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Australian Social Trends 1999

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AUSTRALIAN BUREAU OF STATISTICS

CATALOGUE NO. 4102.0

The Australian Bureau of Statistics has catalogued this publication as follows:

Australian social trends / Australian Bureau of Statistics. — 1994- . — Canberra : Australian Bureau of Statistics, 1994- . — v. : ill.; 30 cm.
Annual
Catalogue no. 4102.0
ISSN: 1321-1781

1. Social indicators — Australia — Statistics — Periodicals.
2. Australia — Social conditions — Statistics — Periodicals.
I. Australian Bureau of Statistics.

319.4

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Contents

Preface

Australian Social Trends 1999 is the sixth of an annual series presenting information on contemporary social issues and areas of public policy concern. By drawing on a wide range of ABS statistics, as well as those from other official sources, it describes many of the circumstances that set the course for on-going social change. *Australian Social Trends* is designed to assist and encourage informed decision-making and is intended for use by a wide audience, including those involved in social policy, research, journalism, marketing and teaching, as well as anyone interested in how we live today.

The articles in *Australian Social Trends 1999* are organised into eight chapters, each representing an area of social concern: population, family, health, education, work, income and expenditure, housing, and culture and leisure. Through extensive referencing to other articles, including those presented in previous editions of *Australian Social Trends,* connections between issues have also been highlighted.

As 1999 is the International Year of Older Persons, several articles in this edition address themes relevant to the wellbeing of older people. The first article sets the scene by describing changes in the representation of older people in the population and some of the implications this has for the broader community. Other articles discuss the health of older people, the use of home care, hostel and nursing home services, and the financial circumstances of older Australians.

As in 1995, the feature chapter in this year's edition takes a look at Australians' involvement in culture and leisure activities. Here, information is presented about the availability and use of free time, people's involvement and interests in cultural activities, the use of computers and the internet in the home, and involvement in sporting activities.

As well as the 31 analytical reviews, *Australian Social Trends* includes a set of national and State summary tables, which present key social indicators in each of the major areas of concern. These show at a glance how aspects of social wellbeing have been changing over time and how circumstances differ between States. This edition has again extended the range of indicators previously presented in these tables. Also provided is a set of tables of international comparisons for 18 countries, including major OECD countries and Australia's nearest neighbours and trading partners. Finally, there is a cumulative index to the 200 articles that have now been presented within the six editions.

Many organisations have assisted in compiling this volume. These include: the Aboriginal and Torres Strait Islander Commission; the Australian Institute of Health and Welfare; Centrelink; the Confederation of Australian Sport Inc.; the Department of Family and Community Services; the Department of Health and Aged Care; and the Organisation for Economic Cooperation and Development. As well as thanking these oganisations, I would also like to thank Mr Gerry Redmond of the Social Policy Research Centre at the University of New South Wales for his contribution in preparing an article, and Mr Mike Giles, who provided editorial comment on this report.

The Australian Bureau of Statistics welcomes readers' suggestions on how the publication could be improved. To express your views or to ask for more information, please contact the Director, Social Analysis and Reporting, at the address below.

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General information

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Inquiries about the availability of more recent data from ABS should be directed to Information Services in your nearest ABS office (see p. 208).

ABS publications and services

A complete list of ABS publications produced in Canberra and each of the State Offices is contained in the ABS *Catalogue of Publications and Products* (Cat. no. 1101.0), which is available from any ABS office.

In many cases, the ABS can also provide information which is not published or which is historical or compiled from a variety of published and unpublished sources. Information of this kind may be obtained through the Information Consultancy Service. This information may be made available in one or more of the following forms: consultancy reports, microfiche, floppy disk, magnetic tape, computer printout or photocopy. Charges are generally made for such information. Inquiries may be made by contacting Information Services in your nearest ABS office (see p. 208).

Abbreviations

The following abbreviations have been used in graphics and tables throughout this publication.

Australia, States and Territories of Australia

Aust.	Australia
NSW	New South Wales
Vic.	Victoria
Qld	Queensland
SA	South Australia
WA	Western Australia
Tas.	Tasmania
NT	Northern Territory
ACT	Australian Capital Territory

Other abbreviations

NZ	New Zealand
OECD	Organisation for Economic Cooperation and Development
PNG	Papua New Guinea
UK	United Kingdom
UN	United Nations
UNICEF	United Nations International Children's Emergency Fund
USA	United States of America
USSR	Union of Soviet Socialist Republics
WHO	World Health Organisation

Symbols and usages

The following symbols and usages mean:

billion	1,000 million
n.a.	not available
n.y.a.	not yet available
p	preliminary — figures or series subject to revision
r	figures or series revised since previous edition
*	subject to high sampling variability
* *	data suppressed due to unacceptably high sampling variability
. .	not applicable
—	nil or rounded to zero

Where figures have been rounded, discrepancies may occur between the sums of the component items and totals.

Population

Population — national summary

COMPOSITION	Units	1988	1989	1990	1991	1992	1993	1994(a)	1995	1996	1997	1998p
Total population	'000	16 532	16 814	17 065	17 284	17 495	17 667	17 855	18 072	18 311	r18 524	18 751
Male population	'000	8 249	8 388	8 511	8 615	8 716	8 798	8 888	8 994	9 108	r9 214	9 330
Female population	'000	8 283	8 427	8 554	8 669	8 779	8 869	8 967	9 078	9 203	r9 310	9 421
Indigenous population(b)	'000	n.a.	n.a.	n.a.	345.4	352.9	360.7	368.8	377.1	386.0	394.2	402.4
Overseas-born population	%	22.0	22.4	22.8	22.9	23.0	22.9	22.9	23.0	23.3	23.3	23.4
Born in the United Kingdom and Ireland	%	7.3	7.3	7.3	7.2	7.1	7.0	6.9	6.9	6.8	6.7	6.7
Born in Europe and the former USSR	%	14.5	14.4	14.2	14.0	13.8	13.6	13.5	13.3	13.2	13.1	12.9
Born in East and Southern Asia	%	3.2	3.5	3.8	4.2	4.4	4.5	4.7	4.9	5.1	5.2	5.4
Population living in capital cities	%	63.7	63.7	63.6	63.6	63.5	63.5	63.5	63.5	63.6	63.7	63.7
Population aged 0–14	%	22.4	22.2	22.0	21.9	21.8	21.7	21.6	21.5	21.4	21.2	20.9
Population aged 15–64	%	66.8	66.9	66.9	66.8	66.7	66.6	66.6	66.6	66.6	66.7	66.9
Population aged 65 and over	%	10.8	11.0	11.1	11.3	11.5	11.6	11.8	11.9	12.0	12.1	12.2
Population aged 80 and over	%	2.1	2.1	2.2	2.2	2.3	2.4	2.5	2.6	2.6	2.7	2.8
Median age of total population	years	31.6	31.8	32.1	32.4	32.7	33.0	33.4	33.7	34.0	34.3	34.6
Median age of Indigenous population	years	n.a.	n.a.	n.a.	19.8	19.8	19.9	20.0	20.0	20.1	19.8	19.8
Sex ratio of population aged 0–64	ratio	103.3	103.2	103.1	103.0	102.8	102.7	102.6	102.5	102.4	102.3	102.4
Sex ratio of population aged 65 and over	ratio	73.7	74.1	74.5	75.0	75.5	75.9	76.3	76.7	77.1	77.5	77.8

POPULATION GROWTH	Units	1988	1989	1990	1991	1992	1993	1994(a)	1995	1996	1997	1998p
Population growth	'000	268.3	282.3	250.7	218.9	210.6	172.4	187.6	217.0	239.0	r213.4	226.8
Births	'000	r246.2	r250.2	r257.5	r261.2	259.2	260.0	258.3	258.2	250.4	r253.7	249.2
Deaths	'000	r120.5	r118.8	r125.1	r119.6	120.8	121.3	123.5	126.2	126.4	r127.3	128.6
Natural increase	'000	r125.7	r131.4	r132.4	r141.6	138.4	138.6	134.8	132.0	124.0	r126.4	120.6
Net overseas migration	'000	149.3	157.4	124.6	86.4	68.6	30.0	46.5	80.1	104.1	r87.1	106.2
Population growth rate	%	r1.62	r1.68	r1.47	r1.27	r1.20	0.99	1.06	1.22	1.32	1.21	1.22
Net overseas migration to total growth	%	55.7	55.8	49.7	39.5	32.6	17.4	24.8	36.9	43.6	40.8	46.8

MIGRATION	Units	1988	1989	1990	1991	1992	1993	1994(a)	1995	1996	1997	1998
Total settler arrivals(c)	'000	143.5	145.3	121.2	121.7	107.4	76.3	69.8	87.4	99.1	85.8	77.3
Skilled settler arrivals	%	24.1	30.0	35.3	39.8	37.6	29.0	18.3	23.1	20.2	23.0	33.6
Family settler arrivals	%	48.5	41.0	41.2	44.3	45.3	42.1	48.1	42.4	46.9	42.6	27.3
Humanitarian settler arrivals	%	7.7	7.5	9.9	6.4	6.7	14.3	16.3	15.6	13.9	11.5	11.4

PROJECTIONS — SERIES II	Units	2001	2006	2011	2016	2021	2026	2031	2036	2041	2046	2051
Total population	'000	19 297	20 189	21 017	21 792	22 519	23 173	23 720	24 149	24 476	24 731	24 945
Population aged 0–14	%	20.3	19.3	18.3	17.6	17.1	16.8	16.5	16.2	15.9	15.7	15.6
Population aged 15–64	%	67.3	67.8	67.7	66.4	65.0	63.4	62.2	61.4	60.8	60.6	60.2
Population aged 65 and over	%	12.4	12.9	14.0	16.0	17.9	19.8	21.3	22.4	23.3	23.7	24.2
Population aged 80 and over	%	3.0	3.4	3.7	3.8	4.1	4.7	5.8	6.7	7.5	8.0	8.4
Median age of total population	years	35.5	36.8	38.3	39.4	40.4	41.3	42.2	42.9	43.5	43.9	44.1
Population living in capital cities	%	63.8	64.0	64.1	64.3	64.5	64.7	64.9	65.1	65.3	65.5	65.7

(a) From 1994, includes Christmas and Cocos Islands.
(b) From 1997, figures are projections.
(c) Total settler arrivals includes special eligibility and non-program migration, in addition to family, skilled and humanitarian migration.

Reference periods: Population composition and projection figures are at 30 June. Growth and migration figures are for the year ended 30 June.

Population — State summary

COMPOSITION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total population	'000	1998p	6 342	4 661	3 456	1 487	1 831	472	190	308	18 751
Male population	'000	1998p	3 151	2 304	1 731	735	922	233	100	154	9 330
Female population	'000	1998p	3 191	2 357	1 726	752	910	239	90	155	9 421
Indigenous population(a)	'000	1998	114.4	23.4	110.3	23.0	58.3	15.8	53.7	3.3	402.4
Overseas-born population	%	1996	24.5	25.1	17.7	22.3	29.3	10.8	16.8	23.7	23.3
Born in the United Kingdom and Ireland	%	1996	5.4	5.5	6.0	10.0	13.2	5.4	4.9	6.7	6.7
Born in Europe and the former USSR	%	1996	11.7	15.2	9.4	17.5	18.9	8.0	8.2	13.6	13.2
Born in East and Southern Asia	%	1996	6.7	5.8	2.8	2.7	5.3	1.0	4.5	5.6	5.1
Population living in capital cities	%	1998p	62.9	72.3	45.6	73.2	73.3	41.3	45.6	99.9	63.7
Population aged 0–14	%	1998p	20.8	20.4	21.5	19.9	21.7	21.6	26.5	21.2	20.9
Population aged 15–64	%	1998p	66.5	67.0	67.2	65.8	67.9	65.2	70.1	71.0	66.9
Population aged 65 and over	%	1998p	12.7	12.6	11.3	14.3	10.5	13.2	3.3	7.8	12.2
Population aged 80 and over	%	1998p	2.9	2.9	2.5	3.4	2.4	3.1	0.5	1.5	2.8
Median age of total population	years	1998p	35.0	34.8	33.9	36.3	33.6	35.6	28.3	32.1	34.6
Sex ratio of population aged 0–64	ratio	1998p	102.3	101.3	103.0	101.9	104.1	100.7	111.7	101.2	102.4
Sex ratio of population aged 65 and over	ratio	1998p	77.1	76.4	81.1	76.4	80.0	76.8	109.1	77.2	77.8

POPULATION GROWTH	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Population growth	'000	1997–98p	68.8	55.7	59.3	7.6	33.5	–1.6	3.1	0.4	226.8
Births	'000	1997–98p	85.1	61.1	46.9	18.0	24.5	5.9	3.6	4.0	249.2
Deaths	'000	1997–98p	45.4	32.3	22.5	11.4	11.0	3.8	0.9	1.3	128.6
Natural increase	'000	1997–98p	39.6	28.8	24.4	6.6	13.6	2.1	2.7	2.7	120.6
Net overseas migration	'000	1997–98p	42.7	25.6	16.9	4.3	15.2	0.2	0.8	0.4	106.2
Net interstate migration	'000	1997–98p	–13.5	1.2	18.0	–3.3	4.7	–4.0	–0.4	–2.7	..
Population growth rate	%	1997–98p	1.10	1.21	1.74	0.51	1.86	–0.34	1.65	0.13	1.22
Net interstate migration rate	%	1997–98p	–0.21	0.03	0.52	–0.22	0.26	–0.84	–0.23	–0.87	..

