the rates of accident and death.¹

Health literacy affects not only a person's involvement in the formal health care system, but also decisions they make in the home, workplace and community. The level of a person's health literacy impacts on tasks such as reading dosage instructions on a package of medicine, and also affects whether people seek screening or diagnostic tests.

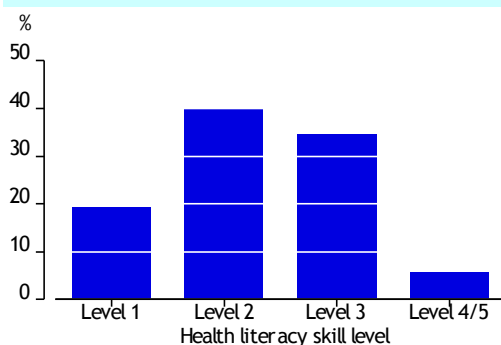
Health literacy levels

In 2006, the Adult Literacy and Life Skills Survey (ALLS) measured the literacy of adults aged 15–74 years, including their health literacy. Skill levels ranged from Level 1 (lowest) through to Level 5 (highest). Skill Level 3 is regarded as the minimum required to allow individuals to meet the complex demands of everyday life.

In 2006, 41% of adults were assessed as having adequate or better health literacy skills, scoring at Level 3 or above. At this level, people could generally perform tasks such as combining information in text and a graph to correctly assess the safety of a product.

The proportion of people with adequate or better health literacy (41%) was lower than other types of literacy: prose (54%), document (53%) and numeracy (47%) (see the box on this page for a description of these other types of

Health literacy skill levels(a) – 2006



(a) Skill levels 3, 4 and 5 represent adequate or better health literacy.

Source: [Health Literacy, Australia](#) (ABS cat. no. 4233.0)

Sources and definitions

This article uses data from the 2006 Adult Literacy and Life Skills Survey (ALLS). The ALLS provides information on the knowledge and skills of 15–74 year olds in a number of literacy domains including health literacy. For more information see:

- [Health Literacy, Australia, 2006](#) (ABS cat. no. 4233.0);
- [Adult Literacy and Life Skills Survey, Summary Results, Australia, 2006](#) (ABS cat. no. 4228.0);
- [Adult Literacy and Life Skills Survey, Australia: User Guide, 2006](#) (ABS cat. no. 4228.0.55.002).

Health literacy is the knowledge and skills needed to understand and use information relating to health issues such as drugs and alcohol, disease prevention and treatment, safety and accident prevention, first aid, emergencies and staying healthy.

Prose literacy is the ability to understand and use information from various kinds of narrative texts, including newspapers, magazines and brochures.

Document literacy measures the knowledge and skills required to locate and use information contained in various formats including tables and charts.

Numeracy is the knowledge and skills required to effectively manage and respond to the mathematical demands of diverse situations.

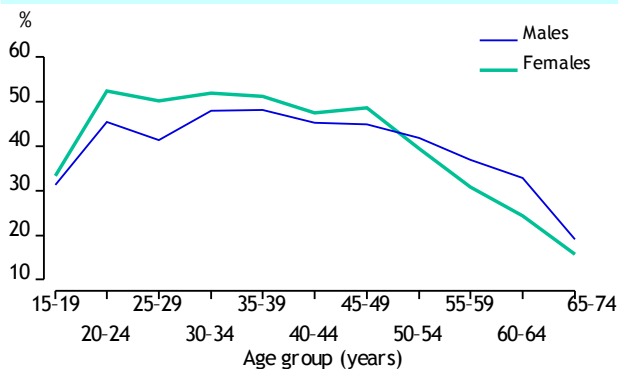
Skill levels range from Level 1 (lowest) to Level 5 (highest). Skill Level 3 is regarded as the minimum required to allow individuals to meet the complex demands of everyday life.

Larger households need more income to finance the same standard of living as smaller households but there are economic advantages for larger households since household resources, especially housing, can be shared. Equivalising adjusts actual income to take account of the different needs of households of different size and composition, resulting in *equivalised household income*.

High income households are those in the ninth and tenth income deciles when all households are ranked from lowest to highest gross equivalised household income; *middle income* households are households in the fifth and sixth deciles; *low income* households are those in the second and third deciles.

literacy). This may be related to the combination of skills people need to understand health information. They may use prose, document and numeracy skills simultaneously.¹

People with adequate or better health literacy(a) – 2006



(a) Skill levels 3, 4 and 5 represent adequate or better health literacy.

Source: [Health Literacy, Australia](#) (ABS cat. no. 4233.0)

Around one-fifth (19%) of adults had Level 1 health literacy skills, with a further 40% having Level 2. These people had difficulty with tasks such as locating information on a bottle of medicine about the maximum number of days the medicine could be taken, or drawing a line on a container indicating where one-third would be (based on other information on the container).

...by age

Rates of health literacy vary with age and show a similar pattern for men and women. In 2006, the rate of adequate or better health literacy increased from around one-third of both men and women aged 15–19 years to around half of all people aged 20–49 years, before declining in older age groups. The lower rate among the youngest age group compared with 20–44 year olds may be related to the fact that the youngest group includes people still completing their education. The low rates of health literacy among older people are similar to results for other dimensions of literacy (see [Australian Social Trends 2008, 'Adult literacy'](#)). This may be due to the effects of age on people's mental processing skills; the length of time since leaving formal education; and the lower levels of formal education received by older generations.

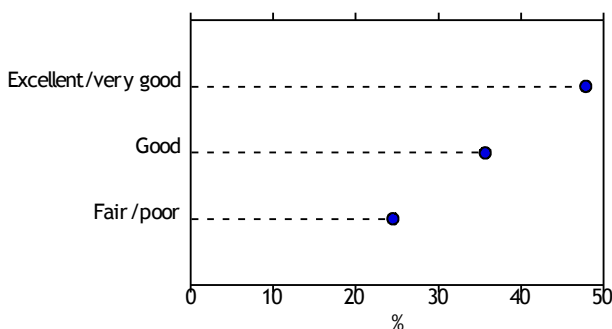
With increased age, as well as being less likely to be able to use health information, people are also more likely to have long-term health conditions. In the 2007–08 National Health Survey, 83% of people aged 65 years and over had three or more long-term health conditions.

Self-assessed health status

People's assessment of their own health is considered a good indicator of the overall health of populations and is a good predictor of death and illness.²

Self-assessed health status: proportion with adequate or better health literacy(a) – 2006

HEALTH STATUS



(a) Skill levels 3, 4 and 5 represent adequate or better health literacy.

Source: ABS 2006 Adult Literacy and Life Skills Survey

In 2006, around 8.3 million adults assessed their health as excellent or very good, 4.4 million as good and 2.4 million as fair or poor. Around half (48%) of all people who described their health as excellent or very good had adequate or better health literacy compared with one-quarter of those people who described their health as fair or poor. People who have poor or fair health are more likely to have both long-term conditions and inadequate health literacy which may affect their ability to manage their condition.

Education

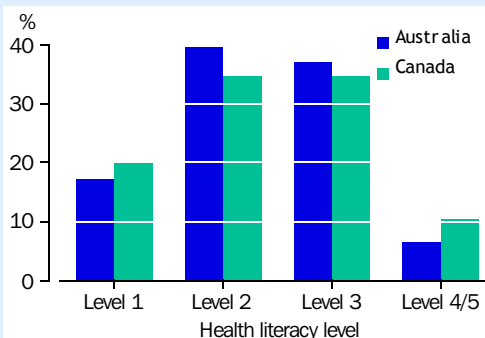
The interaction between education and health has been well recognised. The effect of education on a person's health may include its influence on their employment prospects and

Comparison with Canada



It is possible to compare the results from the Australian ALLS with the Canadian results. The scope of the Canadian survey was people aged 16–65 years. When the Australian results were restricted to this age group, the proportion of Canadians (45%) achieving an adequate or better health literacy score was similar to that in Australia (43%).

Health literacy skill levels(a)



(a) People aged 16–65 years.

Source: [Health Literacy, Australia](#) (ABS cat. no. 4233.0)

income which can affect the options available to improve their health (the money available for dental care, for example), as well as their ability to gather relevant information so that they can understand options and choose pathways that will benefit them the most.¹ Education can also play a role in influencing behaviour in terms of reducing health risks such as tobacco smoking and alcohol use.

In 2006, people who had higher levels of educational attainment had higher rates of adequate or better health literacy. Around three-quarters of people whose highest level of education was a Bachelor degree or above had adequate or better health literacy compared with half of those who finished their formal education at Year 12 and 16% of those with Year 10 or below.

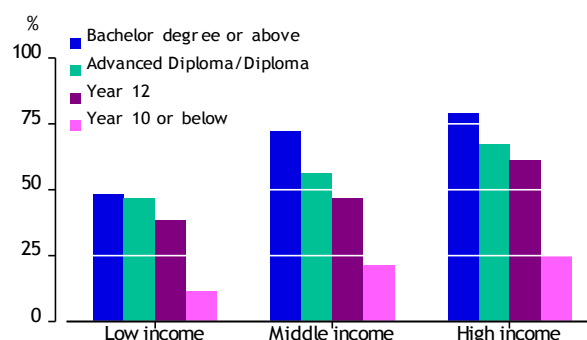
Income

In 2006, people with higher incomes were more likely to have higher health literacy skills, with 63% of the high income group having adequate or better skills compared with 43% of those in the middle income group and 26% of those with low income.

Generally, people with higher levels of income had higher levels of education as well as better health literacy skills. In each income group, people whose highest level of education was Year 10 or below had poorer health literacy skills than those with higher levels of education.