PROJECTIONS — SERIES II	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Total population	'000	2051	7 861	5 242	6 203	1 400	3 098	310	440	387	24 945
Population aged 0–14	%	2051	15.6	14.8	16.1	14.0	16.2	13.9	21.8	16.1	15.6
Population aged 15–64	%	2051	59.8	59.4	61.0	57.1	61.6	54.2	68.7	63.0	60.2
Population aged 65 and over	%	2051	24.6	25.8	23.0	28.9	22.2	31.9	9.6	20.9	24.2
Population aged 80 and over	%	2051	8.6	9.3	7.7	11.0	7.4	12.2	1.9	7.2	8.4
Median age of total population	years	2051	44.5	45.3	43.4	48.0	42.6	51.0	33.9	40.6	44.1
Population living in capital cities	%	2051	67.0	77.9	47.1	75.7	74.3	40.5	53.5	(b)	65.7

(a) Population projections.
(b) Capital city/balance of Territory projections were not generated for the ACT.

Reference periods: Population composition and projection figures are at 30 June. Growth figures are for the year ended 30 June.

Population — definitions and references

Births — live births occurring in that year.
Reference: *Births, Australia* (Cat. no. 3301.0).

Deaths — deaths occurring in that year.
Reference: *Deaths, Australia* (Cat. no. 3302.0).

East and Southern Asia — including the countries of North-East, South-East and Southern Asia. Countries are classified according to the *Standard Australian Classification of Countries (SACC), 1998* (Cat. no. 1269.0).
Reference: *Migration, Australia* (Cat. no. 3412.0).

Europe and the Former USSR — including the United Kingdom and Ireland, the former USSR and the Baltic States.
Reference: *Migration, Australia* (Cat. no. 3412.0).

Family settler arrivals — migrants who have been sponsored by a relative who is an Australian citizen, or permanent resident of Australia, under the family stream of the migration program.
Reference: *Immigration Update, June Quarter 1998*, Department of Immigration and Multicultural Affairs.

Humanitarian settler arrivals — comprises: those who arrive under the refugee program (which provides protection for people who have fled their country because of persecution); those who arrive under the special humanitarian programs (those suffering persecution within their own country or who have left their country because of significant discrimination amounting to gross violation of human rights); and those who arrive under the special assistance category (groups determined by the Minister to be of special concern to Australia and in real need, but who do not come under the traditional humanitarian categories. It includes those internally and externally displaced people who have close family links with Australia).
Reference: *Immigration Update, June Quarter 1998*, Department of Immigration and Multicultural Affairs.

Indigenous population — estimates of the resident Aboriginal and Torres Strait Islander population. Estimates are experimental in that the standard approach to population estimation is not possible because satisfactory data on births, deaths and migration are not generally available. Further, there is significant intercensal volatility in census counts of the Indigenous population, due in part to changes in the propensity of persons to identify as being of Indigenous origin.
Reference: *Experimental Estimates of the Aboriginal and Torres Strait Islander Population* (Cat. no. 3230.0).

Long-term arrivals and departures — Long-term arrivals comprise overseas visitors who intend to stay in Australia for one year or more (but not permanently) and Australian residents returning from an overseas visit of one year or more. Long-term departures comprise Australian residents who intend to stay abroad for one year or more (but not permanently), and overseas visitors departing who stayed a year or more.
Reference: *Migration, Australia* (Cat. no. 3412.0).

Median age — the age at which half the population is older and half is younger.
Reference: *Population by Age and Sex: Australian States and Territories* (Cat. no. 3201.0).

Natural increase — the excess of births over deaths during the year.
Reference: *Australian Demographic Statistics* (Cat. no. 3101.0).

Net interstate migration — interstate arrivals minus interstate departures during the year. Net interstate migration rate expresses this as a proportion (per cent) of the population at the beginning of the year.
Reference: *Australian Demographic Statistics* (Cat. no. 3101.0).

Net overseas migration — permanent and long-term arrivals minus permanent and long-term departures during the year, plus an adjustment for the net effect of category jumping. This net effect may be either positive or negative.
Reference: *Australian Demographic Statistics* (Cat. no. 3101.0).

Permanent arrivals and departures — Permanent arrivals comprise travellers who hold migrant visas and other persons eligible to settle, and permanent departures comprise Australian residents who intend to settle in another country.
Reference: *Migration, Australia* (Cat. no. 3412.0).

Population — estimated resident population. Quarterly estimates of the Australian population are obtained by adding to the estimated population at the beginning of each period the components of natural increase (on a usual residence basis) and net overseas migration. For the States and Territories, account is also taken of estimated interstate movements involving a change of usual residence.
Reference: *Australian Demographic Statistics* (Cat. no. 3101.0).

Population growth — increase in the population during the year, measured as the sum of natural increase and net overseas migration. For dates prior to 1996, differences between growth and the sum of natural increase and net overseas migration arise from retrospective adjustments to population estimates (which are made after each census) to compensate for intercensal discrepancy. Population growth rate expresses the increase as a proportion (per cent) of the population at the beginning of the year.
Reference: *Australian Demographic Statistics* (Cat. no. 3101.0).

Population — definitions and references continued

Population projections — ABS population projections take the base year population for each sex by single years of age and advance it year by year by applying assumptions about future mortality and migration. Assumed age-specific fertility rates are applied to the female populations of child-bearing ages to provide the estimates of new births for each year. The ABS produces several series of population projections based on different combinations of assumptions about mortality, fertility and migration. The assumptions underlying Series II most closely reflect prevailing trends and comprise: declining rates of mortality; the total fertility rate for Australia falling to 1.75 by 2005–06, and then remaining constant; low levels of overseas migration (annual net gain of 70,000 from 1998–99); and medium levels of interstate migration.
Reference: *Projections of the Populations of Australia, States and Territories, 1997 to 2051* (Cat. no. 3222.0).

Sex ratio — the ratio of males to females multiplied by 100.
Reference: *Australian Demographic Statistics* (Cat. no. 3101.0).

Skilled settler arrivals — the skill stream component of the migration program is designed to contribute to Australia's economic growth. Settlers under this program meet a demand in Australia for their particular occupational skills, outstanding talents or business skills.
Reference: *Immigration Update, June Quarter 1998*, Department of Immigration and Multicultural Affairs.

Total settler arrivals — comprised largely of those who arrived under the migration and humanitarian programs. These programs include the following categories: the family stream; the skilled stream; special eligibility migrants; refugees; special humanitarian and special assistance migrants. Special eligibility migrants are those within the migration program, not in the family and skill stream, and are generally former Australian citizens, residents, or family of New Zealand citizens. The remaining settler arrivals are those who have arrived under non-program migration. They are New Zealand citizens; children born to Australian citizens overseas; residents of Cocos (Keeling) Islands, Norfolk Island, etc; and persons granted Australian citizenship overseas.
Reference: *Immigration Update, June Quarter 1998*, Department of Immigration and Multicultural Affairs.

Our ageing population

POPULATION PROJECTIONS

As the youngest of the baby-boom generation turns 65 in 2031, the median age of the population is projected to reach 42–43 years, and the proportion of the population aged 65 and over is projected to reach between 21% and 22%.

Population ageing is a major focus of social and economic planners and policy makers in Australia, as it is throughout the more developed regions of the world. Of particular concern is the anticipated increase in costs associated with the care and income support of a rapidly growing aged population, and how much Australians will be willing and/or able to pay. Much of recent government policy has focused on cost reduction as well as shifting costs and responsibility from the public sector to individuals, families, community groups and private business. For example, recent reforms to the system of retirement income support include: mandatory occupational superannuation for all workers (Superannuation Guarantee Charge) introduced in 1992; tightening of the means test on the age pension; and the introduction, in July 1995, of a progressive increase in the pension age for women from 60 to 65 by 2012.

Australia's population has aged steadily throughout this century, apart from a temporary reversal due to the post-war baby boom. During the 25 years after World War II the median age declined, reaching a low of 27.5 years in 1971 as the first of the baby boomers began to have children of their own. Since then it has risen to 34.3 years in 1997 and is projected to reach between 42 and 43 years in 2031 (as the youngest baby boomers turn 65). The proportion of the population aged 65 years or older (12% in 1997) is projected to increase to between 21% and 22% by 2031.

Population projections

This review makes use of the latest series of ABS population projections (1997 to 2051).[1] The base population for the projections is the estimated resident population at 30 June 1997. The projections are estimates of future populations based on a combination of assumptions about future levels of births, deaths and migration. As such, they provide an indication of what could reasonably happen to Australia's population over the next 50 years. Population projections are not predictions or forecasts.

Three main series (high, medium and low population growth) have been produced which cover three sets of possible future outcomes. For the sake of simplicity, most of the analysis in this review is based on the medium series (Series II).

Series II is based on the following assumptions:

- *total fertility rate* will continue to fall during the next decade – to 1.75 births per woman by 2006 – then remain constant at 1.75 until 2051;
- *age-specific death rates* will continue to decline, resulting in life expectancy at birth increasing by 5–7 years by 2051; and
- *net overseas migration* of 78,000 in 1998 then 70,000 per year from 1999 to 2051.

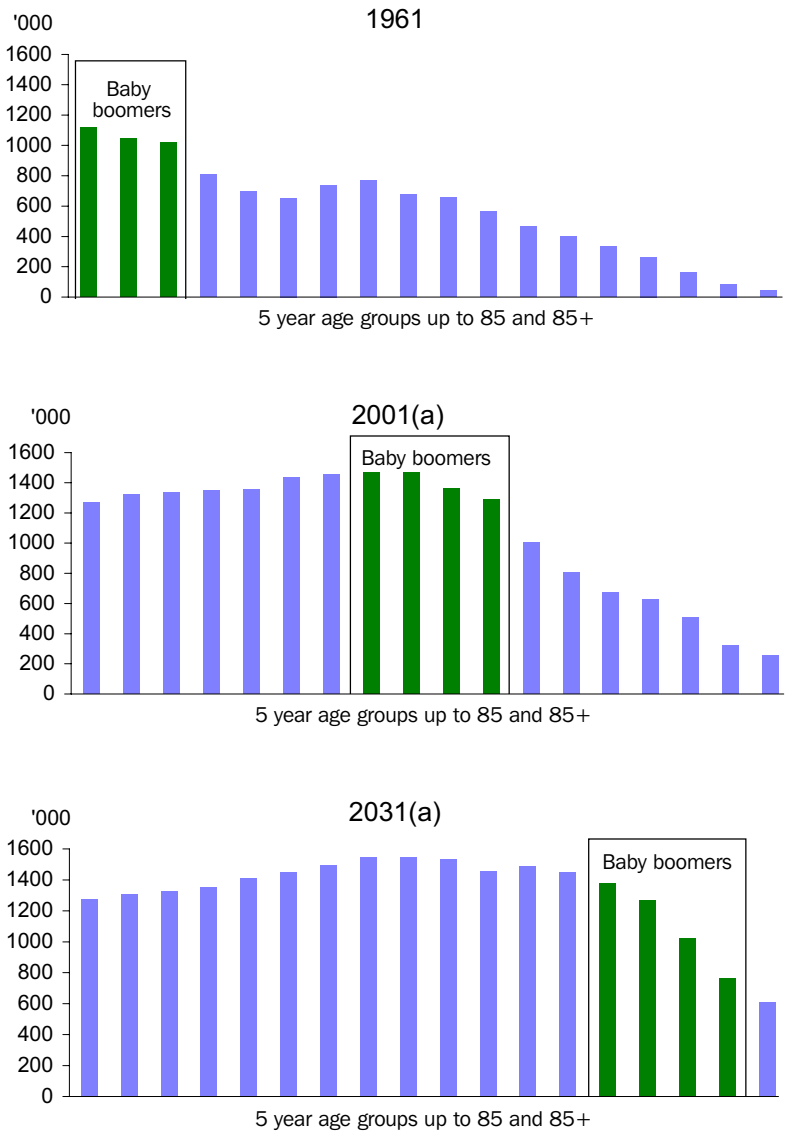
Age composition of the population, estimates and projections(a)

	1946	*1961*	*1971*	*1997*	*2001*	*2011*	*2031*	*2051*
	%	%	%	%	%	%	%	%
Proportion aged								
Under 15	24.5	30.3	28.7	21.2	20.3	18.3	16.5	15.6
15–64	67.6	61.2	63.0	66.7	67.3	67.7	62.2	60.2
65 and over	8.0	8.5	8.3	12.1	12.4	14.0	21.3	24.2
Baby boom age cohort(b)	..	30.3	36.5	30.0	29.0	26.3	18.7	4.5
	years	years	years	years	years	years	years	years
Median age	30.8	29.3	27.5	34.3	35.5	38.3	42.2	44.1
	million	million	million	million	million	million	million	million
Total population	**7.5**	**10.5**	**13.1**	**18.5**	**19.3**	**21.0**	**23.7**	**24.9**

(a) Data for 2001 to 2051 are projections (Series II).
(b) Australian residents who were born in Australia or overseas during the years 1946 to 1965.