The influence of post-school qualifications was less marked in the low income group where those with a Bachelor degree or above and Advanced Diploma/Diploma had similar rates of adequate or better health literacy (around 48%). In the low income group, the rate of adequate or better health literacy for people

Adequate or better health literacy(a): highest level of educational attainment and household income – 2006



(a) Skill levels 3, 4 and 5 represent adequate or better health literacy.
Source: ABS 2006 Adult Literacy and Life Skills Survey

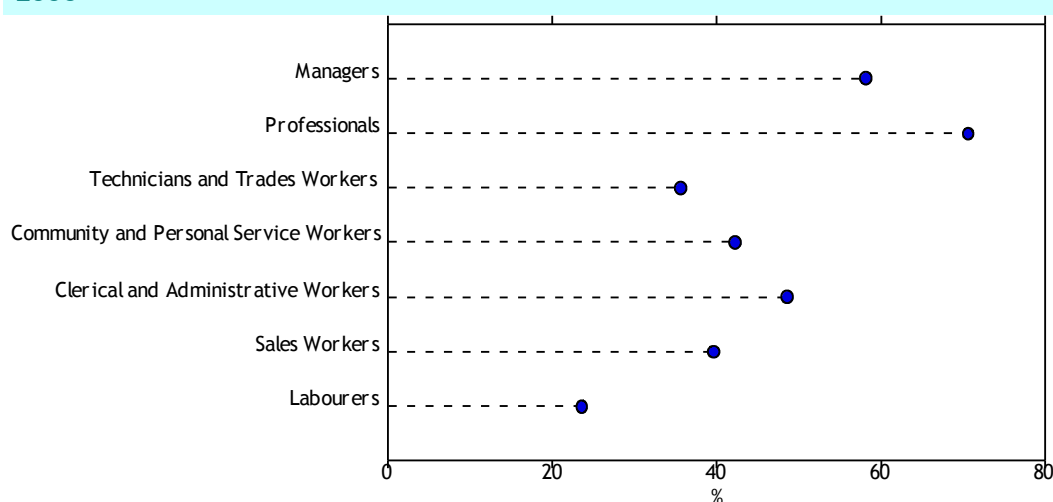
who had completed Year 12 was 39% and for Year 10 or below just 12%.

Whether working, and occupation

Employed people were more likely to have higher levels of health literacy than those who were unemployed or outside the labour force. In 2006, of people aged 15–64 years, around half of those employed had adequate or better health literacy (47%) compared with one-quarter of both unemployed people and those not in the labour force.

Like income, labour force status is affected by educational attainment. People with a progressively higher education generally have a greater ability to gain employment than those with lower skill levels.

Selected occupations: proportion with adequate or better health literacy(a) – 2006



(a) Skill levels 3, 4 and 5 represent adequate or better health literacy.
Source: ABS 2006 Adult Literacy and Life Skills Survey

Those employed in occupations requiring greater education and skill levels were more likely to have higher health literacy, with 71% of Professionals at or above Level 3 compared with 24% of Labourers.

Migrants and language spoken

...first language

People whose first language is not English may have more difficulty understanding English-based health information than people whose first language is English. In 2006, almost three million Australians aged 15–74 years spoke English as a second language. Around one-quarter of this group had adequate or better health literacy compared with 44% of people whose first spoken language was English.

...assistance to read English

In 2006, 5% of those with adequate or better health literacy needed help to read information in English, compared with 19% of people with relatively low health literacy skills.

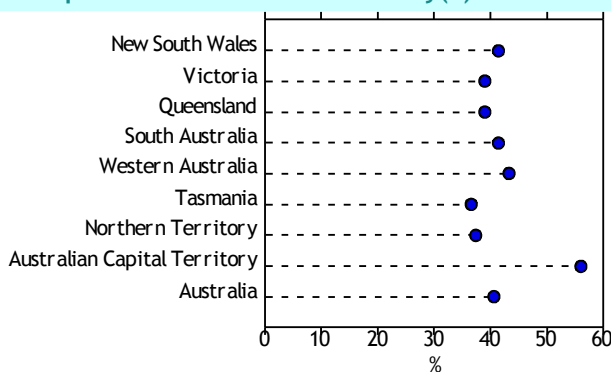
...born overseas

One-third of people born in a country other than Australia had adequate or better health literacy when tested in English compared with 43% of people who were born in Australia.

States and territories

There were few significant differences between the states and territories in terms of health literacy. The exception was the higher proportion of residents of the Australian Capital Territory whose health literacy was at Level 3 or higher (56%), with most other states and the Northern Territory around 40%. This is related to the greater proportion of the ACT population who have non-school qualifications compared with the states and the Northern Territory.

Proportion of people by state or territory: adequate or better health literacy(a) – 2006



(a) Skill levels 3, 4 and 5 represent adequate or better health literacy.

Source: [Health Literacy, Australia](#) (ABS cat. no. 4233.0)

Endnotes

- 1 Canadian Council on Learning 2008, *Health literacy in Canada, A healthy understanding* 2008, Ottawa.
- 2 Australian Bureau of Statistics 2007, *Self-assessed health in Australia: A Snapshot, 2004–05*, cat. no. 4828.0.55.001, ABS, Canberra.

Student achievement in maths and science

A population with a high level of maths and scientific literacy helps to maximise scientific and technological innovation, enhance our standard of living, and allows us to be internationally competitive.¹

Educational systems play an important role in developing students' knowledge and skills in maths and science. In recent years, however, there has been a declining proportion of Australian students who have elected to study maths and science subjects in the senior years of secondary school, and the proportion of tertiary students pursuing a Bachelor Degree in maths or science has also declined.² Recently, maths and science have been identified as key learning areas for national, state and territory curriculum programs.³

This article uses data from the Trends in International Mathematics and Science Study (TIMSS) 2007. It examines the achievement of Year 4 and Year 8 students in maths and science, and provides information on teaching practices and approaches.

Trends in maths and science

According to TIMSS 2007, Australian students performed at or significantly above the TIMSS scale average for both subject and year levels.

Between 2003 and 2007, the Year 4 maths students score increased by 17 points to 516. This score was well above the TIMSS scale average (500).

Australian Year 4 science students also achieved a score which was significantly higher than the TIMSS scale average. The 2007 score of 527 showed little change from 2003.

In contrast, the Year 8 maths score fell by 8 points to 496 over the same period. This was not significantly different to the TIMSS scale average.

Australian maths and science scores – 1995-2007(a)

	Year 4		Year 8	
	Maths	Science	Maths	Science
TIMSS years				
1995	494	521	509	514
2003	499	520	504	527
2007	516	527	496	515

(a) Results for Year 4 and Year 8 are not directly comparable to each other, nor are the results for maths and science.

Source: The Trends in International Mathematics and Science Study, 2007

Data and definitions

The data in this article are sourced from the 2007 Trends in International Mathematics and Science Study (TIMSS). The Australian Council for Educational Research (ACER) is responsible for conducting the Australian component of TIMSS.

In TIMSS 2007, 36 countries participated at the Year 4 level and 49 countries at the Year 8 level. In Australia, 229 primary schools and 228 secondary schools, and approximately 4,000 students from each year level, participated in the study. The minimum participation rate for TIMSS is set at 85% of sample schools and 85% of sampled students (or a combined school and student participation rate of 75%). Australia achieved the participation rate for both Year 4 and Year 8.

Results for Year 4 and Year 8 are not directly comparable to each other, nor are the results for maths and science. Also, there are differences in the number of years of schooling, and the ages of students, in certain countries and at each year level.

The *TIMSS scale average* for each of Year 4 maths, Year 4 science, Year 8 maths and Year 8 science, is the average of the scales established in 1995, calibrated to be 500, with a standard deviation of 100 score points.

The *international average* is the average score or percentage of all countries participating in TIMSS 2007 at the particular year level, for the given subject.

The *international median* is the midpoint in a ranking of countries by score or percentage. By definition, half the countries will have a score or percentage above the median and half below.

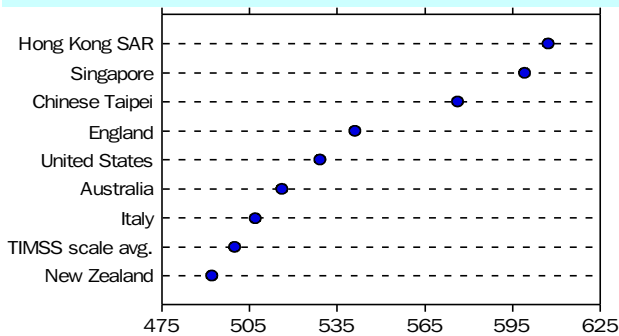
Between 2003 and 2007, achievement in science for Australian students at the Year 8 level declined, with a 12 point reduction in the TIMSS score. However, the score of 515 was still above the TIMSS scale average.

How does Australia compare?

Australian students performed well in 2007 when compared with other participating countries, but were outperformed by England, the United States and most of the Asian countries, especially Singapore and Chinese Taipei. Australian students achieved an international ranking of 14th for Years 4 and 8 maths and 13th for Years 4 and 8 science, similar to the levels of performance attained in 2003.

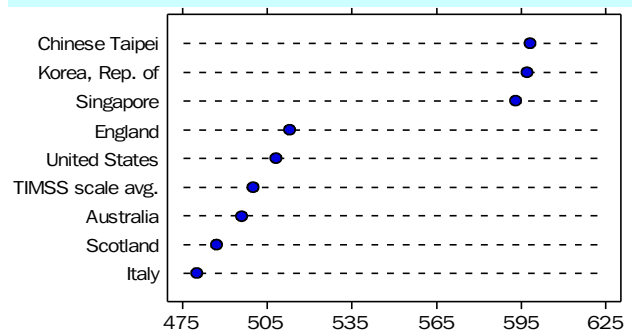
The largest disparity of scores in TIMSS 2007 was in Year 4 science, where a 390 point difference separated the highest scoring country Singapore (587) and the lowest scoring country Yemen (197). Australia's score of 527 was similar to the scores achieved by students in Germany and Italy.

Selected countries: Year 4 maths scores – 2007



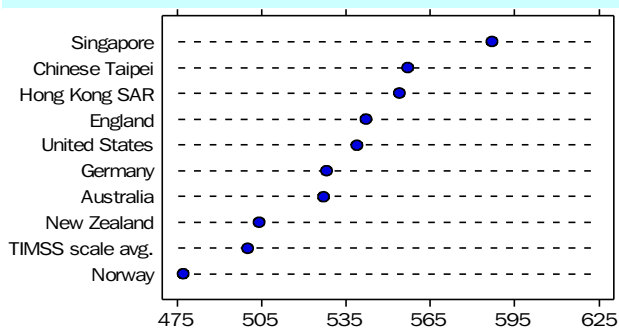
Source: The Trends in International Mathematics and Science Study, 2007

Selected countries: Year 8 maths scores – 2007



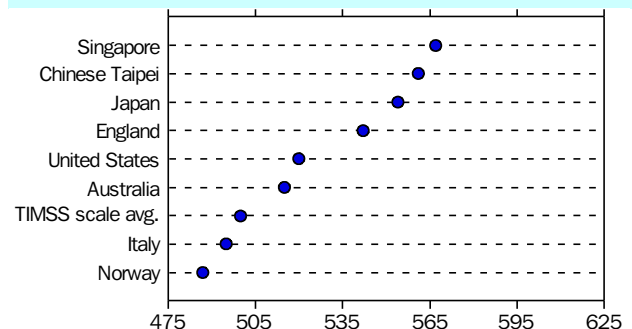
Source: The Trends in International Mathematics and Science Study, 2007

Selected countries: Year 4 science scores – 2007



Source: The Trends in International Mathematics and Science Study, 2007

Selected countries: Year 8 science scores – 2007



Source: The Trends in International Mathematics and Science Study, 2007

In contrast, the smallest disparity of scores among countries was for Year 8 science where a difference of 264 points separated Singapore (567) and Ghana (303). Australia's score of 515 was similar to Lithuania and Sweden.