Source: Demography, 1961; Population by Age and Sex, Australian States and Territories, June 1992 to June 1997 (Cat. no. 3201.0); *Population Projections, 1997 to 2051* (Cat. no. 3222.0).

Age distribution of the population



(a) Projections (Series II).

Source: Demography, 1961; Population Projections, 1997 to 2051 (Cat. no. 3222.0).

Why is the population ageing?

Structural ageing in Australia (i.e. the declining proportion of the population to be found in younger age groups and the consequent increase in the proportion found in older age groups)[2] is mainly due to the sustained decline in fertility which followed the post-war baby boom. In 1961, at the height of the baby boom, the total fertility rate peaked at 3.6 babies per woman. By the late 1970s, it had fallen to around half that level and has continued to decline (at a much slower rate) throughout the eighties and nineties.[4] Based on assumptions of continued low fertility, and continued small declines in mortality, Australia's population is projected to continue ageing into the next half century.

Baby boom

The period from the end of World War II until around the mid 1960's, has come to be known as the baby boom in Australia and in several other countries such as New Zealand, Canada and the United States. After the war, these were all relatively prosperous, industrially advanced countries with rapidly expanding economies, rising living standards and serious labour shortages. These countries welcomed high levels of immigration, and a rapidly growing population was seen as essential to continued economic progress.[3]

While the end of the baby boom is not as exactly defined as the beginning, it is clear that a change began to take place in the 1960s. With the introduction of oral contraceptives, changing perceptions of desired family size, and growing acceptance of women's participation in paid employment, birth rates declined. (See *Australian Social Trends 1998,* Family Planning pp. 29–32.) In Australia, the fertility rate peaked in 1961 and by 1965 had dropped back to just below the 1946 level.[4]

In this review, *baby boomers* refers to Australian residents who were born in Australia or overseas during the years 1946 to 1965. This group includes people in the baby-boom age cohort who immigrated to Australia from countries which did not experience a post-war baby boom.

Baby boomers and ageing

The baby-boom generation, the result of a period of high fertility and high levels of immigration which followed the Second World War, is significantly larger than preceding cohorts. Because of this, it has made, and will continue to make, a large impact on the absolute size of a range of population groups of specific policy interest as it progresses through the age structure. For example, in 1961, baby boomers formed a prominent bulge at the younger end of the age distribution (all children under 15). At the other end of the spectrum, between 2011 and 2031, baby boomers will make a significant contribution to the numbers of people aged 65 years and over. During this period, the population aged 65 and over is projected to grow from 3 to 5 million. By 2031, all surviving baby boomers will be 65–84 years of age. Between 2031 and 2051, baby boomers are projected to swell the population aged 85 and over from 612,000 to 1.1 million.

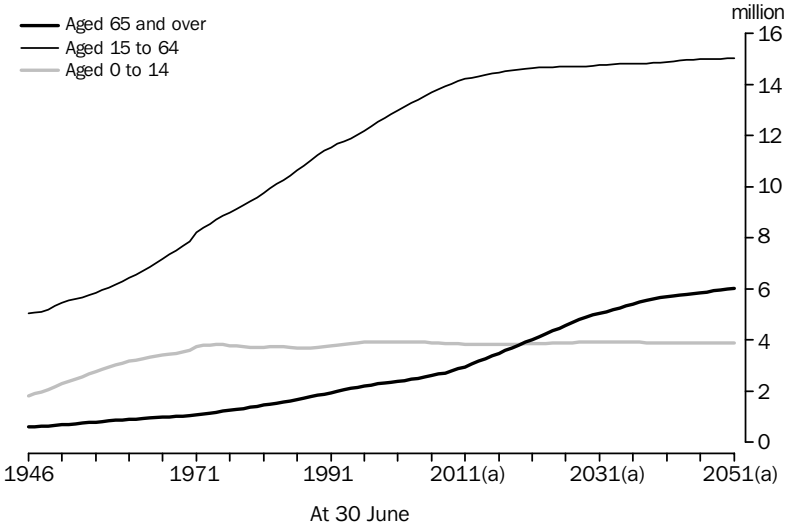
Immigration and ageing

Immigration has played an important role in Australia's population growth and economic and social development. During the post World War II period, high levels of immigration, combined with high fertility, contributed to a more youthful age structure. Since immigrants have a younger age profile than the general population, the initial effect of any migrant intake is to delay the ageing process, but this effect is relatively small over the long term. For example, if net migration were assumed to be zero (instead of 70,000 per year) from 1999–2051, the median age of the projected population in 2051 would be 47 years (instead of 44 years).[1]

Ageing in States and Territories

Population age profiles vary between States and Territories as a result of past differences in fertility, mortality and migration trends. Nevertheless, all of the State and Territory populations are projected to continue ageing into the next half century, some more rapidly than others. Tasmania's population is projected to age the most rapidly, overtaking South Australia as the 'oldest' State in about twenty years' time and reaching a median age of around 51 years by 2051. By 2051, the proportion of the population aged 65 and over is projected to reach 32% in Tasmania and 29% in South Australia, well above the average of 24% for total Australia. (See *Australian Social Trends 1999,* Population — State summary table, p. 3.)

Population in selected age groups (years)



(a) Projections (Series II).

Source: Demography, 1961; Population by Age and Sex, Australian States and Territories, June 1992 to June 1997 (Cat. no. 3201.0); *Population Projections, 1997 to 2051* (Cat. no. 3222.0).

Supporting a growing aged population

Australia's changing age structure has implications both for the level of social expenditure that might be required in future, and the level of resources that might be available to fund it. For example, as the population aged 65 and over increases in size, associated social expenditures on income support, care and health services can be expected to increase. However, since the potential labour force (roughly represented by the population aged 15–64) is projected to grow at a slower rate after 2011, it may be more difficult to generate the level of resources and public support needed to maintain a large aged population with an acceptable standard of living and quality of life. The most rapid change in the relative size of these two age groups is projected to occur between 2011 and 2031 as the baby-boom generation moves out of the labour force and into retirement. During this period, the population aged 0–14 is projected to remain fairly stable so there is unlikely to be a compensating decline in demand for social expenditures associated with this group.

In addition to the changing age structure of the population, there are many other factors, social and economic, which could also have an important bearing on future levels of social expenditure and how it is distributed. For example, future rates of economic growth, productivity improvements and taxation levels will affect the level of resources potentially available.[5] At the same time, the circumstances of future older generations (e.g. labour force participation, level of private income and asset holdings, health status, availability of family/community support networks) will influence the level of resources that will be needed for aged care, health, housing and income support. On the other hand, future trends in education, labour force participation, unemployment rates and income distribution among the younger age groups will influence the level and nature of competing demands (e.g. university funding, employment programs, unemployment benefits, support for low-income families) on available resources.

Changes in social values, attitudes and government policy will also influence the level of support provided for older people (and other groups such as children, unemployed people and people with disabilities) as well as the respective roles of government, private business, community groups, families and individuals in providing it.[6]

Ageing world

Australia's population is relatively old by world standards and the proportion aged 65 and over is projected to double between 2001 and 2051 to around 24%. However, compared to many other more developed countries, Australia's population is relatively young and will remain so for some time. For example, in Italy, Greece and Japan, the proportion of the population aged 65 and over is projected by the UN to exceed 30% by 2050. (See Australian Social Trends 1999, *International — Population projections*, page 198.)

Ageing populations are not unique to the more developed countries, though they currently have the world's oldest populations. All of the world's populations are projected to age rapidly during the first half of next century as mortality and fertility rates continue to decline.

UN projections indicate that, between 2000 and 2050, the median age could increase by an average of 7 years in the more developed regions; 11 years in the less developed regions; and 12 years in the least developed countries of the world. During the same period, the proportion of the population aged 65 years and over is projected to almost double in the more developed countries and almost treble in the less developed countries of the world.

While the more developed regions are projected to age less rapidly than the less developed regions, they will still be significantly older in 2050. The median age in the more developed regions is projected to reach about 44 years, on average, compared to 36 years in the less developed regions, and 30 years in the least developed countries. The proportion of the population aged 65 years and over is projected to reach 25% in the more developed regions, 14% in the less developed regions, and 8% in the least developed countries of the world.

Population projections(a) for world regions

	Median age of population			*Proportion aged 65 and over*		
	2000	*2030*	*2050*	*2000*	*2030*	*2050*
World regions	years	years	years	%	%	%
More developed regions(b)	37.4	43.8	43.9	14.2	21.8	24.7
Less developed regions(c)	24.3	31.5	35.6	5.0	9.4	13.8
Least developed countries(d)	18.3	23.6	30.1	3.0	4.4	7.7
World	**26.5**	**33.0**	**36.5**	**6.8**	**11.2**	**15.1**

(a) Medium-variant projection.
(b) Northern America, Japan, Europe, Australia and New Zealand.
(c) All regions of Africa, Asia (excluding Japan), Latin America and the Caribbean, and Oceania (excluding Australia and New Zealand).
(d) The 48 least developed countries in the world (of which 33 are in Africa, 9 in Asia, 5 in Oceania, and 1 in Latin America and the Caribbean).

Source: United Nations *World Population Prospects: 1996 revision.*

Baby boomers in retirement

It appears likely that many, though not all, baby boomers will be in a better position than the current older generation to provide for a financially secure retirement without relying on the age pension for most of their income. This is particularly so for those individuals and households who have been able to benefit from the relatively favourable economic conditions and low unemployment rates during the seventies and eighties to accumulate significant assets such as superannuation, the family home, investment property, stocks, shares, etc. Higher rates of labour force participation among women baby boomers, and the consequent high rates of two-income families, have put this group in a better position than previous generations to accumulate such assets.

However, not all baby boomers have had these opportunities, and it will take at least 20 years of contributions under the Superannuation Guarantee Charge arrangements for these funds to mature into a significant retirement income for most employees. Those with lower incomes and/or discontinuous employment may never be able to accumulate enough superannuation to replace the age pension as the primary source of retirement income.[7] It is possible that the recent trend towards early retirement (see *Australian Social Trends 1994,* Early retirement among men, pp. 126–129) will be offset to some extent in the future as some baby boomers choose to extend their working lives beyond the current expected retirement ages. Compulsory retirement has been abolished in all Australian States (except Tasmania) and Territories.

However, if recent trends in economic restructuring, technological change and rapidly changing skill requirements in the workplace continue, job opportunities for older people could be limited. (See *Australian Social Trends 1999,* Older job seekers, pp. 114–118.) On the other hand, large numbers of older people wishing to update their skills, or to acquire new qualifications which would enable them to compete in the labour market for longer, could have significant implications for the future education market.

Not only are baby boomers expected to live longer than the current older generation but to remain healthier for longer. The period of life for which older people make the most intensive use of health care resources, i.e. the two years preceding death,[8] is not expected to widen significantly in the future. A combination of better health, higher incomes, and government policy designed to reduce costs associated with institutional care of the aged, could see baby boomers remaining in their own homes and living relatively independent lives with the aid of family, paid help, and community support programs. They may also have access to a broader range of supported housing options between fully independent living and full nursing home care. (See *Australian Social Trends 1999,* Home care, hostels and nursing homes, pp. 157–161.)

A largely healthy, active older population could make a valuable contribution, either as private individuals or through voluntary organisations, to the care and support of the very old or infirm (and to the welfare sector in general). Currently, about 17% of people aged 65 years and over donate time to voluntary organisations (see *Australian Social Trends 1997,* Voluntary work, pp. 109–112). Older volunteers work more hours, on average, than their younger counterparts and are much more likely to be involved in the welfare and community fields. In addition to formal volunteer work, older people provide a range of unpaid services to family, friends and neighbours. The 1998 Survey of Disability, Ageing and Carers[9] estimated that people aged 65 and over accounted for 21% of all people who were the primary providers of informal care to someone needing help with self-care, mobility or verbal communication. The majority of older primary carers were providing care to another older person – 75% were caring for their partner and 10% were caring for a parent.

While much of the current research and policy on ageing tends to focus on the potential 'burden' to society of a large older population, the potential economic stimulus created by a growing demand for services (e.g. home help, specialised housing, financial and personal services) has been largely overlooked.[6] Better educated and more affluent than their parents' generation, baby boomers are currently a large and influential market sector and could remain so well into their retirement years. Also, as the population ages, it is to be expected that public debate and government policy on ageing will be increasingly influenced by the views of older people.[6] By 2031, over a quarter (27%) of all Australians of voting age (18 years and over) will be aged 65 or older.

Endnotes

1 Australian Bureau of Statistics 1998, *Population Projections 1997 to 2051,* Cat. no. 3222.0, ABS, Canberra.

2 Jackson, N. 1999, *Understanding Population Ageing,* paper presented to Department of Family and Community Services Seminar, Canberra.

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5 Clare, R. and Tulpule, A. 1994, *Australia's Ageing Society,* Background Paper No. 37, Office of Economic Planning Advisory Council, Canberra.

6 Saunders, P. 1996, *Dawning of a New Age? The Extent, Causes and Consequences of Ageing in Australia,* Discussion paper no. 75, Social Policy Research Centre, Sydney.

7 Rosenman, L. and Warburton J. 1997, 'Retirement Policy, Retirement Incomes and Women' in *Ageing and Social Policy in Australia,* Cambridge University Press, Melbourne.

8 Goss, J. 1994, *Population Ageing and Its Impact on Health Expenditure to 2031,* paper presented to Australian Instititute of Health and Welfare Seminar, Canberra.

9 Australian Bureau of Statistics 1999, *Disability, Ageing and Carers: Summary of Findings, 1998,* Cat. no. 4430.0, ABS, Canberra.

Languages spoken in Australia

POPULATION COMPOSITION

In 1996, 15% of Australia's population spoke a language other than English at home.

English is regarded as the national language of Australia.[1] In 1996, 85% of the population spoke only English at home and less than 1% of the population could not speak English at all. However, apart from English and Indigenous languages (see *Australian Social Trends 1999,* Indigenous languages, pp. 16–20), more than 160 other languages were also spoken in the home. Although languages other than English, such as German and Chinese languages, were spoken in Australia after European settlement, today's linguistic diversity stems largely from immigration since 1945. (For information on the changing sources of immigrants since 1945, see *Australian Social Trends 1994,* Birthplaces of Australia's settlers, pp. 9–12.)

People whose English language skills are lacking face practical problems in education, employment, and access to services. Where there is a lack of a common language there is also a need for interpreter and translation services, and programs of English instruction in schools and in other educational institutions. At the same time, many people from a non-English speaking background desire to see the use of their home language continue in Australia, for reasons of cultural continuity and identity.

Data sources

This article is based on data collected in the 1996 Census of Population and Housing, which included the question 'Does the person speak a language other than English at home?'. If more than one language other than English was used at home, people were asked to record only the one that was most commonly used.

Definitions

Language shift – the process by which speakers of a language gradually replace it with another language. In this article, the extent of shift from using languages other than English at home to using only English at home is estimated indirectly, by calculating the proportion of people born in particular countries, or with parents born in particular countries, who said they only spoke English at home at the 1996 Census. This method has been used by Clyne and Kipp in a more detailed examination of Census data.[2]

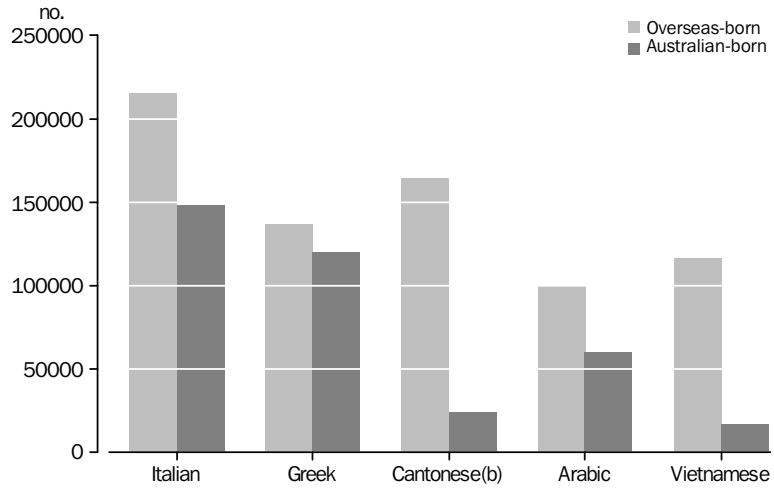
Language maintenance – the retention of a language within a community through people continuing to speak it and to pass it on to successive generations.

Main English-speaking countries – United Kingdom, Ireland, United States of America, Canada, New Zealand, South Africa and Australia.

First generation Australians – people living in Australia who were born overseas.

Second generation Australians – Australian-born people with at least one parent born overseas.

Leading five languages other than English spoken at home(a), by birthplace, 1996



(a) By people aged five years and over.
(b) Excludes people who did not specify which Chinese language they spoke.

Source: Unpublished data, 1996 Census of Population and Housing.

Languages other than English spoken at home

In 1996, 2.5 million people aged five years or over (15% of Australia's total population in that age range) spoke a language other than English at home. Of these, 74% were people born overseas (first generation Australians) and 22% were children of people born overseas (second generation Australians).

The most commonly spoken language was Italian, its 367,300 speakers making up 2.3% of the Australian population aged five years or more. Greek (1.6% of Australians), Cantonese (1.2%), Arabic (1.0%), and Vietnamese (0.8%) ranked next. These five languages were each spoken at home by more than 100,000 people. A further 10 languages were each spoken by more than 40,000 people. In total, people who spoke one of the 15 most

Languages other than English spoken at home(a), Australia, 1996

		Language speakers	
	Number of speakers	*Proportion born in Australia*	*As a proportion of the Australian population*
Language	'000	%	%
Italian	367.3	40.7	2.3
Greek	259.0	46.7	1.6
Cantonese(b)	190.1	12.9	1.2
Arabic	162.0	37.8	1.0
Vietnamese	134.0	12.6	0.8
German	96.7	18.9	0.6
Mandarin(b)	87.3	6.4	0.5
Spanish	86.9	17.6	0.5
Macedonian	68.1	34.9	0.4
Tagalog (Filipino)	67.3	5.0	0.4
Croatian	66.7	32.4	0.4
Polish	61.0	16.2	0.4
Maltese	44.7	27.9	0.3
Turkish	42.2	31.3	0.3
Netherlandic	40.2	12.4	0.3
All other	696.8	20.0	4.4
Total	**2 470.2**	**26.0**	**15.5**

(a) Languages with more than 40,000 speakers aged five years and over.
(b) People who specified Cantonese or Mandarin have been separately classified; people who specified another Chinese language (eg Hokkien) or simply wrote 'Chinese' are included in 'All other'.

Source: Unpublished data, 1996 Census of Population and Housing.

common languages accounted for 72% of speakers of a language other than English, and 11% of Australia's population.

The ranking of languages partly reflects the greater numbers of immigrants who have arrived from particular countries, and the number of children they have had in Australia. However, not all immigrants who speak a language other than English continue to use it at home throughout their life; nor do their children always learn the language or continue to speak it throughout their lives. Some languages have been maintained in the home to a greater extent than have others, and this contributes to their higher ranking among languages spoken in Australia.

Language maintenance among the first generation

Information about first language spoken is not collected in the Census. Nevertheless, the extent to which first generation Australians have maintained particular languages can be estimated indirectly by combining information on birthplace with information on the main language other than English that people spoke at home.

The proportion of overseas-born people who spoke only English at home increased with period of residence in Australia. Of people born overseas in a country other than one of the main English-speaking countries, 23% said that they spoke only English at home. Of those who had been in Australia for a short time (5 years or less), 9% spoke only English, rising steadily to 31% of those who had been in Australia for 15 years or more.

There were differences among people born in the major source countries for the 15 most common languages other than English. The greatest shift to English was by people from the Netherlands, 63% of whom spoke only English at home. The smallest shift to English was by people from Vietnam (3%). Differences in average period of residence would explain some of this, given that only 23% of Vietnamese-born people arrived prior to 1981 compared to 90% of those born in the Netherlands. Consistent with these differences in period of residence, the median age of the Vietnamese-born was 33 while it was 53 for those born in the Netherlands.

However, there were also differences in the rate of shift to English between birthplace groups where the difference in period of residence was less dramatic. For example, around 95% of people born in Italy and Greece had arrived before 1981, compared to 84% of those born in Germany, and 58% of those born in Poland. The median age of each group was between 52 (Germany) and 58 (Italy). Nevertheless, a smaller proportion of people born in Italy and Greece (15% and 6% respectively) spoke only English at home, than those born in Germany (49%) or Poland (20%). This suggests that factors other than period of residence are also important.

There are many differences between birthplace groups. For example, there are broad cultural and socio-economic variations among countries of origin, and different circumstances encouraging migration from particular countries. Migration from different countries has occurred in various periods, and the social and economic conditions immigrant groups have found in Australia therefore differ. Furthermore, a greater proportion of some groups had English language skills before arrival (an early language survey, in 1983, found that people whose first language was Maltese or a Chinese language were most likely to have been taught English overseas).[3]

Shift to English in first and second generation Australians, by selected countries of origin(a), with related demographic information, 1996

Birthplace (associated language)(a)	Proportion who spoke only English at home(b)		All persons – demographic information		
	First generation	Second generation	Median age of first generation	Median age of second generation	Proportion of mixed parentage(c)
	%	%	years	years	%
Netherlands (Netherlandic)	62.9	95.9	53	26	72.7
Germany (German)	48.9	91.1	52	25	83.6
Malta (Maltese)	37.0	82.8	51	23	52.1
Philippines (Tagalog)	25.0	84.2	35	8	69.9
Spain (Spanish)	22.7	63.6	48	18	67.4
Poland (Polish)	20.1	77.6	53	33	55.8
Italy (Italian)	14.8	57.4	58	27	40.6
Croatia (Croatian)	13.9	41.7	50	20	37.2
South and Central America (Spanish)	13.1	36.6	37	10	56.1
Hong Kong (Chinese languages, especially Cantonese)	8.8	52.7	29	10	55.6
Greece (Greek)	6.4	27.9	54	26	33.2
Turkey (Turkish)	5.9	16.4	36	10	24.2
Lebanon (Arabic)	5.6	21.7	38	12	26.9
China(d) (Chinese languages)	4.8	48.6	40	13	56.6
Taiwan (Chinese languages, especially Mandarin)	3.4	29.3	23	7	62.9
FYROM (Macedonian)(e)	3.1	14.7	44	17	23.7
Vietnam (Vietnamese)	2.7	10.6	33	7	15.6
Total (countries other than main English speaking countries)	23.1	64.9	43	20	45.6

(a) Birthplaces most commonly associated with the leading fifteen languages (according to Census data). They are not necessarily the main language in the birthplace.
(b) Data relate to people aged five years and over. Those whose language was not stated were excluded.
(c) Proportion of the second generation whose parents did not have the same country of birth.
(d) Excludes Hong Kong and Taiwan.
(e) Former Yugoslav Republic of Macedonia.

Source: Unpublished data, 1996 Census of Population and Housing.

One broad area of explanation for differences in language shift is the theory of 'cultural distance', which holds that differences in culture rather than language explain the differences in shift to English by different immigrant groups internationally.[2] Another way of viewing this theory is that when people share many customs, beliefs and lifestyles with the majority culture, language barriers are more easily overcome. A further important factor is the number of people who speak the language and their settlement pattern. Larger numbers of speakers, and their concentration within a city or region, is thought to reinforce the use of a language other than the majority language.[2]

Language maintenance among the second generation

In contrast to the first generation, the majority of the second generation spoke only English at home (67%). Older second-generation Australians were more likely to speak only English at home. The proportion who spoke only English increased steadily with age from 58% of those aged 5–14 years to 93% of those aged over 84. The increase with age may be partly accounted for by living arrangements. Many aged people may live alone, or with younger third generation family members who speak only English, and therefore not have the opportunity to speak a language other than

English. Conversely, a greater proportion of second generation young people than any other age group may live in their parents' home, communicating with family members who are more comfortable speaking a language other than English.

Proportions who spoke only English were substantially higher if only one parent was born in a country other than one of the main English-speaking countries. 91% of those whose father only, and 89% of those whose mother only, had been born in a country other than a main English speaking country, spoke only English at home. However, when both parents were born in a non-main English speaking country, 44% of the Australian-born generation spoke only English at home.

As with the first generation, there were large variations between people from different countries in the extent of shift to English. In general, those countries which recorded the greatest shifts to English in the first generation also recorded the greatest shifts in the second. For example, among countries associated with the 15 leading languages, people from the Netherlands recorded the greatest shifts to English in both the first and second generations (63% and 96% respectively). People from Vietnam recorded the smallest shifts (3% and 11% respectively).

Second generation Australians are a diverse group. In 1996, they ranged in age from the young children of recent immigrants to ageing children of pre-war immigrants. There were also substantial differences in the extent of mixed parentage (parents born in different countries) between second generation Australians of different background. For example, the median age of second generation Australians with one or more parents born in Vietnam was 7 and only 16% were children of families in which the parents were born in different countries. This contrasted with a median age of 26 for second generation Australians with one or more parents born in the Netherlands, and the much larger proportion (73%) who had mixed parentage.

State differences

The proportion of people who spoke a language other than English at home ranged from 3% for Tasmania to 25% for the Northern Territory. The high proportion for the Northern Territory reflected the large number of people who spoke an Indigenous language. Victoria (21%) and New South Wales (19%) had the next highest proportions, reflecting the historically high levels of immigration to these States, particularly to Sydney and Melbourne.

The speakers of some languages were more highly concentrated geographically than others. In 1996, 71% of people who spoke Arabic at home and 53% of those who spoke Cantonese at home lived in New South Wales.