International benchmarks

The international benchmarks in TIMSS 2007 describe the capacity and ability of students in maths and science, and make it possible to compare results among countries.

At the higher benchmark levels, a student has demonstrated the ability to apply their maths and science knowledge to a variety of complex situations and provide reasoning. Students at the lower benchmark levels have demonstrated only a basic level of maths and science knowledge. The international benchmark levels for Year 4 and Year 8 maths and science are: advanced (625 points), high (550 points), intermediate (475 points) and low (400 points).

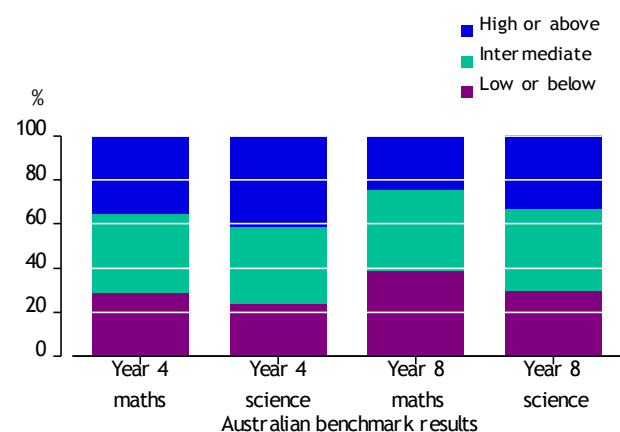
...Australian benchmark results

In TIMSS 2007, at least seven out of ten Australian students achieved the intermediate international benchmark or better, across both maths and science at Years 4 and 8 (with the exception of Year 8 maths students, where six out of ten students achieved this benchmark). This included a third or more of students who reached the advanced or high benchmark for

Year 4 maths and Year 4 and 8 science. Year 4 science had the largest proportion of students who reached the advanced (10%) and high (31%) international benchmarks.

In contrast, at least one in four Australian students were at the low benchmark, with a further one in ten students unable to achieve the low benchmark. Year 8 maths had the highest proportion of students (39%) performing at the low benchmark level or below in TIMSS 2007.

Australian student achievement against International benchmarks – 2007



Source: The Trends in International Mathematics and Science Study, 2007

Year 4 science benchmarks: selected countries – 2007



Source: The Trends in International Mathematics and Science Study, 2007

State and territory scores

In 2007, Year 4 maths students in New South Wales and Victoria achieved significantly higher scores than other states and territories. A larger proportion of students in New South Wales (44%) and Victoria (41%) reached the high benchmark level or above compared with other states and territories. Nationally, an average of 36% of students reached the intermediate benchmark for Year 4 maths, while around 40% of students in Western Australia, South Australia, Queensland and the Northern Territory were at the low benchmark level or below.

For Year 4 science, students in Victoria and New South Wales had similar scores to Tasmania and the Australian Capital Territory, and significantly better scores than the remaining states and territories.

For Year 8 maths and science, there was little or no significant score differences among the states and territories in 2007, however the Australian Capital Territory and New South Wales had a higher proportion of students

reaching the high benchmark level or above compared to students in other states and territories.

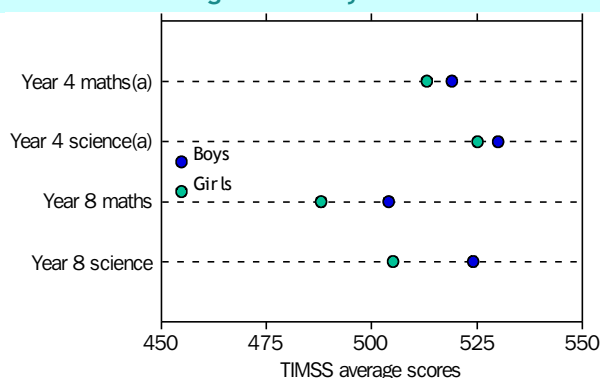
Who are the higher achievers, boys or girls?

Compared with earlier cycles of TIMSS, there are fewer countries with significant gender differences in achievement in maths and science.⁴

In 2007, there was no significant difference in achievement in maths and science between boys and girls in Year 4 in Australia. However, boys in Year 8 outperformed girls in both maths and science. These results are in contrast to the international trend for Year 8 students, as girls tended to outperform boys.

In addition, a higher proportion of boys than girls in both Year 4 and Year 8 attained the advanced benchmark level for maths and science, while the proportion not able to achieve the low benchmark was much the same across both subjects and year levels.

Australian average scores by sex – 2007



(a) Differences between boys and girls are not statistically significant.

Source: The Trends in International Mathematics and Science Study, 2007

What factors influence student achievement in Australia?

One of the main goals of TIMSS is to compare educational achievement across countries. TIMSS also provides information on teaching and learning methods for the improvement of maths and science programs.

The presence of learning resources in the home can reflect the economic capacity of parents to provide these resources as well as practical and psychological support for educational achievement. Students' access to books, computers and Internet connections at home were also measured by TIMSS.

...books, computers and the Internet

Earlier cycles of TIMSS have shown that students from homes with access to books, computers and the Internet at home have higher achievement in maths and science than students from less well-resourced homes.⁴

In 2007, Australia was one of a small number of countries with over 30% of students reporting that they had over 100 books in the home. Year 4 and Year 8 students from homes with more than 100 books had significantly higher levels of maths and science achievement than those students with fewer books in the home.

Increasingly, computers are becoming commonplace in the home and school environment, and the Internet is providing access to information in a way not previously available to students. In 2007, almost all Australian Year 4 (95%) and Year 8 students (97%) reported having a computer at home, while 84% of Year 4 students and almost 90% in Year 8 reported having an Internet connection at home. Australian students were also more likely than students from most other countries participating in TIMSS to use computers both at home and at school.

...homework

Homework may provide an opportunity for students to extend and consolidate what they have learned in school. Australian students tend to receive less maths and science homework at both Year 4 and Year 8 levels than students in other countries.

The amount of homework set for Australian students does not necessarily translate into higher achievements. Year 4 maths and science students who reported low amounts of homework had higher levels of achievement than those students who received high amounts of homework, suggesting that Year 4 homework had a stronger remedial focus.

Students in Year 8 maths and science who had high amounts of homework set had higher levels of achievement, reflecting that homework at this year level can act as an extension, as well as remediation.

...student backgrounds

Parental education is also strongly linked to student achievement. Higher levels of parental education are associated with higher levels of achievement. Students with at least one parent with a Bachelor Degree had significantly higher maths and science achievement than those students whose parents did not complete secondary school.

Content and cognitive dimensions

TIMSS 2007 assessed students in maths and science, across a content and a cognitive dimension. The content dimension specified the subject matter to be assessed, while the cognitive dimension specified the types of thinking processes and sets of behaviours expected of students. Content areas for maths included: numbers, geometric shapes and measures/geometry, data display/data chance and algebra. For science, the content included: life science/biology, physical science/physics, Earth science and chemistry. The three cognitive domains for both maths and science were knowing, applying and reasoning.

For maths, Australian Year 4 students performed less well in numbers, and better in geometric shapes and measures. Year 4 students were stronger in the knowing domain and weaker in applying. Year 8 maths students were better able to perform in data display and chance than algebra, and performed equally well in all cognitive domains.

For science, Australian Year 4 students performed less well in physical science and life science, and better in Earth science. Year 8 students performed less well in chemistry and physics and had stronger performance in biology and Earth science. In the cognitive domains, both Year 4 and Year 8 students showed stronger performance in the reasoning domain than all others.

Students who come from homes where English is not spoken frequently have less exposure to the language of instruction in the test, which could disadvantage them. Most Australian students spoke English in the home (90%) and these students had higher average scores, for both maths and science (average scores between 498 and 533), than those who spoke a language other than English at home (average scores between 478 and 489).

...student attitudes

Developing positive attitudes toward maths and science and valuing them highly is not only an important goal of the curriculum, but also a factor associated with student self-confidence and achievement.

The TIMSS 2007 measured a student's feelings towards maths and science, and how those feelings related to student achievement. In the TIMSS report they referred to this as a student's positive affect towards mathematics and science. In this article, it is referred to as a student's attitude.

Students with a high positive attitude and value towards maths and science, as well as high self-confidence levels in their capacity to learn these subjects, had higher average achievements than those students who had lower values, self-confidence and attitudes.

A greater proportion of Australian Year 4 students had a highly positive attitude towards science (78%) than Year 4 maths students (66%). In both cases this was similar to the international average.

For Year 8, a significantly lower proportion of Australian students had a positive attitude towards maths and science than was the case, on average, internationally. Around a third of Year 8 maths students had a positive attitude towards maths, compared with 54% internationally, while 47% of Year 8 students had a positive attitude towards science, compared with the international average of 65%.

In 2007, most Australian students in both Year 4 and Year 8 (80% and 75% respectively) agreed that they liked being at school. Students who liked school had higher average TIMSS scores than those students who did not like school.

Australian students in Year 4 and Year 8 generally had higher self-confidence levels than the international average, with the only exception being Year 8 science students, where 41% of students had high self-confidence in learning science, compared with 48% internationally. In addition, male students in Australia were more likely than female students to have high self-confidence levels at both year levels and for both subjects, with the exception of Year 4 science.

...teachers

Australian maths and science teachers were, on the whole, highly qualified, with only a very small proportion of teachers not having obtained at least a Bachelor Degree. While most teachers held at least a Bachelor Degree, a much smaller proportion had a qualification with a maths or science specialisation.