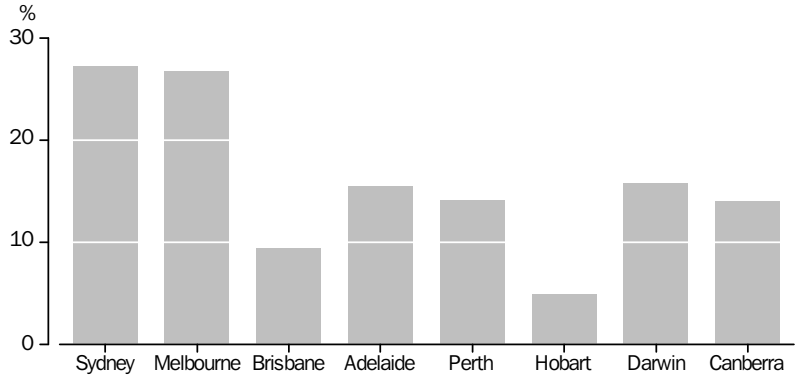
Languages other than English by State or Territory

	NSW	*Vic.*	*Qld*	*SA*	*WA*	*Tas.*	*NT*	*ACT*	*Australia*	
	Distribution of speakers of leading five languages and Indigenous languages by State or Territory(a)									
	%	%	%	%	%	%	%	%	%	'000
Italian	27.3	42.3	6.9	11.5	10.3	—	—	1.0	100.0	367.3
Greek	34.4	46.2	4.3	10.4	2.2	—	1.0	1.1	100.0	259.0
Cantonese(b)	52.7	26.5	8.0	3.3	7.3	—	—	1.2	100.0	190.1
Arabic	70.8	22.1	2.0	2.1	2.1	—	—	0.6	100.0	162.0
Vietnamese	38.7	36.7	8.0	7.6	6.9	—	—	1.6	100.0	134.0
Indigenous languages/creoles	2.3	0.7	14.5	4.6	18.9	—	58.7	—	100.0	44.2
All languages other than English	**40.9**	**32.9**	**8.5**	**6.6**	**7.4**	**0.6**	**1.6**	**1.5**	**100.0**	**2 470.2**
	Speakers of a language other than English as a proportion of the State or Territory populations(a)									
	%	%	%	%	%	%	%	%	%	
All languages other than English	18.7	20.7	7.1	12.6	11.8	3.4	24.5	14.1	15.5	

(a) People aged five years and over who spoke a language other than English in the home.
(b) Excludes people who did not specify which Chinese language they spoke.

Source: Unpublished data, 1996 Census of Population and Housing.

Proportion of the population(a) who spoke a language other than English at home, capital cities, 1996



(a) Aged five years and over.

Source: Unpublished data, 1996 Census of Population and Housing.

Commonly spoken languages which were concentrated in Victoria were the longer established languages, Italian (42%) and Greek (46%).

A greater proportion of people in capital cities spoke a language other than English at home than in other areas (21% compared to 5%). This pattern applied in every State and Territory except the Northern Territory. For example, in New South Wales 27% of people in Sydney spoke a language other than English compared to 5% of people who lived elsewhere in the State. Melbourne (27%) had the next highest proportion among capital cities, and Hobart the lowest (5%). Within cities, some areas had higher concentrations than others.[4]

Recent trends

Out of the 25 leading languages in 1996, most of those spoken by the longer established immigrant groups had recorded a decrease, since 1991, in the number of people who spoke the language at home. French showed the largest decrease (17%), followed by German (16%), Netherlandic (15%), Maltese (14%) and Hungarian (11%). Factors contributing to these decreases would include the death rate among the ageing first generation, and language shift. In contrast, most of the largest proportional increases occurred in languages associated with more recent immigrants. The greatest increase was for Mandarin (65%), followed by Serbian (52%), Korean (50%), Hindi (47%), and Vietnamese (31%). Some of the less commonly spoken languages also showed large proportional increases in number of speakers. These included Tamil (up 53% to 17,500), Sinhalese (up 53% to 14,700), and Thai (up 36% to 12,800). On-going immigration from countries where these languages are spoken, and the birth of children to speakers in Australia, would contribute to these increases.

Comparisons between 1991 and 1996 Census counts cannot be made for some languages, because a more detailed language classification was used in the 1996 Census. In 1996, the leading languages separately counted for the first time were Samoan (13,900), Assyrian (11,000), Punjabi (10,100), the Chinese language Hokkien (9,800) and Malay (9,700).

Endnotes

1. Lo Bianco, J. 1987, *National Policy on Languages*, Commonwealth Department of Education, AGPS, Canberra, p 71.

2. Clyne, M. and Kipp, S., 'Language maintenance and language shift in Australia, 1996', *People and Place* 1997, vol. 5, no. 4.

3. Australian Bureau of Statistics 1983*, Language Survey, Australia, May 1983 (Preliminary),* Cat. no. 4503.0, ABS, Canberra.

4. Australian Bureau of Statistics 1998, *Australia in Profile 1996*, Cat. no. 2032.0, ABS, Canberra.

Major changes, leading languages, 1991 to 1996(a)

Languages with fewer speakers in 1996 than 1991			*Languages with more speakers in 1996 than 1991*		
	Number of speakers	*Decrease since 1991*		*Number of speakers*	*Increase since 1991*
Language	'000	%	Language	'000	%
French	38.0	16.9	Mandarin	87.3	65.2
German	96.6	16.1	Serbian	35.4	52.3
Netherlandic	40.2	15.4	Korean	28.1	49.9
Maltese	44.7	14.2	Hindi	31.7	47.1
Hungarian	25.8	11.1	Vietnamese	134.0	31.3

(a) The languages showing the greatest decreases and increases since 1991, of the leading 25 languages in 1996, spoken at home as the main language other than English by the population aged five years and over.

Source: Unpublished data, 1996 Census of Population and Housing.

Indigenous languages

POPULATION COMPOSITION

In 1996, about 48,200 people spoke an Indigenous language at home. Most speakers lived in the more remote central and northern regions of Australia.

At the time of the first European settlement, more than 500 dialects may have been spoken by the Indigenous population. These dialects made up about 250 distinct languages (in terms of groupings with similar grammar and vocabulary).[1] The subsequent expansion of Europeans into the continent resulted in the loss of many languages and dialects as many speakers died and others shifted to speaking other Indigenous languages, English or creoles.

The importance of the maintenance of the remaining Indigenous languages was affirmed in Australia's language policy, formulated in the 1980s.[2] This policy recognised the central importance of Indigenous languages in conveying traditional knowledge and expressing the world view of the people who speak them. Recording languages no longer in daily use and regaining knowledge of languages of the past is also a cultural priority of Indigenous Australians. The Aboriginal and Torres Strait Islander Commission (ATSIC) has funded community-initiated programs aimed at the maintenance, retrieval and revival of Indigenous languages, and improving awareness and appreciation of them in the wider community.[3]

Indigenous languages and Australian creoles spoken at home, by number of speakers(a), 1996

	Languages	*Speakers*	
Indigenous languages and creoles	number	number	%
Individually classified:	*50*	*36 400*	*75.4*
≥ 3,000 speakers	2	7 400	15.4
2,000 – 2,999 speakers	3	7 000	14.4
1,000 – 1,999 speakers	7	10 300	21.4
500 – 999 speakers	9	6 700	13.9
250 – 499 speakers	9	3 000	6.3
100 – 249 speakers	9	1 400	2.8
< 100 speakers	11	551	1.1
Not individually classified(b)	*n.a.*	*11 800*	*24.6*
Total		**48 200**	**100.0**

(a) Persons who reported Indigenous languages and creoles as the main language other than English spoken at home.
(b) Indigenous languages and creoles other than the 50 for which separate data were compiled. People who described their language in general terms only (eg 'Aboriginal language') are also included here.

Source: Unpublished data, 1996 Census of Population and Housing.

Data source

All statistics are from the 1996 Census of Population and Housing unless otherwise referenced.

Definitions

Indigenous person – are identified in Census data through answers to the ABS standard question, 'Is the person of Aboriginal or Torres Strait Islander origin?'.

Indigenous language – those languages which were spoken in Australia by the Indigenous population prior to European settlement. Languages are classified according to the ABS *Australian Standard Classification of Languages* 1997 (Cat. no. 1267.0).

Dialect – a variety of a language, spoken in a particular area, or by a particular group.

Pidgin – a limited form of language made up of words from various languages and with simplified grammar, used in restricted contexts such as trade transactions between groups of people who do not share a common language.

Creole – a full language which develops from a pidgin, because people start to use the pidgin as a general means of communication, and children then grow up learning it as their first language. Australian creoles combine characteristics of English, Indigenous languages and other languages.

Numbers of speakers and languages

Languages or dialects can be maintained by very small groups of people. The small number of speakers of some Indigenous languages is not necessarily a result only of declining use. However, Indigenous people who speak Indigenous languages now have increased contact with speakers of other Indigenous languages, English and creoles. They are also exposed to English through the education system and the media. In this context, the maintenance of Indigenous languages with small numbers of speakers is more difficult.

Each census collects information about the main language other than English spoken in the home. In 1996, just under 48,200 people were recorded as speaking an Indigenous language or Australian creole at home, (including about 1,300 non-Indigenous

people). Of the total Indigenous, and the total Australian populations, 13% and 0.3% respectively, spoke an Indigenous language or creole at home.

For practical reasons, separate census counts were held only for 48 of the more common Indigenous languages and 2 creoles. About 100 other known Indigenous languages, believed to be used by only a few people each, were grouped into residual categories. Those who spoke languages in these residual categories, and speakers who did not identify a specific Indigenous language, together represented 25% of all speakers of Indigenous languages and creoles.

The numbers of speakers of the 50 separately counted languages (representing 75% of all speakers of an Indigenous language or creole) ranged from 11 to 3,800 people. Of these, 12 languages had more than 1,000 speakers, 18 had from 100 to 1,000 speakers and 11 had fewer than 100 speakers.

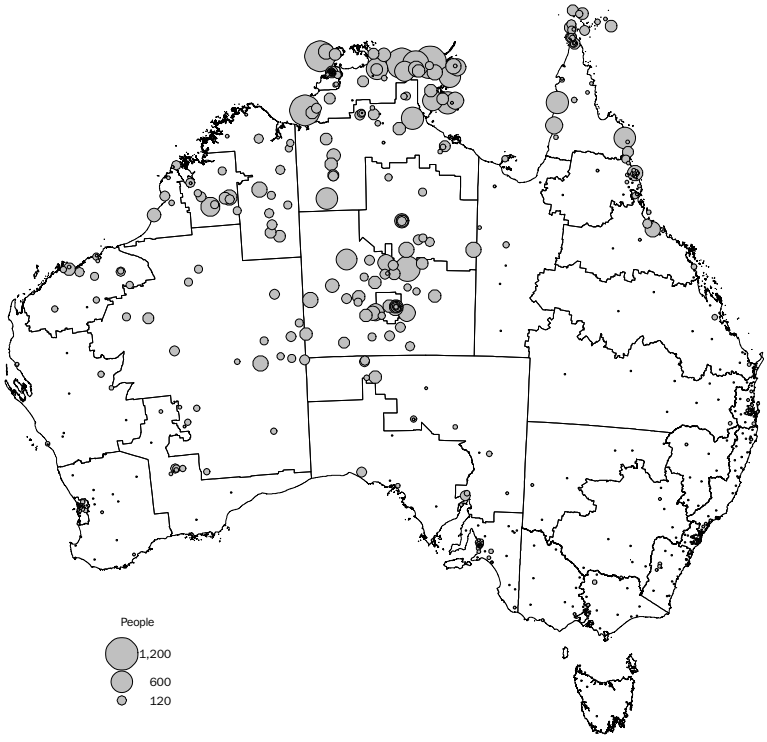
While giving an indication of the number of people who spoke an Indigenous language at home, and of the diversity of languages, the Census did not measure the full knowledge or use of Indigenous languages, particularly creoles. Some languages may be much more widely known, but no longer used at home. In addition, only the most often used language other than English spoken at home could be recorded in the Census, but many Indigenous speakers are thought to speak more than one Indigenous language.[1]

Location of speakers

Most Indigenous people in Australia live in the more populous eastern and southern States (see *Australian Social Trends* 1998, Growth and distribution of Indigenous people, pp. 15–17). In contrast, almost all the speakers of Indigenous languages and creoles live in the more sparsely populated centre and north of Australia.