This was particularly so for Year 4 where only a small proportion of students in 2007 were taught by a teacher with a specific qualification in maths (7%) and science (12%). A much higher proportion of Year 8 students had a teacher with a maths or science specific qualification (49% and 85% respectively),

Australian student attitudes and related achievement: average scores—2007(a)

	Year 4		Year 8	
	Maths	Science	Maths	Science
High positive attitude	525	534	521	535
Low positive attitude	494	505	476	494
High value(b)	502	531
Low value(b)	470	496
High self-confidence	542	543	539	549
Low self-confidence	457	483	445	483

.. not applicable

(a) Student attributes (including positive attitudes, values and self-confidence) relate to students in Year 4 and Year 8 for maths and science only.

(b) High value of maths and science was asked of Year 8 students only.

Source: The Trends in Mathematics and Science Study, 2007

Classroom characteristics

The implementation of the maths and science curriculum and especially the way in which these subjects are taught is largely determined by the teacher and their classroom activities and practices.⁴ Differing academic abilities, a wide range of backgrounds, students with special needs, uninterested students and disruptive students are factors that can limit a teacher's capacity to successfully teach.

In TIMSS 2007, a higher percentage of Australian students were taught by teachers who reported few limitations on instruction compared with the international averages, especially for Year 4 science. Being taught in a class with few or no limitations on instruction was associated with higher levels of achievement in maths and science.

Australia differs from other countries participating in TIMSS both in the use of textbooks as a lesson resource, and the use of calculators in Year 4. Most countries use textbooks in both Year 4 maths and science, where over 85% of teachers use textbooks either as a primary or supplementary source. In Australia, around 76% of Year 4 maths classes and 18% of Year 4 science classes use textbooks as a primary or supplementary source. The use of calculators in the classroom is allowed by 95% of Year 4 teachers in Australia, much higher than 46% on average internationally.

The use of textbooks and calculators at the Year 8 level is similar to other countries, with most Australian maths (94%) and science (84%) teachers using textbooks as a primary or secondary source, and virtually all Year 8 students using calculators (99%).

reflecting the requirements of the different teaching levels.

A relatively high proportion of maths teachers in both Year 4 and Year 8 participated in professional development, most commonly in the areas of maths content (71% of Year 4 and 69% of Year 8 teachers) and maths curriculum (73% of Year 4 and 69% of Year 8 teachers).

Science teachers were less likely to have participated in professional development activities, with over one-third of Year 4 teachers participating in activities concerning improving students' critical thinking or problem solving skills, and over half of Year 8 teachers participating in a variety of professional activities.

In terms of preparedness to teach, most maths teachers reported feeling very well prepared to teach maths topics to students in Years 4 and 8, while around half of Year 4 science teachers and around three quarters of Year 8 science teachers felt very well prepared.

...school environment

Achievement in maths and science was highest in schools where the principal reported that the schools were well resourced. In 2007, over half of Australian Year 4 (57%) and Year 8 (55%) students attended schools well resourced for the teaching of maths, while 39% of Year 4 and 57% of Year 8 students attended schools with a high level of science teaching resources.

Looking forward

The results of TIMSS enable countries to review and develop their maths and science curriculum, in both content and implementation, as well as broader educational policies. TIMSS assessments are conducted on a four-year cycle. The next TIMSS study will be carried out in 2011.

Endnotes

- 1 The Federation of Australian Scientific and Technological Societies, *Science and Technology for the Social, Environmental and Economic Benefit of Australia*, viewed 6 May 2009, <www.usyd.edu.au>.
- 2 The Australian Association for Research in Education, *Engaging Pedagogies in Maths and Science Education: Some Key Ideas, Issues and Implications for Research and Teaching in South Australia*, Carol Aldous, Flinders University 2006, viewed 6 May 2009, <www.aare.edu.au>.
- 3 Ministerial Council on Education, Employment, Training and Youth Affairs, *Melbourne Declaration on Educational Goals for Young Australians*, December 2008, viewed 23 April 2009, <www.mceetya.edu.au>.
- 4 Trends in International Mathematics and Science Study (TIMSS) 2007, *Taking a Closer Look at Mathematics and Science in Australia*, Australian Council for Educational Research, Melbourne 2008.

Casual employees

In recent decades there has been an increase in forms of employment other than the 'traditional' arrangement of full-time, ongoing wage or salary jobs, with regular hours and paid leave. One such form of employment is casual work.

Although casual employment has risen only modestly in recent years (from 21% of employees in 1992 to 25% in 2007)¹, it is of particular interest because of concerns about the working conditions of casual workers.^{2,3} These concerns include suggestions that casuals may have poorer career opportunities or less job security than other employees. On the other hand, the part-time arrangements often associated with casual employment can help employees balance their work with other commitments such as education and family responsibilities.

This article looks at the flexibility of working arrangements of casual employees compared with other employees (for example, whether they have a say in start and finish times) and also examines job stability for casuals.

Who is employed as a casual?

There were 8.3 million employees in 2007, and one in four (2.1 million) were casuals. Women accounted for over half (56%) of all casuals. Casuals also tended to be young. Two-fifths of casuals were aged 15–24 years compared with 14% of other employees.

How flexible are working arrangements for casuals?

In 2007, casuals were less likely to have flexible working arrangements than employees with paid leave entitlements. However, the fact that many casuals work part-time may make some of these flexible working arrangements less important.

The biggest difference between casual employees and other employees was in the ability to work extra hours to take time off. Just over half (52%) of employees with paid leave entitlements could do this, compared with less than one-third (30%) of casuals. Casuals were also less likely (77%) than other employees (89%) to be able to choose when to take their holiday leave. However, there was little difference between casuals and other employees when it came to having a say in start and finish times (40% and 43% respectively).

Data sources and definitions

Most of the information in this article comes from the 2007 Survey of Employment Arrangements, Retirement and Superannuation (SEARS). The information relates to people aged 15 years and over. Where people had more than one job, the information is on their main job. More information about SEARS can be found in:

- [Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007](#) (ABS cat. no. 6361.0); and
- [User Guide: Employment Arrangements, Retirement and Superannuation, Australia, April to July 2007](#) (ABS cat. no. 6361.0.55.002).

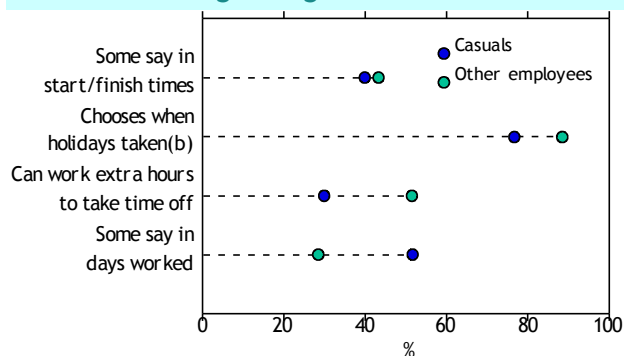
Casuals are defined as employees (excluding owner managers of incorporated enterprises) who are not entitled to paid sick or holiday leave (the ABS proxy measure for casuals).⁴ *Other employees* are those who are entitled to paid sick and/or holiday leave.

In this article, *part-time* employees are those who usually worked 1–34 hours in their main job. *Full-time* employees are those who usually worked 35 or more hours in their main job.

Employees, for the purposes of this article, exclude owner managers of incorporated enterprises. These are people who work in their own incorporated enterprise, that is, a business entity which is registered as a separate legal entity to its members or owners (a limited liability company). While owner managers of incorporated enterprises are generally classed as employees, they have more control over their working arrangements than other employees, and so are excluded from this analysis.

Casuals who had some say in their start and finish times were less likely to be able to choose those times on a day-to-day basis than other employees (65% of casuals compared with 74% of other employees). About one in ten casuals with some say in their start and finish times

Employees(a) in main job, proportion with selected working arrangements – 2007

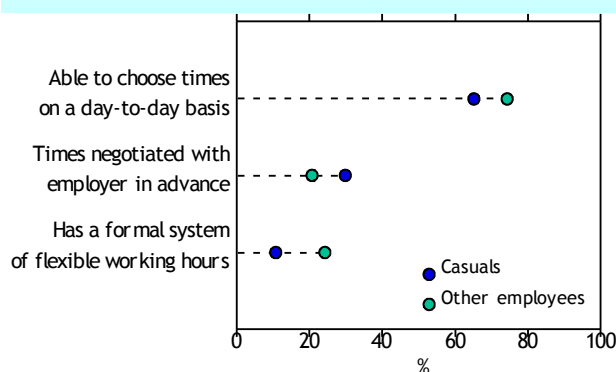


(a) Employees excluding owner managers of incorporated enterprises.

(b) Includes those who could sometimes choose when holidays were taken.

Source: ABS 2007 Survey of Employment Arrangements, Retirement and Superannuation

Employees(a) in main job, who had some say in start and finish times – 2007



(a) Employees excluding owner managers of incorporated enterprises.

Source: ABS 2007 Survey of Employment Arrangements, Retirement and Superannuation

had a formal system of flexible working arrangements, compared with around one in four other employees. Overall, only a small proportion of all employees had a formal system of flexible working arrangements (4% of all casuals, and 10% of those with paid leave).

One aspect in which casuals had more flexibility was in the days of the week on which they worked. Just over half (52%) of casuals had some say in the days they worked in 2007, compared with 28% of other employees. This was due to the fact that many casuals work part-time: casuals were four times as likely to work part-time (71%) as other employees (18%). Overall, part-time employees (casuals and non-casuals combined) were more than twice as likely to have a say in the days they worked compared with full-time employees (56%, compared with 24% of full-time employees). Most full-time employees worked from Monday to Friday each week.

The Fair Work Bill

The Commonwealth Government introduced the *Fair Work Bill* on 25 November 2008, to give parents and other people caring for children under school age the right to make formal requests for flexible work arrangements. These provisions are intended to apply to all employees, including long-term casual workers and casuals whose jobs are ongoing. The Bill allows employers to refuse such requests only on reasonable business grounds.

This article uses information from a survey conducted in 2007, prior to the introduction of the *Fair Work Bill*.