In 1996, more than half (60%) of Indigenous people who said they spoke an Indigenous language at home lived in the Northern Territory, where they made up 65% of the Indigenous population. In no other State or Territory did the majority of the Indigenous

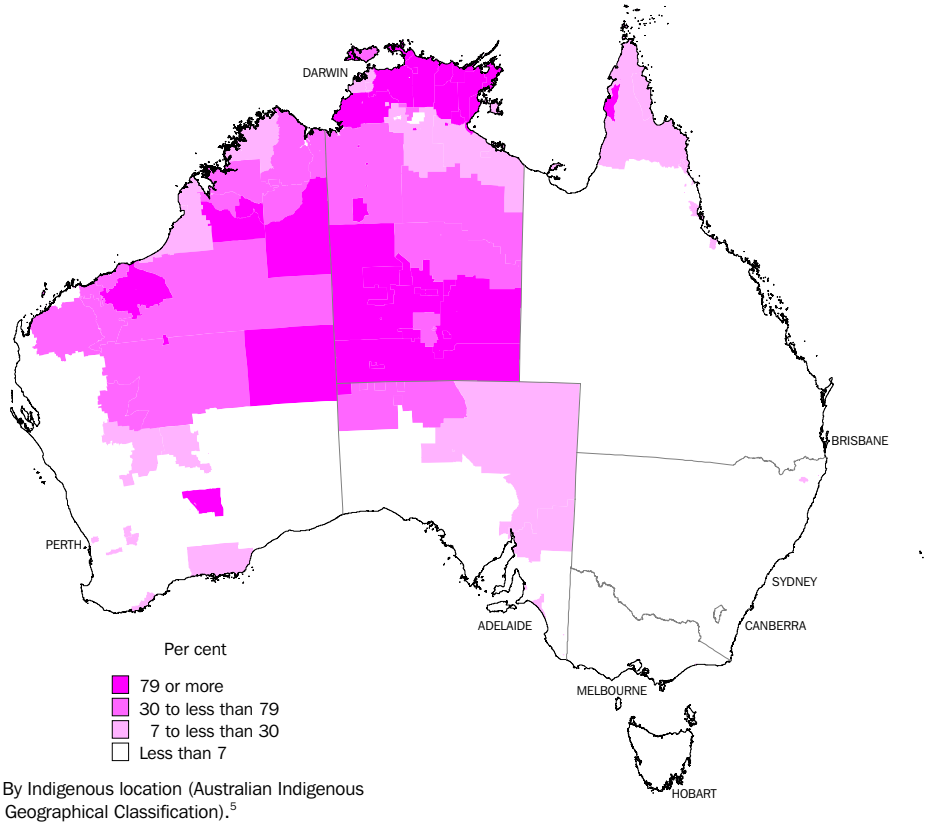
Indigenous people who spoke an Indigenous language or creole at home(a), 1996



(a) By Indigenous Location and showing ATSIC region boundaries (Australian Indigenous Geographical Classification). For some locations in the north of South Australia, Census data is not available.[5]

Source: Unpublished data, 1996 Census of Population and Housing.

Proportions of Indigenous people who spoke an Indigenous language or creole(a), 1996



(a) By Indigenous location (Australian Indigenous Geographical Classification).[5]

Source: Unpublished data, 1996 Census of Population and Housing.

population speak an Indigenous language. The 19% of speakers who lived in Western Australia made up 18% of the Indigenous population in that State. About 14% lived in Queensland, making up 7% of Indigenous people there. The 4% of speakers who were counted in South Australia made up 11% of the State's Indigenous population. (This is an under-estimate for that State, as no census figures are available for 1996 in some areas near the border with the Northern Territory.) The remaining south-eastern States and the Australian Capital Territory together accounted for only 3% of Indigenous people who spoke an Indigenous language at home. These speakers made up 2% of the Indigenous population of the Australian Capital Territory and less than 1% of the respective Indigenous populations of New South Wales, Victoria and Tasmania.

Speakers of Indigenous languages tended to be clustered in locations in the south and far north of Northern Territory, and the Torres Strait Islands. Within these areas, the great majority of the Indigenous population spoke an Indigenous language (79% or more). In most other areas, Indigenous language speakers were outnumbered by Indigenous people who spoke only English at home.

In most locations where 79% or more of the Indigenous people spoke an Indigenous language, these speakers also made up the majority of the total population. In 79% of these specific locations, Indigenous language speakers made up more than three quarters of the total population. In locations with lower proportions of language speakers, non-Indigenous people tended to make up a larger proportion of the population.

Most commonly spoken languages

Out of the 50 individually classified languages, there were 10 Indigenous languages and two creoles which had more than 1,000 speakers. Most of the 10 major Indigenous languages were spoken in those regions in the Northern Territory in which a

larger proportion of the Indigenous people spoke an Indigenous language. Four languages: Dhuwal-Dhuwala, Anindilyakwa, Murrinh-Patha and Kunwinjku were spoken in Arnhem land and adjacent areas. Tiwi was spoken on Bathurst and Melville islands. Arrernte was spoken in locations in the vicinity of Alice Springs and, like Anmatyerr and Alyawarr, in more remote locations in the arid central region. Warlpiri was spoken in central western parts of the Northern Territory while Pitjantjatjara was spoken across the north-western parts of South Australia and adjacent areas of Western Australia and the Northern Territory.

Kriol (one of the two individually classified creoles) was spoken in locations across the north of Australia from the border of Queensland and the Northern Territory to Derby in Western Australia. Torres Strait Creole was spoken on the Torres Strait Islands and also, due to the migration of Torres Strait Islanders, in centres in Queensland such as Cooktown, Cairns, Townsville and Brisbane. In total, creoles were named by 4,200 people as the language other than English that they spoke most often at home. This is most likely a considerable underestimate of total use, since creoles are often used as an additional language by people who speak an Indigenous language. For example, many people who listed Torres Strait Island languages such as Kalaw Lagaw Ya (925 speakers) as the language other than English they speak most often at home, might also speak Torres Strait Creole. Creoles also tend not to be recognised as distinct, bone fide languages, even by the people who speak them, and may not be recorded for this reason. Rather, many speakers of creole might identify themselves as speaking only English at home. Indeed, language experts estimate that as many as 15,000 people speak each of the two major creoles, Kriol and Torres Strait Creole.[1]

Most commonly spoken Indigenous languages and creoles(a), 1996

Language	no. of speakers
Indigenous languages	*44 000*
Arrernte (Aranda)	3 800
Dhuwal-Dhuwala	3 600
Warlpiri	2 700
Pitjantjatjara(b)	2 100
Tiwi	1 800
Alyawarr (Alyawarra)	1 400
Murrinh-Patha	1 400
Kunwinjku (Gunwinggu)	1 400
Anindilyakwa	1 200
Anmatyerr (Anmatyirra)	1 200
Australian creoles	*4 200*
Kriol	2 200
Torres Strait Creole (Broken)	1 700
Total	**48 200**

(a) Indigenous languages and creoles reported as the main language other than English spoken at home.
(b) Data quality problems are thought to have resulted in an underestimate of speakers of Pitjantjatjara.

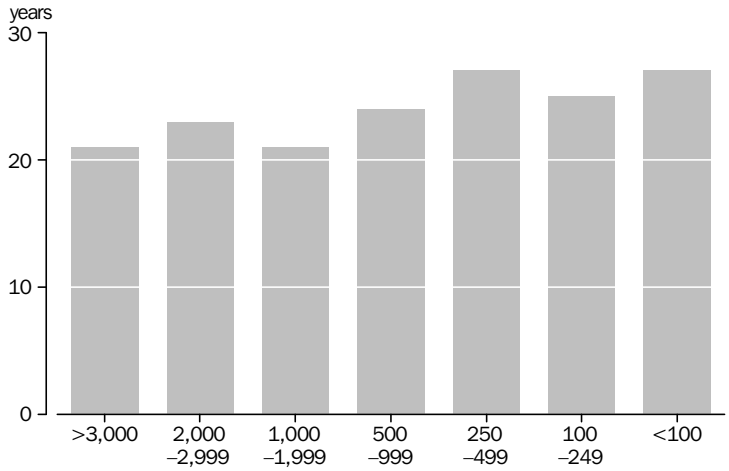
Source: 1996 Census of Population and Housing.

Indicators of maintenance

The maintenance of languages in everyday use depends on their being passed on to new generations of speakers. In 1996, 32% of all speakers of Indigenous languages were children under 15 years of age. However, this proportion largely reflects the youthful age structure of the Indigenous population. As might be expected, older people were more likely to speak an Indigenous language than younger people. Thus while 12% of all Indigenous children aged 5–14 spoke an Indigenous language, the proportion was about 14% for each 10 year age group aged between 25 and 44, 15% for those aged 45–54 and 22% among those aged 65 and over. These proportions and the degree of difference between young and old Indigenous people varied between the States and Territories.

In the Northern Territory, the proportions of Indigenous people who spoke an Indigenous language were much higher, and ranged from

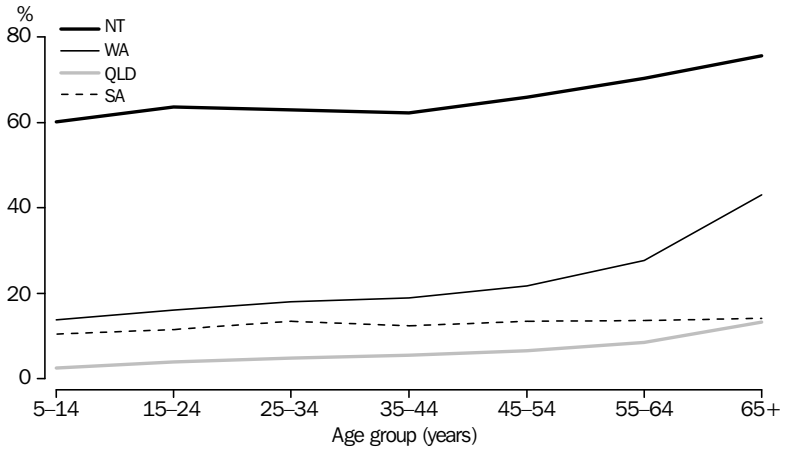
Median age of speakers, by number of speakers of Indigenous languages(a), 1996



(a) Creoles not included.

Source: Unpublished data, 1996 Census of Population and Housing.

Proportion of Indigenous people who spoke an Indigenous language at home(a), by age, selected States, 1996



(a) Creoles not included.

Source: Unpublished data, 1996 Census of Population and Housing.

60% of children aged 5–14 to 76% of those aged 65 and over. Compared to the Northern Territory, the difference between age groups was more marked, and increased more steadily with age, among Indigenous people in Western Australia and Queensland. In Western Australia, the proportions ranged from 14% of children aged 5–14 to 43% of those aged 65 and over. In Queensland the proportions ranged from 2.5% of children aged 5–14 to 13% of those aged 65 and over.

It is not possible to predict the future of language use, although it might be expected that those with smaller numbers of speakers and those whose speakers have older age profiles are likely to be those at greatest risk of falling into disuse. The speakers of Indigenous languages with fewer than 1,000 speakers had higher median ages than those whose languages were more commonly spoken.

Familiarity with English

The census question did not measure how fluently people spoke an Indigenous language or in what contexts at home they used it. However, self-rated proficiency in spoken English, and indications of the use of English at home, may provide indirect indicators of language displacement.

Certainly most Indigenous people who spoke an Indigenous language also spoke English (95%) and of these, 74% said they spoke English well or very well. Proficiency in English is a subjective measure. Some people may consider they speak English well if they can conduct basic transactions satisfactorily in English while others might mean they can converse fluently in English or that they usually speak English.

Among the most commonly spoken languages, the proportion who spoke English well or very well was highest for people who spoke Tiwi (94%), followed by Anindilyakwa (83%). It was lowest for Anmatyerr (41%) and Kunwinjku (57%). Over three quarters (77%) of speakers of each of the two creoles said they spoke English well or very well.

A greater proportion of people who spoke languages with fewer than 1,000 speakers rated themselves as speaking English well or very well (78%) than did those whose languages were spoken by 1,000 people or more (63%).

It appears that many people who speak an Indigenous language at home interact on a daily basis with people who speak only English. Of all Indigenous people who spoke an Indigenous language at home, 27% lived in a dwelling where at least one person was said to speak only English.

Non-Indigenous speakers

At the 1996 Census, 1,300 non-Indigenous people said they spoke an Indigenous language at home. Non-Indigenous people may speak Indigenous languages at home when communicating with Indigenous people, either other household members or visitors. In addition to acquiring some ability in Indigenous languages through everyday interaction, people working in some communities take intensive training in an Indigenous language as part of their work requirements.

Endnotes

1 Australian Institute of Aboriginal and Torres Strait Islander Studies, 1994, *Encyclopedia of Aboriginal Australia,* Aboriginal Studies Press, Canberra, pp. 279, 601, 728, 867.

2 Lo Bianco, J. 1987, *National Policy on Languages*, Commonwealth Dept. of Education, AGPS, Canberra, pp. 8–14.

3 Aboriginal and Torres Strait Islander Commission 1998, *Annual Report 1997–1998*, AGPS, pp. 77–78.

4 Australian Bureau of Statistics 1998, *Australian Indigenous Geographical Classification*, Cat. no. 4706.0.30.001, ABS, Canberra.

Island populations

POPULATION DISTRIBUTION

Australia's territorial boundaries extend to islands located hundreds of kilometres off shore. Over 65,000 people were on these islands on census night in 1996.

Most residents of Australia live either on the mainland or in Tasmania. However, Australia also has territorial control over hundreds of small islands, some of which are also home to small communities of people. Some of these islands lie close to the mainland, yet others, such as the Cocos (Keeling) Islands, lie many hundreds of kilometres off shore. Some, generally those in northern seas, are largely occupied by Indigenous people, yet others have become tourist destinations. Using information from the 1996 Census of Population and Housing, this review provides a brief demographic and socio-economic profile of people living on the most populated islands.

While some information is provided for islands close to the mainland, the profiles relate primarily to those islands which are likely, due to their distance off shore (more than 5 km), to have greater difficulties accessing the goods and services that are more readily obtained in less remote areas of mainland Australia. As well as distinguishing between islands with large Indigenous and non-Indigenous populations, and those with large numbers of visitors, the statistics presented in the tables show something of the lifestyles and economic wellbeing of the usual residents of the respective island populations, and how they differ from those for Australia as a whole. Differences in household per capita incomes, for example, provide a view of the living standards of people living on different islands. Lifestyle differences are also indicated by some of the large differences in proportions of households that are family households and differences in average household size.