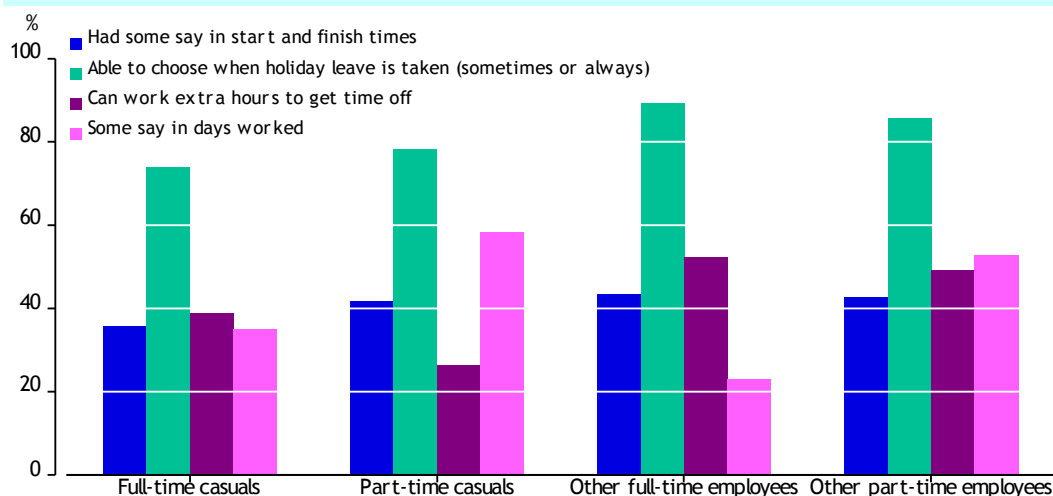
Female casuals were more likely than male casuals to have some say in the days of the week on which they worked (57% compared with 45%). This was largely due to the fact that women accounted for almost two-thirds of all part-time casuals, and part-time casuals were more likely to have this flexibility than full-time casuals were.

...for part-time compared with full-time casuals

In some ways, casuals were likely to have more job flexibility if they worked part-time. In 2007, 42% of part-time casuals had some say in their start and finish times compared with 36% of full-time casuals. In addition, 58% of part-time casuals had a say in days worked compared with 35% for full-time casuals, while the proportion of casuals who had some say in when they took holidays was similar for part-time and full-time workers (close to three-quarters of casuals in both cases).

In contrast, part-time casuals were less likely to be able to work extra hours in order to take time off (26%) than those who worked full-time (39%). This may be partly due to the fact that part-time casuals were more likely than full-time casuals to have hours that varied each

Employees(a) in main job, proportion with job flexibility by full-time/part-time status – 2007



(a) Employees excluding owner managers of incorporated enterprises.

Source: ABS 2007 Survey of Employment Arrangements, Retirement and Superannuation

week (37% compared with 29%). For part-time casuals, working extra hours to take time off may not be as important as being able to negotiate which days or hours are worked.

...for full-time employees

Full-time casuals were less likely to have flexible working arrangements in many respects than other full-time employees. Full-time casuals were less likely to have a say in start and finish times (36%) than other full-time employees (43%), less likely to be able to choose when to have holidays (74% and 89%, respectively) and less likely to be able to work extra hours to take time off (39% and 52%, respectively). On the other hand, full-time casuals were more likely than other full-time employees to have some say in which days they worked (35% compared with 23%).

...by industry

Job flexibility for employees varies across industries according to the activities and requirements of the workplace. In all industries, casuals had less flexibility than other employees for most measures, except that casuals in each industry were more likely to have a say in the days on which they worked. Where casuals had low job flexibility, other employees in the same industry often had low flexibility as well.

Job flexibility was highest for casuals in the Professional, scientific and technical services industry: 69% of all casuals in this industry had a say in their start and finish times, 87% could choose when holidays were taken, 53% were able to work extra hours to take time off and 67% had a say in the days they worked each week. Casuals in the Financial and insurance services industry also had higher flexibility

Employees(a) in main job, selected working arrangements by industry, casuals and other employees – 2007

	Employees(a)		Some say in start / finish times		Could choose when holidays taken(b)		Could work extra hours to take time off		Some say in days worked	
	Casuals	Other	Casuals	Other	Casuals	Other	Casuals	Other	Casuals	Other
	'000	'000	%	%	%	%	%	%	%	%
Agriculture, forestry & fishing	70.1	61.1	44.9	54.7	73.4	88.7	40.7	64.9	52.5	37.9
Mining	18.7	125.9	*26.4	29.4	73.0	94.5	*31.2	45.6	31.3	15.4
Manufacturing	169.2	780.3	31.4	34.9	68.7	92.6	28.4	49.6	34.6	17.6
Electricity, gas, water & waste services	9.2	73.3	*55.0	59.9	*55.8	94.0	*36.0	65.8	*45.6	26.5
Construction	112.6	358.4	33.8	35.1	79.7	90.8	49.6	54.9	37.1	21.3
Wholesale trade	49.2	280.8	37.8	47.7	71.5	93.6	*23.0	54.4	44.2	22.9
Retail trade	438.7	603.3	37.9	40.1	83.3	95.9	26.0	51.3	58.0	35.9
Accommodation & food services	357.6	191.6	39.8	41.9	78.8	91.3	27.4	50.2	56.5	44.5
Transport, postal & warehousing	99.7	327.7	33.1	33.1	76.2	92.1	31.3	44.2	36.6	20.6
Information media & telecommunications	39.1	166.1	42.4	57.3	80.9	96.5	*24.6	59.8	54.1	36.0
Financial & insurance services	29.9	294.6	67.2	56.4	88.9	98.1	45.1	63.6	51.2	22.9
Rental, hiring & real estate services	41.5	114.1	46.2	42.7	69.7	97.2	*18.9	55.8	56.1	29.3
Professional, scientific & technical services	91.4	443.6	68.7	61.4	87.0	98.1	53.0	65.6	66.7	29.9
Admin. & support services	123.0	144.1	36.0	43.1	70.3	92.5	26.5	43.8	41.4	24.3
Public administration & safety	55.6	557.3	56.8	60.1	73.9	93.6	33.4	64.9	47.8	28.6
Education & training	112.0	612.0	29.1	35.2	46.5	37.0	20.3	32.4	50.5	23.5
Health care & social assistance	183.3	786.2	42.6	37.5	82.0	94.9	26.0	44.4	61.3	43.8
Arts & recreation services	49.7	71.2	34.6	49.7	83.5	90.5	24.7	53.2	64.2	32.8
Other services	57.5	211.6	48.0	40.5	79.4	95.0	36.8	56.8	47.9	27.5
Total(c)	2 109.8	6 204.4	40.0	43.3	76.8	88.6	29.9	51.6	51.7	28.5

* estimate is subject to sampling variability too high for most practical purposes

(a) Employees excluding owner managers of incorporated enterprises.

(b) Includes those who could sometimes choose when holidays were taken.

(c) Includes people whose industry could not be determined.

Source: ABS 2007 Survey of Employment Arrangements, Retirement and Superannuation

than most other industries, though having some say in the days on which they worked was similar to the level for all casuals. However the proportion of casuals in these industries was relatively small (17% in Professional, scientific and technical services and 9% in Financial and insurance services).

Accommodation and food services had the highest proportion of casuals. Only 40% of casuals in this industry had a say in their start/finish times, although close to 80% of casuals could choose when they took holidays.

Employees working in the Education and training industry were much less likely to have a choice in when holidays were taken than employees generally (38% in Education and training compared with 86% overall) as many of these employees are restricted to taking leave outside of teaching periods. However, casuals seemed to be less restricted than other employees in this industry: 46% of casuals in Education and training were able to choose when holidays were taken, compared with 37% of other employees.

...by occupation

In terms of choosing when holidays were taken, having some say in start and finish times, and being able to work extra hours in order to take time off, Clerical and administrative workers had the highest levels of job flexibility among casuals. Most (83%) casual workers in this occupation group could choose when holidays were taken, 58% had some say in start and finish times and 44% were able to work extra hours in order to take time off. The proportion of casuals in this occupation was smaller than

most other occupations (19% of Clerical and administrative workers were casuals compared with 25% for all occupations).

Across all major occupation groups, casuals were less likely than employees with leave entitlements to be able to choose when holiday leave was taken or to work extra hours in order to take time off. However, for most occupation groups, casuals were more likely than other employees to have some say in their start and finish times or to have some say in days worked. For example, one in three casual Labourers had some say in their start and finish times compared with only one in five labourers with leave entitlements. Casual Labourers were much more likely to have some say in days worked (41%) compared with other Labourers (16%).

Job stability

As well as the flexibility of working arrangements, another concern when considering the working arrangements of casuals is the security and stability of their jobs. Particular areas of concern include the fact that casuals may not be given notice (or severance pay) in the case of dismissal and uncertainty around pay amounts from pay period to pay period. While some casuals keep their jobs for long periods, many are in short-term, irregular jobs characterised by high levels of employment insecurity and high turnover.⁵

Employees(a) in main job, selected working arrangements by occupation, casuals and other employees – 2007

	Employees(a)		Some say in start/ finish times		Could choose when holidays taken(b)		Could work extra hours to take time off		Some say in days worked	
	Casuals	Other	Casuals	Other	Casuals	Other	Casuals	Other	Casuals	Other
	'000	'000	%	%	%	%	%	%	%	%
Managers	70.2	790.1	45.3	69.6	78.2	93.5	42.0	58.2	48.4	35.9
Professionals	212.6	1 582.0	48.3	50.5	71.6	79.1	34.4	47.8	59.6	33.1
Technicians and trades workers	178.6	870.2	34.1	33.0	75.1	91.8	35.1	55.4	38.5	21.9
Community and personal service workers	314.5	477.5	37.1	29.2	77.3	83.1	24.6	37.6	57.7	36.5
Clerical & admin. workers	256.4	1 120.1	58.3	49.6	83.2	94.4	44.2	64.8	59.2	27.2
Sales workers	436.7	423.4	42.0	42.0	82.8	95.1	26.8	50.6	64.1	35.2
Machinery operators & drivers	162.6	450.1	26.3	19.4	72.6	90.6	29.6	42.5	32.2	14.5
Labourers	478.1	490.9	32.6	18.9	71.7	90.4	22.8	39.8	40.8	15.6
Total	2 109.8	6 204.4	40.0	43.3	76.8	88.6	29.9	51.6	51.7	28.5

(a) Employees excluding owner managers of incorporated enterprises.

(b) Includes those who could sometimes choose when holidays were taken.

Source: ABS 2007 Survey of Employment Arrangements, Retirement and Superannuation

...duration of current job and expected future duration

In 2007, while almost half (45%) of all casuals had been in their current job for less than a year, nearly three-quarters (74%) of all casuals expected to be working for the same employer in 12 months time compared with 89% of other employees.

Employees with paid leave entitlements were much more likely than casuals to have been in their current job for five years or more (46% of employees with paid leave entitlements, compared with 15% of casuals). This may partly reflect the younger age profile of casuals and the fact that some of them would have been in the workforce for less than five years.

For those casuals who expected to change employer within 12 months, the most common main reason for doing so was that they would be changing jobs or seeking other employment (55%). Returning to study was also a common main reason (11%). In 13% of cases, the main reason was to do with the job finishing at the employer's instigation (e.g. the contract coming to an end, the employer downsizing, or it being a seasonal/temporary job).

...do earnings and hours vary?

Variations in pay from week to week can make it difficult for employees to plan their finances and take out loans. Nearly half (47%) of casual employees had earnings (excluding overtime) that varied from pay to pay, compared with 16% of other employees.

Casuals were twice as likely as other employees to work in a job where the hours varied from week to week (35% and 17%, respectively).

There was little difference between the sexes when it came to these aspects of job stability. About 37% of female casuals had hours that

varied from week to week (compared with 33% of male casuals). There was no significant difference between the sexes for earnings that varied from pay to pay.

...is a minimum number of hours guaranteed?

Almost one-quarter of casuals did not have a minimum number of hours guaranteed, while around 11% did have a guaranteed minimum. There was little difference between the sexes. The remainder of casuals (65%) worked the same number of hours each week.

Would casuals prefer to work more hours?

Casuals who worked part-time were more likely to prefer to work more hours than other part-time employees (28% and 16%, respectively).⁶

For both casual and other part-time employees, men were more likely to prefer to work more hours than women. About 32% of men in casual part-time employment would have preferred more hours, compared with 22% of other male part-time employees. Just over one-quarter of women in casual part-time employment would have preferred more hours (26%) compared with 15% of other female part-time employees.⁶

How many casuals get paid a loading for being casual?

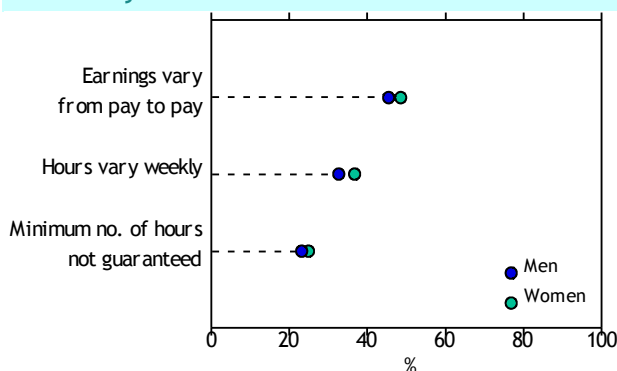
Another factor affecting casual jobs is whether or not employees get paid a casual loading. Almost half of casuals said they received a loading (48%), just over one-third said they did not receive a loading (36%) and the remainder (16%) did not know whether or not they received a casual loading as part of their pay.

Female casuals were more likely than male casuals to say they had received a casual loading (50% compared with 45%). One-third of female casuals said they did not get a casual loading (compared with 41% of male casuals) and 17% were unsure whether or not they received such a loading (compared with 14% of male casuals).

Conclusion

In 2007, one in four employees were casuals. This type of worker is likely to have less flexible working arrangements in some respects than other employees, although the part-time working arrangements common for casuals may allow time for other parts of life, such as family responsibilities. Casuals also tended to have less certainty in terms of the amount of pay they receive from one pay period to the next, and in hours of work. Nevertheless, just

Casual employees(a), selected measures of job instability – 2007



(a) Employees excluding owner managers of incorporated enterprises.

Source: ABS Survey of Employment Arrangements, Retirement and Superannuation 2007

over half (53%) of casuals had earnings that did not vary from pay to pay, and 65% had hours that did not vary from week to week.

Endnotes

- 1 Australian Bureau of Statistics 2009, [Australian Labour Market Statistics, January 2009](#), Data Cubes: Table 2: Employment Type 1992-2007, cat. no. 6105.0, ABS, Canberra.
- 2 Watson, I, 2004, 'Contented Casuals in Inferior Jobs? Reassessing Casual Employment in Australia', Working Paper no. 94, Australian Centre of Industrial Relations Research and Training, Sydney, viewed 29 May 2009, <www.wrc.org.au>.
- 3 Wooden, M. and Warren, D, 2003, 'The Characteristics of Casual and Fixed-Term Employment: Evidence from the HILDA Survey', Working Paper 15/03, Melbourne Institute of Applied Economic and Social Research, Melbourne, viewed 29 May 2009, <www.melbourneinstitute.com>. The authors noted that many commentators consider growth in casual employment an unfortunate by-product of labour market reform, but they found that 'non-standard employment is not necessarily seen as undesirable by workers'.
- 4 For more information on how casual employment may be defined, see '[Measures of Casual Employment](#)' in *Australian Labour Market Statistics, October 2008*, cat. no. 6105.0, ABS, Canberra.
- 5 Campbell I, Whitehouse G and Baxter, J, 2009, 'Working Paper, Australia: Casual Employment, Part-time Employment and the Resilience of the Male-Breadwinner Model', viewed 1 June 2009, <www.genderwork.ca>.
- 6 Australian Bureau of Statistics, 2007 Survey of Employee Earnings, Benefits and Trade Union Membership.

Home and away: the living arrangements of young people

Moving out of the parental home has traditionally been an important step in the transition from dependent childhood to independent adulthood. Changes in housing and living arrangements are often related to milestones such as starting or finishing education and starting work. Other factors associated with young people's living arrangements include their level of financial security and housing affordability.

Since the 1970s, young people have tended to reach many of the major life milestones later, and this is reflected in the trends in living arrangements, which show a greater proportion living in the parental home.¹ Additionally, more young people who have moved out of the parental home are renting, rather than buying a home.

Trends in living arrangements

Young people are now more likely to be living with their parents than they used to be. In 2006, almost one in four (23%) people aged 20–34 years were living at home with their parents, compared with 19% in 1986. Over these decades young women had the biggest relative change in their living arrangements, with the proportion living at home increasing from 13% to 18% (up 36%). However, young men were more likely than young women to live with their parents. In 1986, 24% of young men were living at home, increasing to 27% by 2006 (up 16%).

Data sources and definitions

Most data in this article are sourced from the 2006 ABS Census of Population and Housing and the ABS 2006–07 Family Characteristics and Transitions Survey (FCTS). The FCTS collected information from people aged 18–34 years about leaving the parental home. For more information see [Family Characteristics and Transitions, Australia, 2006–07](#) (ABS cat. no. 4442.0). Census data exclude people not at home on census night and people for whom the relationship in household was not stated. Unlike the FCTS, the census includes people living in non private dwellings such as hotels, staff quarters and residential colleges. This accounts for some of the difference in the proportion of young people living at home between these two data sources.

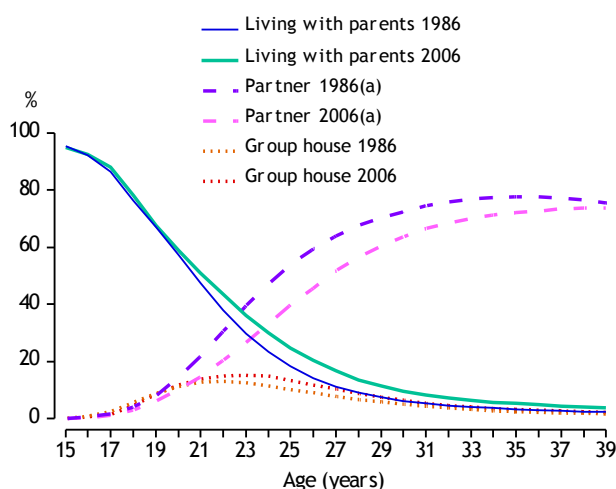
Young people refers to people aged 20–34 years.

People living at home are those who usually live with at least one parent. These people are identified by their relationship to the household reference person. People who never left home but no longer live with their parents, for example those who bought the family home from their parents, are excluded.

This change in the living arrangements of young people is related to the trend towards partnering at a later age (see [Australian Social Trends March 2009, 'Couples in Australia'](#)). It was less common in 2006 than in 1986 for a young person to be a partner in a couple family. The age at which being in a couple family became a more common living arrangement than living with parents was 23 years in 1986. In 2006 this cross-over point had increased to 24 years.

Group houses also became a slightly more common living arrangement over this time. This type of living arrangement was most common among those in their early 20s in both 1986 and 2006.

Selected living arrangements

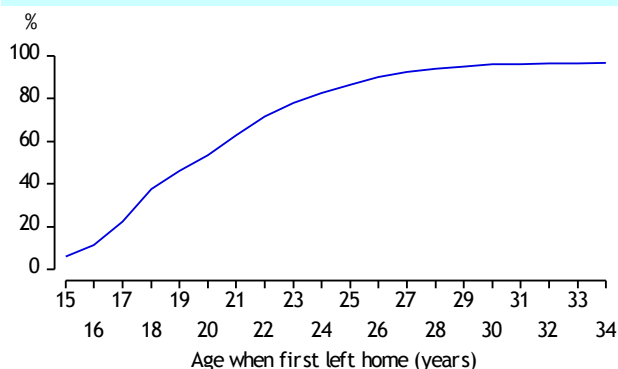


(a) Includes couples living in group houses.

Source: ABS Censuses of Population and Housing

Over the last twenty years, the proportion of young people living with their parents increased from 19% to 23%.

People aged 18-34 years: probability of first leaving home by a certain age – 2006-07(a)



(a) Excludes people who were living separately from their parents but had never left home.

Source: ABS 2006-07 Family Characteristics and Transitions Survey

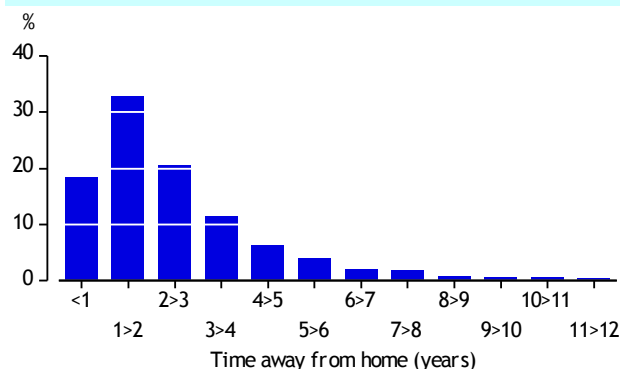
Moving out: at what age?