Counts of people on islands, August 1996

Selected characteristics	*Islands – distance from mainland*		*All of Australia*
	Less than 5 km	*More than 5 km*	
Visitors (% of total population)(a)	15.2	19.6	5.4
Indigenous people (% of resident population)(b)	11.6	43.3	2.0
Total population(a)('000)	**32.8**	**32.7**	**17 892.4**

(a) Persons present on census night, 6th August 1996.
(b) Resident population only. Excludes visitors.

Source: Unpublished data from 1996 Census of Population and Housing; *Norfolk Island Census of Population and Housing, Statistical Report, 1996 .*

Identifying islands

In this review, islands are defined as those land masses belonging to Australia other than the Australian mainland and the island of Tasmania. Neither the number of islands with one or more residents, nor the total number of people living on these islands, can be precisely determined. The national Census of Population and Housing, last conducted in August 1996, provides the most comprehensive source of information about Australia's people, and at its lowest level of geographic detail presents information for those living in small areas known as census collection districts (CDs) – commonly areas of 200 or so households. The availability of separate counts of people living on some islands depends on whether the island is close to the mainland and large enough to make up at least one CD on its own.

Some of the available Census data relates to groups of islands. The islands that have been named to represent the groups are generally the only ones populated or, where there are large numbers of islands within the group, those in the group that are the most populated.

Visitors and residents

The Census counted visitors to private dwellings on census night, as well as those staying in camping grounds, hotels, and other non-private dwellings. Visitor numbers do not necessarily represent the total number of visitors (or tourists) to an island as they may include some island residents staying with another island household on census night. In this review, islands where the proportion of visitors was more than three times the national average (5.4%) are identified as those with large visitor (or tourist) populations.

Demographic characteristics for each island are given only for the island's usual residents. Most (11) of the 15 islands profiled include a number of CDs and form larger areas known as Statistical Local Areas. Resident population counts for these islands include persons temporarily absent from their usual place of residence. For the remaining islands, resident population counts relate only to people counted at home on census night. The effect of these differences is considered to be small.

Island populations

The 1996 Census counted 65,481 people on islands around Australia, representing less than 1% of Australia's total population. Of the people counted on islands, one half (32,715) were on islands more than 5 km from the mainland. Many of the people (6,421) on these more distant islands were visitors.

Demographic profiles: Largest island communities located more than 5 km from the mainland, 1996

	Location		Persons			Age(a)			Sex ratio(a)
	Distance from mainland	Nearest State/ Territory	Total persons(b)	Proportion who were visitors(b)	Proportion who were Indigenous(a)	0–14 years	65 years and over	Median age	Males to 100 females
Islands with	km		no.	%	%	%	%	years	no.
Primarily Indigenous communities									
Torres Strait Islands(c)	16	Qld	6 708	12.6	84.4	38.5	4.7	22	103
Mornington Island	28	Qld	1 114	6.7	89.2	30.1	3.3	25	99
Palm Island(c)	25	Qld	2 073	4.2	97.2	38.0	1.7	21	107
Groote Eylandt	40	NT	2 551	6.4	58.5	32.7	1.1	25	107
Bathurst and Melville Islands	24	NT	2 033	3.8	93.8	31.4	2.1	23	102
Primarily non-Indigenous communities, mostly usual residents									
Christmas Island	1 540	WA	1 906	7.1	0.2	33.0	1.4	29	113
Cocos (Keeling) Islands	2 110	WA	655	13.6	2.9	30.1	4.9	32	102
Kangaroo Island	13	SA	4 118	10.3	0.8	23.5	12.8	37	106
King Island	85	Tas.	1 797	4.4	1.8	24.4	11.2	34	112
Flinders Island	53	Tas.	924	7.7	16.9	22.7	12.3	38	111
Primarily non-Indigenous communities, with many visitors									
The Whitsundays(c)(d)	10	Qld	4 547	59.5	0.0	13.2	5.3	36	104
Moreton Island	15	Qld	455	71.9	0.7	5.3	8.8	36	166
Norfolk Island	1 600	NSW	2 181	18.8	n.a.	20.4	13.6	39	97
Lord Howe Island	570	NSW	369	27.6	0.3	19.8	11.8	35	97
Rottnest Island(c)	18	WA	412	58.5	0.0	16.5	0.0	27	110
Total Australia	**. .**	**. .**	**17 892 423**	**5.4**	**2.0**	**21.6**	**12.1**	**34**	**98**

(a) Resident population only. Excludes visitors.
(b) Persons present on census night, 6th August 1996.
(c) Except for total persons and the proportion who were visitors the figures only relate to the resident population in occupied private dwellings.
(d) Includes the Lindeman, Sir James Smith, and Cumberland groups.

Source: Unpublished data from 1996 Census of Population and Housing; *Norfolk Island Census of Population and Housing, Statistical Report, 1996* .

Islands with large Indigenous communities

Islands largely occupied by Indigenous people are all located in the northern parts of Australia, off the coast of Queensland and the Northern Territory.

The most populated set of islands (with some 6,700 people on census night in August 1996) is the Torres Strait Islands located between the tip of Cape York and Papua New Guinea. Of the hundred-plus islands in the group, 17 have communities on them. However, a sizeable proportion (37%) of the population were counted on Thursday Island, the commercial centre of the region. Most (84%) of the resident population on the islands were Indigenous people, generally of Torres Strait Islander origin. Like other islands with large Indigenous communities, the age profile of the population is young: 39% were under 15 years of age compared to 22% for Australia as a whole, and most people lived in family households with relatively large numbers of people. Living standards on the islands, measured in terms of household per capita income, were also well below those for Australia's population as a whole ($186 per week compared to $310). The Torres Strait Islands community has maintained many aspects of its cultural heritage.[1] Only 32% of all residents of the islands spoke English in the home – the majority spoke creoles or traditional languages (see *Australian Social Trends 1999,* Indigenous languages, pp. 16–20).

Mornington Island, to the south-west of the Torres Strait Islands, is located among the Wellesley Islands (a group of 22 islands, in the south-east corner of the Gulf of Carpentaria). The Mornington Island community lives together in a settlement,

Social characteristics: Largest island communities located more than 5 km from the mainland(a), 1996

	Labour force status(b)		*Language*	*Households(e)*			*Household type(e)*		
	Participation rate	*Unemployment rate(c)*	*Proportion who spoke English(d)*	*Total*	*Household income per capita*	*Average size*	*Family*	*Lone person*	*Group*
	%	%	%	no.	$ / week	persons	%	%	%
Primarily Indigenous communities									
Torres Strait Islands(e)	61.4	8.6	31.6	1 355	186	4.2	82.2	15.1	2.7
Mornington Island	57.6	2.1	92.1	201	144	5.2	86.6	11.9	1.5
Palm Island(e)	58.8	4.6	97.0	336	127	5.8	85.1	10.7	4.2
Groote Eylandt	50.3	3.5	43.8	474	311	4.7	89.7	9.9	0.4
Bathurst and Melville Islands	56.2	16.0	13.3	401	137	4.9	88.3	9.5	2.2
Primarily non-Indigenous communities, mostly usual residents									
Christmas Island	79.4	7.3	37.5	625	365	2.9	69.3	27.4	3.4
Cocos (Keeling) Islands	51.8	9.3	24.0	143	229	4.0	91.6	8.4	0.0
Kangaroo Island	63.6	14.0	98.6	1 464	230	2.6	75.0	22.8	2.2
King Island	70.4	4.1	97.0	684	263	2.6	73.0	23.2	3.8
Flinders Island	65.4	8.1	98.4	345	261	2.4	66.4	32.5	1.2
Primarily non-Indigenous communities, with many visitors									
The Whitsundays(e)(f)	81.2	6.3	91.4	170	460	2.3	71.2	18.8	10.0
Moreton Island	74.5	3.7	98.7	47	267	1.5	40.4	55.3	4.3
Norfolk Island	n.a.	n.a.	n.a.	944	n.a.	2.2	n.a.	n.a.	n.a.
Lord Howe Island	75.6	4.8	96.1	114	330	2.4	71.1	24.6	4.4
Rottnest Island(e)	92.5	0.7	96.0	95	387	1.8	35.8	57.9	6.3
Total Australia	**61.9**	**9.2**	**84.8**	**6 281 817**	**310**	**2.7**	**73.0**	**22.8**	**4.2**

(a) Resident population only. Excludes visitors.
(b) Persons aged 15 years and over.
(c) Unemployment rates on islands with large Indigenous communities do not provide a full picture of employment activity because many Indigenous people classified as being employed work in specialised 'work for the dole' schemes, formally known as Community Development Employment Programs (CDEP).
(d) In the home.
(e) Resident population in occupied private dwellings only.
(f) Includes the Lindeman, Sir James Smith, and Cumberland groups.

Source: Unpublished data from 1996 Census of Population and Housing; *Norfolk Island Census of Population and Housing, Statistical Report, 1996* .

called Gununa, founded by Presbyterian missionaries in 1914, who drew together Indigenous people from the surrounding islands and the mainland.[2] Unlike those on the Torres Strait Islands, most people speak English at home, although the traditional languages of the Lardil people, and other tribal groups from surrounding areas continue to be spoken.[2]

On Groote Eylandt, located on the western side of the Gulf of Carpentaria 40 km from the Northern Territory coast, well over half (59%) of the residents were Indigenous people. There are two main Aboriginal communities on the island, Angurugu and Umbakumba, while most non-Indigenous people live in Alyangula, a town built around the mining industry.[3] Household income per capita in 1996 for Indigenous households ($107 per week) was low, and well below the average for Australia's total population ($310) and for non-Indigenous residents ($562) on the island.

Bathurst and Melville Islands to the north of Darwin, and some small surrounding islands, form the homelands of the Tiwi people. Many of these people live in the town of Nguiu, first established as a mission in 1911.[4] Tiwi is the most commonly spoken language on the islands; only a small proportion of residents (13%) spoke English in the home.

Palm Island, some 25 km off the Queensland coast, was mostly settled in the early 1900s when Indigenous people were moved there from the mainland.[5] Nearly all (97%) of the

Islands close to the mainland

There are many populated islands located within 5 km of the mainland (the most populated are given in the table below). While the distance to the closest port of call may in some cases be more than 5 km, some, such as Bribie and Phillip islands, are connected to the mainland by road. With some exceptions, islands within 5 km of the mainland typically have fewer visitors and fewer Indigenous people than those on more distant islands (see table on page 21).

Islands within 5 km of mainland, with the largest populations, 1996

Island	*Nearest State/ Territory*	*Total persons(a)*
		no.
Bribie Island	Qld	12 946
Phillip Island	Vic.	5 707
Magnetic Island	Qld	3 027
Russell–Macleay Islands	Qld	2 939
North Stradbroke Island	Qld	2 435
Fraser Island	Qld	1 378
Galiwinku	NT	1 285
Milingimbi	NT	941
Bruny Island	Tas.	581

(a) Total number of persons present on census night, 6th August 1996.

Source: Unpublished data, 1996 Census of Population and Housing.

1,986 residents, visitors excluded, counted at the census were Indigenous people. The small number of non-Indigenous people living on the island were government workers providing health and educational services.[5] The island community is relatively poor, recording the lowest per capita household incomes of all the islands for which information has been provided.

Islands with large non-Indigenous populations

Communities on both the Christmas and Cocos (Keeling) Islands are among Australia's most remote and isolated. Christmas Island is closer to Singapore and Indonesia, being 360 km south of Jakarta, than it is to the West Australian coast (1,540 km off shore). Its multicultural population of close to 1,800 usual residents (at the time of the census) is reflected in the mix of languages spoken there. In 1996, 45% of the usual residents spoke a Chinese dialect, 38% spoke English, and 12% spoke Malay.

The main industries on Christmas Island are phosphate mining and tourism.[6] The over-representation of men (113 males per 100 females) on the island, and above average labour force participation rate, are likely to be associated with the presence of skilled workers (from other places), employed to bring the island's infrastructure up to mainland standards.[6]

The Cocos (Keeling) Islands are even more remote, located some 2,110 km off the West Australian coast and 900 km west of Christmas Island. This group of 27 small islands had a population of 655 people on census night in 1996. Only two islands in the group are populated, Home Island and West Island. The majority of the permanent population, mostly of Islander decent and of Muslim faith, live on Home Island.[7] West Island is the main economic centre where government employees on temporary contracts live and work in administration of the island or the quarantine service.[6] Only 24% of its resident population spoke English in 1996 – the rest spoke Malay.

Kangaroo Island is Australia's third largest island, in area, after Tasmania and Melville Island. It is 13 km off the South Australian coast and connected by ferry. On census night, there were 4,118 people on Kangaroo Island, of whom 10% were visitors. The island is well known for its wildlife and conservation and national parks. As well as its tourist industry, the island has both farming and fishing industries.

King Island lies in Bass Strait, almost equidistant from Victoria and Tasmania. It had a population of 1,797 people on census night, with an over-representation of men (112 men to every 100 women) among its resident population. King Island is best known for its beef production, seafood and dairy products. Besides these food producing industries, it attracts tourists and has a relatively new kelp industry.