For men aged 18–34 years in 2006–07, the median age of first leaving home was 20.9 years (including those who left then returned later). Women in this age group tended to leave home for the first time at a slightly younger age (19.8 years).

The likelihood that a young person would have ever left home increased with age, then began to level out at around 28 years of age, where 94% of people had ever moved out. Only a further three percentage points of the population moved out by 34 years.

This leaves around 3% who hadn't left home by age 34 (excluding those who hadn't left home but were living separately from their parents). In the 30–34 years age group, only a quarter of the 12% who had never left home were actually living with their parents. The rest were not living with their parents, indicating that their

People aged 18-34 years who left home and returned: length of first time away – 2006-07



Source: ABS 2006-07 Family Characteristics and Transitions Survey

parents had moved or died. Women aged 20–24 years were three times as likely as men to not be living with their parents without having moved out (5.0% compared with 1.6%).

Among people aged 18–19 years in 2006–07, 18% were not living with their parents.

Do the leavers return later?

The increase in young people living with their parents may be due to young people leaving home for the first time at a later age, or an increased tendency to move out and later return to their parents' home after some time away, or both.² It is now quite common for young people to move out of home, then return later for a time, perhaps due to a change in circumstances or to save to buy their own home. In 2006–07, 31% of people aged 20–34 years had left their parents' home and returned at some point to again live with their parents (including 22% who were not living with their parents at the time of the survey).

People aged 20-34 years: moving out of, and back to, the parental home – 2006-07

	Age group (years)			
	20-24	25-29	30-34	20-34
	%	%	%	%
Total lives with parents	47.2	16.8	8.2	24.5
Has never left home	34.9	7.8	3.0	15.6
Left home and has returned	12.3	9.0	5.2	8.9
Total does not live with parents	52.8	83.2	91.8	75.5
Left home and has not returned	37.2	49.5	55.4	47.2
Left home and returned at least once	12.4	26.5	27.3	21.9
Has never left home, but lives separately from parents(a)	3.2	7.3	9.1	6.5
Total persons	100.0	100.0	100.0	100.0
	'000	'000	'000	'000
Total persons	1 495.3	1 389.6	1 433.5	4 318.5

(a) Includes people whose parents may have died or moved away.

Source: ABS 2006-07 Family Characteristics and Transitions Survey

Having left home for the first time, the probability that someone would return home at least once before turning 35 was almost one in two (46%). Of those who do return home, the most common duration away was between one and two years with one-third of returnees expected to return in this period. Seven out of ten people who return to the parental home could be expected to do so within three years.

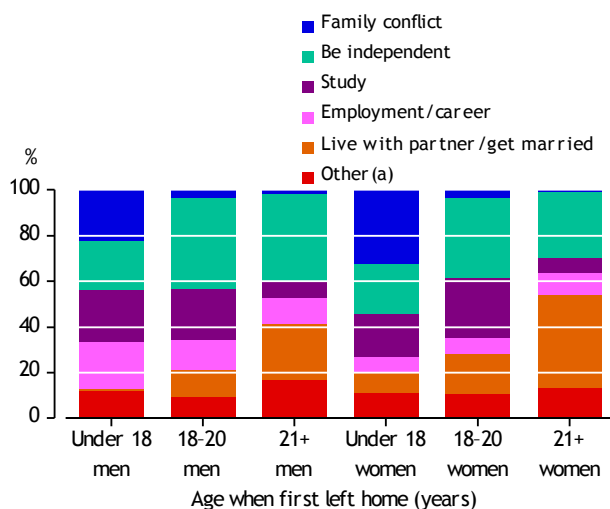
While it was slightly more common for young men living with their parents to have never left home (18% of all young men compared with 13% of young women), a higher proportion of young women (24%) than men (20%) reported returning home before moving out again.

Stay or go: why do people leave?

There have been some significant shifts in the reasons that young people leave home. From around the 1970s, leaving home to marry became less common.² A new stage of life emerged between living in the parental home and marriage, with people moving out for reasons other than marriage, such as to study, work, travel or to be independent.³

In 2006–07, 16% of all men and 22% of all women aged 18–34 years at the time of the survey had first left home before the age of 18 years. Moving out because of family conflict was more common among people who left before age 18 than people who moved out when they were older. This was the most common reason for leaving (32%) among women who left home before they turned 18. Almost one in four (22%) men who moved out before age 18 said that the main reason they left was because of family conflict. People who left at this young age because of family conflict

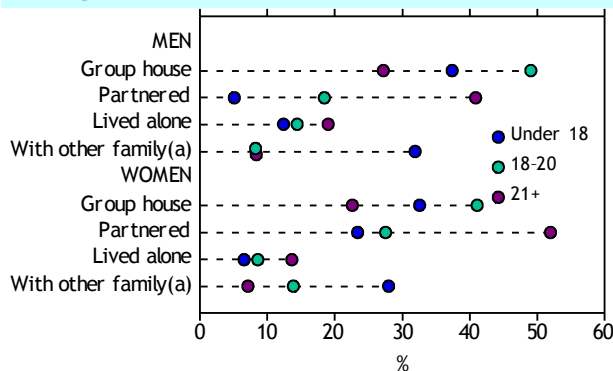
People aged 18–34 years: main reason first left home – 2006–07



(a) Includes travel; moving interstate or overseas; other reason; and reason not stated.

Source: ABS 2006–07 Family Characteristics and Transitions Survey

People aged 18–34 years: selected living arrangements when first left home – 2006–07



(a) Other family members or an unrelated family.

Source: ABS 2006–07 Family Characteristics and Transitions Survey

were more likely to move in with other family members, an unrelated family or into crisis or other temporary accommodation than those who left for another reason (43% compared with 26%).

Men who moved out before they turned 18 were three times as likely as women to say that their main reason for moving was for employment or career reasons (21% compared with 7%). Similar proportions of men (23%) and women (19%) said that they left to study.

More than one-quarter of men (29%) and women (28%) first moved out when they were aged between 18 and 20 years. The most common reason given for leaving home for the first time by both men and women who left at this age was to be independent (39% and 35% respectively). Men who moved out at this age were almost twice as likely as women to leave for employment or career reasons (13% compared with 7%).

...where do they go?

Group houses were the most common destination among people who left home before the age of 18, with 37% of men and 33% of women moving into a group house when they first left home. Moving in with other family members or an unrelated family was also common among people who left at this age (32% of men and 28% of women).

Overall, women were more likely than men to leave home to move in with a partner or to marry. This difference was especially apparent among those who moved out before they turned 18, with 23% of women in this age group living with a partner or spouse after moving out, compared with 5% of men. This was the most common living arrangement among men and women who first moved out when they were aged 21 years or older.

People aged 20-34 years engaged in work and study – 2006

	Men		Women	
	Lives with parents %	Does not live with parents %	Lives with parents %	Does not live with parents %
Working and/or studying full-time	66.2	77.0	68.7	47.8
Working full-time	51.4	67.7	45.2	38.8
Studying full-time	15.6	9.4	24.4	9.5
Working part-time only	9.8	7.7	12.3	18.6
Studying part-time only	1.3	0.5	1.5	1.8
Working and studying part-time	1.7	0.8	2.9	2.0
Employed but full or part-time status unknown(a)	5.3	4.4	4.3	4.2
Not currently working or studying(b)	15.7	9.7	10.4	25.6
Total	100.0	100.0	100.0	100.0
	'000	'000	'000	'000
Total	483.4	1 330.8	335.6	1 524.3

(a) Those who worked 0 hours in the week prior to census night.

(b) Includes those who were unemployed; not in the labour force; and/or not attending an educational institution.

Source: ABS 2006 Census of Population and Housing

Men were generally more likely than women to live alone after leaving home. In particular, the proportion of men who moved out before the age of 18 to live alone was almost twice that of women (12% compared with 7%).

Why stay at home?

Almost half (45%) of people aged 20–24 years who had never left home said that the main reason was financial. Among people aged 25–29 years, common reasons for staying at home included financial reasons (20%) and the convenience or enjoyment of living at home (also 20%).

Among 30–34 year olds who had never left home, most (67% of men and 82% of women) were living separately from their parents. This was also common among 25–29 year olds (35% of men and 59% of women who had never left home).

Characteristics of young people living at home

...are they working?

In 2006, women aged 20–34 years who were living at home were slightly more likely to be working full-time and less likely to be working part-time than those living out of home. Those women living away were more than twice as likely to be not working or studying as those living at home. This pattern is related to the child-rearing responsibilities of many women not living at home. Women who have moved out of home are more likely to have children

and are therefore more likely to be either not working or to be working part-time (see [Australian Social Trends 2006, "Trends in women's employment"](#)).

Men in this age group followed an opposite pattern. A lower proportion of those living at home were working full-time, compared with those living away. It was more common for men to be not working or studying if they were living with their parents.

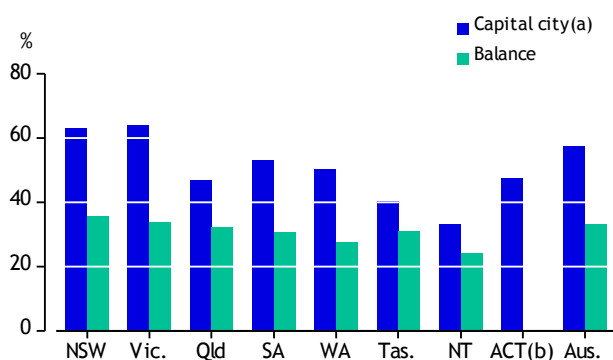
...are they studying?

Both men and women aged 20–34 years were more likely to be full-time students if they were living with their parents. This difference was more pronounced among women than men, with a much higher proportion of women living with their parents studying full-time.

Young men who were full-time students living at home spent more time than those living away on education activities.

Information from the 2006 Time Use Survey shows that 20–34 year old men living at home and studying full-time spent more time on education activities than those living away (about 31 hours per week compared with about 15 hours). The amount of time women spent on education was not associated with whether or not they lived at home.

People aged 20-24 years who lived with their parents in 2006: where they lived in 2001



(a) Capital City Statistical Division.

(b) Data for Balance not shown due to the very small number of people who live there.

Source: ABS 2006 Census of Population and Housing

...living in a capital city

Young people from capital cities were more likely to be living with their parents than those from the non-capital city areas. This was particularly the case among those in their early twenties, who were more likely than any other age group to have had a change in living arrangements in the previous five years. In 2006, 57% of the 20–24 year olds who were living in a capital city five years earlier were living with their parents, compared with 33% of those who were living in non-capital cities five years earlier. Some of this difference was due to internal migration, with 20% of people this age from non-capital city areas moving to a capital city between 2001 and 2006, reflecting the attraction of major cities for young people especially for education and employment opportunities. Full-time education was also associated with living in a capital city. Almost one-third (30%) of the 20–24 year olds living with their parents in a capital city in 2006 were full-time students, but only 15% of those living outside capitals were engaged in full-time study.

In 2006, people aged 20–24 years who were living in Melbourne or Sydney five years earlier were more likely to be living with their parents (64% and 63% respectively) than people from other places. Those from Darwin and Hobart were the least likely to remain with their parents (33% and 40%) compared with young people from other capitals, but were still more likely to do so than those from the non-Darwin part of Northern Territory (24%) and the non-Perth areas of Western Australia (28%).

...ancestry

People aged 20–34 years in 2006 from particular Asian backgrounds (who were born in Australia but had parents who were both born overseas) had a greater tendency than people of

Ancestry of second generation Australians aged 20-34 years – 2006(a)(b)

	Ratio of people living with parents to people not living with parents	Proportion of people studying full-time	All people born in Australia whose parents were both born overseas
	Ratio	%	'000
Vietnamese	2.13	32.7	7.4
Chinese	1.40	30.8	20.7
Filipino	1.21	20.8	4.8
Lebanese	0.83	8.0	25.7
Macedonian	0.72	5.9	12.8
Turkish	0.71	11.1	7.0
Greek	0.64	5.3	38.4
Serbian	0.56	7.6	7.6
Polish	0.52	14.9	7.3
Croatian	0.49	6.1	14.8
Italian	0.47	4.8	58.0
Maltese	0.37	4.0	14.9
British and/or Irish(c)	0.30	8.6	114.7
New Zealand peoples(d)	0.30	10.3	7.9
Other	0.50	11.8	130.5
Total persons	0.54	10.0	407.1

(a) Australian born people whose parents were both born overseas.

(b) Each person could give up to two ancestry responses, for example British and Irish.

(c) British and/or Irish includes British; English; Scottish; Welsh; Channel Islander; and Manx.

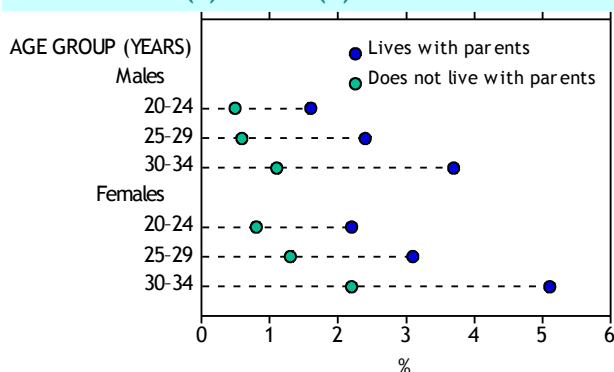
(d) New Zealand peoples includes New Zealand Peoples; Maori; and New Zealand.

Source: ABS 2006 Census of Population and Housing

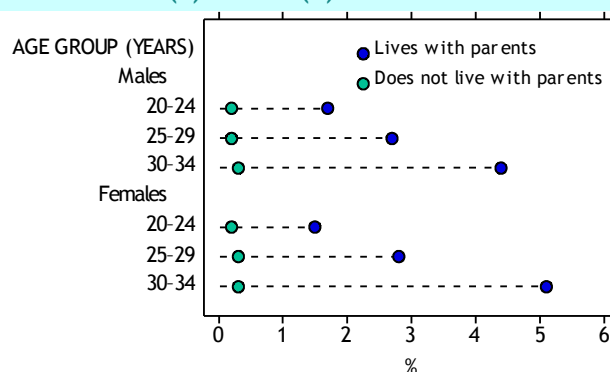
other ancestries to be living with their parents. Among second generation Australians with Vietnamese ancestry, there were two people living with their parents for every one person living away from home (a ratio of 2.13). This was much higher than the ratio for all second generation Australians living at home to those living away (0.54). People from these ancestries were also more likely to be in full-time education than other second generation Australians. One-third of people with Vietnamese ancestry were full-time students, as were 31% of people with Chinese ancestry and 21% with Filipino ancestry.

To a lesser extent, people from some other backgrounds also had a greater tendency to live with their parents. People of Lebanese ancestry had a ratio of 0.83, higher than for all second generation Australians (0.54). The ratio of people living at home to those living away was

Young carers living with a person with a need for assistance(a) – 2006(b)



Young people with a need for assistance living with a carer(a) – 2006(b)



(a) The link between recipient of assistance and carer was not explicitly collected in the census. Carers could be providing care to a person with a need for assistance other than the person living in the same household.

(b) Excludes people not living in households.

Source: ABS 2006 Census of Population and Housing

lower among people of British and/or Irish, New Zealand and Maltese ancestries. For more information on second generation Australians see [A Picture of the Nation: the Statistician's Report on the 2006 Census, 2006, 'Second generation Australians'](#).

women aged 30–34 years living with their parents, 5.1% were providing care, compared with 3.7% of men. Overall, of those young carers living at home, over two-thirds (67%) were living with a parent who had a need for assistance.

Are they caring for someone or being cared for?

People living with their parents may be caring for someone, or be recipients of care. In 2006, 2.4% of 25–29 year old men living with their parents were carers living with a person with a need for assistance, four times the rate of those not living with their parents (0.6%). A similar difference was apparent among men in the other age groups. Women living at home were around three times as likely to be carers living with a person with a need for assistance as those living away.

Women in all age groups were slightly more likely than men to be carers living with a person who had a need for assistance. Of

Young people living at home were much more likely to have a need for assistance and be living with a carer than those who had moved out.

People living at home were much more likely to have a need for assistance (and be living with a carer) than those who had moved out. This difference became more apparent with increasing age. Among men aged 20–24 years the rate was around eight times as high among those living at home (1.7% of people living with their parents had a need for assistance and were living with a carer, compared with 0.2% of those living away). Among 30–34 year old men the rate was around fifteen times as high. Women living with their parents were also much more likely to have a need for assistance and followed the same age pattern as men. Almost all (99%) young people living at home who had a need for assistance were living with a parent providing care.

Carers and people with a need for assistance

Carers are people who, in the two weeks prior to census night, provided unpaid care, help or assistance to a person with a disability, a long-term illness or problems related to old age by assisting them with their daily activities, such as bathing, communicating with others, meal preparation and driving to appointments and activities.

People with a need for assistance are those with a profound or severe disability. They need help or assistance in one or more of the three core activity areas of self-care, mobility and communication, because of a disability, a long-term health condition (lasting six months or more) or old age.

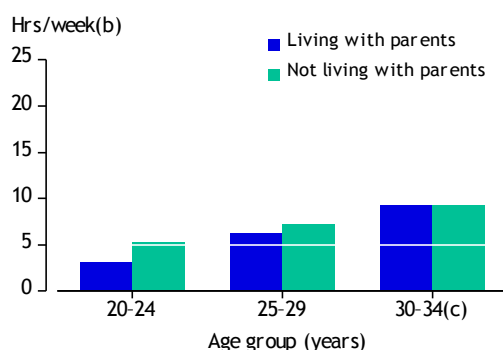
For more information see [A Profile of Carers in Australia](#) (ABS cat. no. 4448.0) and [Australian Social Trends 2008, 'People with a need for assistance'](#).

Do they help out at home?

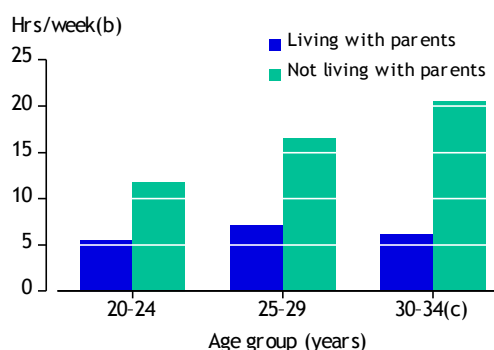
The time spent each week by 25–34 year old men living with their parents on domestic activities, such as cooking or gardening, did not differ greatly from the time spent by men this age who were living away from home. However there was a considerable difference among men aged 20–24 years. Those living at home spent on average 3 hours and 15 minutes on domestic activities each week, compared with the 5 hours and 25 minutes spent by those living away. The time 20–24 year old women spent on domestic activities similarly differed

Time spent on domestic activities(a) per week – 2006

MALES



FEMALES



(a) Main (not secondary) activity at the time. Domestic activities includes food preparation, service and clean-up; washing; ironing and clothes care; other housework such as indoor cleaning and tidying activities; domestic management; home and car maintenance and improvement; pet care; and care of the grounds. Associated travel is not included.

(b) Average hours and minutes per week by all people.

(c) Estimate for living with parents has a relative standard error of 25% to 50% and should be used with caution.

Source: ABS 2006 Time Use Survey

with their living arrangements, with those living at home spending an average of almost 6 hours a week on domestic activities, compared with the 11 hours and 10 minutes spent by those living away.

Looking ahead

Given the close association of education and employment status with young people's living arrangements, it is evident that a broad range of government policies, including income support and housing policies, are potentially relevant to young people making the decision to leave home.¹ Although living with their parents helps young people to establish themselves, there is the issue of what their parents gain (or lose) from this living arrangement, for example the impact on the accumulation of retirement wealth by these parents.¹

Endnotes

- 1 Cobb-Clark, D. A., 2008 'Leaving Home: What Economics Has to Say about the Living Arrangements of Young Australians', *The Australian Economic Review*, Vol. 41, no. 2, pp. 160–176.
- 2 Weston, R., Stanton, D., Qu, L., and Soriano, G., 2001, 'Australian Families in Transition', *Family Matters*, no. 60, pp. 12–23.
- 3 Young, C, 1996 'Are young people leaving home earlier or later?' *Journal of the Australian Population Association*, Vol. 13, no. 2, pp. 125–152.

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