Flinders Island is also in Bass Strait, 53 km north-east of Tasmania, and is by far the most populated of the 52 islands in the Furneaux Group with which it is associated. It has a tourist industry as the island is well known for its beaches, wildlife and history of Aboriginal settlement. In 1996, 17% of the resident population were Indigenous people.

Islands with large visitor numbers

The Whitsundays including islands in the Lindeman, Sir James Smith, and Cumberland groups, are a group of over 70 islands clustered on Queensland's Great Barrier Reef, mostly between 10 and 20 km off shore, generally east/south-east from the town of Proserpine. Many are national parks and others, for example Hamilton, Hayman, Daydream and Lindeman islands, have large tourist resorts. Of the 4,547 people counted on these islands on census night, 60% were visitors. The labour force participation rate among the resident community was high (81% of residents aged 15 years and over were in the labour force compared to 62% for Australia as a whole).

Moreton Island is a sand island in Moreton Bay, 15 km off the Queensland coast east of Brisbane. The island is popular for its nature-based recreation (e.g. camping, bush walking, four-wheel drive expeditions), and 72% of people on the island on census night in 1996 were visitors. The small resident population of 128 people on census night was mostly male (166 males to every 100 females). In common with Rottnest Island near Perth, many residents who live there are single people.

Two islands to the east of New South Wales, Norfolk Island and Lord Howe Island, are known to mainlanders as tourist destinations, but are also home to long-established communities. As well as being known for its scenic beauty, Norfolk Island, 1,600 km north-east of Sydney, attracts visitors because of its history as a convict settlement. After the establishment of the penal colony, it was settled by Pitcairn Islanders from Polynesia, some of whom were descendants from the mutineers of HMS Bounty.[7] Of the 2,181 people present on census night, 19% were visitors. The island has a unique policy of self-government, with relative independence and some powers normally reserved for the Commonwealth government.[7] It conducted its own census (also on 6 August 1996, but independent of the national census), thereby limiting the amount of comparable information provided in the summary tables.

Lord Howe Island is a small island located 570 km east of the mid-north coast of New South Wales, and is recorded as having the southern-most coral reef in the world.[8] It had a population count of 369 people on census night, 28% of whom (102 people) were visitors. While many of the residents work to support the tourist industry, Kentia palms are also grown for export.

Australians on Antarctica

Australia has had responsibility for part of Antarctica, called the Australian Antarctic Territory, since 1933. Australia began its scientific research in Antarctica in 1954, which continues at the territory's three scientific stations – Mawson, Davis and Casey. The remaining parts of Antarctica are administered by other countries, e.g. France and New Zealand.[9]

On census night, 6th August 1996, there were 61 men and 9 women in the Australian Antarctica Territory. These people were undertaking research on global climate change, marine biology and Antarctica's natural resources, or providing associated support services.

Known for its wildlife (mainly quokkas) and nature reserves, Rottnest Island, 18 km from Perth, is a popular destination for large numbers of daytime and overnight-stay visitors. Many of the people among the small resident population (171 people on census night) work on the island in support of the tourist industry and often do so for limited periods of time.

Endnotes

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Family

Family — national summary

LIVING ARRANGEMENTS	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total households	'000	n.a.	n.a.	n.a.	6 173	6 302	6 446	6 579	6 690	6 762	6 956	7 056
Lone-person households	%	n.a.	n.a.	n.a.	21.1	21.8	22.3	22.7	22.8	23.0	23.8	23.8
Households with three or more persons	%	n.a.	n.a.	n.a.	47.0	46.3	45.5	44.8	44.5	44.5	43.6	43.2
Total families	'000	4 236	4 319	4 456	4 502	4 587	4 638	4 709	4 791	4 834	4 899	5 027
Families with children under 15	'000	1 962	1 947	1 999	2 002	2 048	2 038	2 041	2 100	2 092	2 130	2 160
Couple families	'000	3 660	3 729	3 812	3 849	3 883	3 929	3 998	4 051	4 080	4 090	4 158
De facto couple families (of all couple families)(a)	%	n.a.	n.a.	n.a.	8.2	n.a.	n.a.	n.a.	n.a.	10.1	n.a.	n.a.
Couple-only families (of all couple families)	%	47.2	48.2	48.2	48.9	48.7	49.3	51.0	51.1	51.9	51.1	51.8
Couple-only families with female partner aged under 40 (of all couple only families)	%	n.a.	n.a.	22.5	22.0	22.1	22.3	22.7	21.6	21.3	20.9	21.3
Couple families with children under 15 (of all families with children under 15)	%	85.6	86.0	85.2	84.0	83.5	83.0	82.8	81.5	81.6	80.0	78.4
Lone father families with children under 15 (of all families with children under 15)	%	n.a.	1.4	1.6	1.8	1.5	1.7	1.8	1.9	2.0	2.3	2.0
Lone mother families with children under 15 (of all families with children under 15)	%	n.a.	12.6	13.2	14.2	14.9	15.3	15.4	16.6	16.3	17.7	19.5
Families with at least one child aged under 5 (of all families with children under 15)	%	47.9	47.4	46.8	47.4	47.4	47.8	47.8	47.4	47.8	47.8	46.2
Average family size (persons)	no.	3.2	3.2	3.2	3.2	3.2	3.2	3.1	3.1	3.1	3.1	3.1
Children under 15 living in one-parent families (of all children under 15)	%	n.a.	n.a.	12.7	13.6	14.4	14.8	15.3	16.4	16.3	18.0	19.5
Persons aged 20–24 living with parents (of all persons aged 20–24)	%	43.3	44.7	46.8	47.2	47.4	46.1	44.7	45.2	44.5	46.2	48.0
Persons aged 25–34 living with parents (of all persons aged 25–34)	%	8.5	8.5	9.5	10.7	10.5	10.7	10.5	10.6	10.7	11.5	12.4
Persons aged 15–64 who live alone (of all persons aged 15–64)	%	6.0	5.9	5.7	6.0	6.3	6.8	7.0	7.4	7.6	7.9	8.1
Persons aged 65 and over who live alone (of all persons aged 65 and over)	%	29.6	28.6	29.0	29.4	29.3	31.0	29.4	29.3	29.8	30.7	29.0

FAMILIES AND WORK	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Couple families with children under 15, both parents employed (of all couple families with children under 15)	%	50.4	52.6	54.7	51.8	51.7	50.6	51.1	56.2	54.5	54.4	55.6
Couple families with children under 15, neither parent employed (of all couple families with children under 15)	%	7.1	6.9	6.3	8.1	9.8	10.8	10.0	8.4	7.9	8.6	8.5
One-parent families with children under 15, parent employed (of all one-parent families with children under 15)	%	n.a.	46.1	44.2	43.2	40.6	41.4	41.8	43.2	42.7	42.9	42.1
Children under 15 living in families where no parent is employed (of all children under 15)	%	n.a.	n.a.	n.a.	n.a.	n.a.	18.8	18.5	17.1	17.2	18.1	19.7

(a) Includes same-sex couples in 1996.

Reference periods: Data on family formation are for the calendar year. Data on de facto couples are at census date. Data on other living arrangements, families, and work are at June.

Family — national summary continued

FAMILY FORMATION	Units	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Registered marriages												
Number of marriages	'000	114.1	116.8	117.2	117.0	113.9	114.8	113.3	111.2	109.4	106.1	106.7
Crude marriage rate (per 1,000 population)	no.	7.0	7.1	7.0	6.9	6.6	6.6	6.4	6.2	6.1	5.8	5.8
Marriages where both partners married for the first time (of all marriages)	%	67.2	67.1	67.3	67.4	67.5	67.2	67.1	67.5	67.5	66.4	66.6
Median age of men at first marriage	years	25.9	26.1	26.3	26.5	26.7	26.9	27.0	27.2	27.3	27.6	27.8
Median age of women at first marriage	years	23.8	24.0	24.2	24.3	24.5	24.7	24.8	25.1	25.3	25.7	25.9
Median age at remarriage (divorced men)	years	38.6	38.9	39.3	39.6	39.7	40.1	40.4	40.9	41.1	41.6	41.8
Median age at remarriage (divorced women)	years	35.1	35.3	35.6	36.0	36.1	36.5	36.8	37.4	37.6	38.0	38.2
Divorce												
Number of divorces	'000	39.7	41.0	41.4	42.6	45.6	45.7	48.4	48.3	49.7	52.5	51.3
Crude divorce rate (per 1,000 population)	no.	2.4	2.5	2.5	2.5	2.6	2.6	2.7	2.7	2.8	2.9	2.8
Median duration between marriage and separation	years	7.3	7.3	7.3	7.3	7.4	7.4	7.6	7.7	7.6	7.6	7.7
Divorces involving children under 18 (of all divorces)	%	58.6	57.5	55.3	55.6	54.2	52.9	52.6	52.4	n.a.	53.6	54.0
Children under 18 affected by divorce	'000	44.1	44.4	43.3	44.9	46.7	45.7	48.1	47.5	n.a.	52.5	51.7
Fertility												
Births	'000	244.0	246.2	250.9	262.6	264.2	260.2	258.1	256.2	253.8	251.8	251.8
Total fertility rate (per woman)	no.	1.85	1.84	1.84	1.91	1.86	1.89	1.86	1.85	1.83	1.80	1.78
Births to mothers aged under 20 (of all births)	%	5.7	5.7	5.7	5.8	5.7	5.4	5.1	5.0	4.9	4.9	4.9
Births to mothers aged 35 and over (of all births)	%	8.5	9.0	9.6	10.0	10.7	11.4	11.9	12.9	13.7	14.6	15.3
Births outside marriage (of all births)	%	18.0	19.0	20.2	21.9	23.0	24.0	24.9	25.6	26.6	27.4	28.1
Births outside marriage acknowledged by father (of all births outside marriage)	%	73.0	74.4	75.9	77.1	79.5	81.0	81.7	82.2	83.3	84.2	85.5
Women aged 35 and over giving birth for the first time (of all births to women 35 and over)	%	n.a.	n.a.	n.a.	n.a.	12.7	19.9	19.8	20.8	20.8	21.2	n.a.
Median age of mothers at first birth	years	n.a.	n.a.	n.a.	n.a.	26.3	26.5	26.6	26.8	26.9	27.1	n.a.

CHILD CARE	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Children aged under 3 using formal care (of all children under 3)	%	n.a.	n.a.	14.0	n.a.	n.a.	17.0	n.a.	n.a.	21.6	n.a.	n.a.
Children aged under 3 using informal care (of all children under 3)	%	n.a.	n.a.	44.8	n.a.	n.a.	40.4	n.a.	n.a.	39.3	n.a.	n.a.

Reference periods: Data on family formation are for the calendar year. Data on child care are at November 1990, June 1993 and March 1996.

Family — State summary

LIVING ARRANGEMENTS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Total households	'000	1998	2 338	1 735	1 315	606	694	186	64	119	7 056
Lone-person households	%	1998	22.6	23.4	23.9	28.1	24.2	26.1	21.7	26.6	23.8
Households with three or more persons	%	1998	44.9	44.1	42.8	37.1	41.7	38.9	50.2	42.0	43.2
Total families	'000	1998	1 720	1 249	928	411	481	131	33	75	5 027
Families with children under 15	'000	1998	737	526	403	171	216	57	17	33	2 160
Couple families	'000	1998	1 409	1 040	764	342	401	110	28	62	4 158
De facto couple families (of all couple families)(b)	%	1996	9.4	8.4	11.9	9.8	12.0	11.1	19.6	11.3	10.1
Couple-only families (of all couple families)	%	1998	52.3	50.7	51.9	54.4	51.7	54.3	42.9	47.0	51.8
Couple-only families with female partner aged under 40 (of all couple only families)	%	1998	19.4	23.2	21.5	19.2	23.3	17.4	37.4	28.9	21.3
Couple families with children under 15 (of all families with children under 15)	%	1998	78.0	79.3	78.1	76.7	79.5	77.0	83.8	80.9	78.4
Lone-father families with children under 15 (of all families with children under 15)	%	1998	1.7	2.4	1.9	2.0	2.0	2.4	* *	3.5	2.0
Lone-mother families with children under 15 (of all families with children under 15)	%	1998	20.3	18.2	20.0	21.4	18.5	20.6	15.2	15.6	19.5
Families with at least one child aged under 5 (of all families with children under 15)	%	1998	46.9	46.2	47.5	45.4	42.5	43.4	54.2	43.0	46.2
Average family size (persons)	no.	1998	3.1	3.1	3.1	3.0	3.1	3.0	3.3	3.1	3.1
Children under 15 living in one-parent families (of all children under 15)	%	1998	20.4	18.8	19.4	20.8	18.4	19.3	12.9	17.0	19.5
Persons aged 20–24 living with parents (of all persons aged 20–24)	%	1998	52.5	55.0	36.8	45.6	42.5	44.3	31.2	39.4	48.0
Persons aged 25–34 living with parents (of all persons aged 25–34)	%	1998	14.4	14.1	9.9	10.9	9.1	9.7	*3.5	7.2	12.4
Persons aged 15–64 who live alone (of all persons aged 15–64)	%	1998	7.0	7.8	8.6	10.6	8.7	8.9	*8.7	9.6	8.1
Persons aged 65 and over who live alone (of all persons aged 65 and over)	%	1998	28.2	28.3	29.1	31.7	29.2	33.7	*14.1	33.5	29.0

FAMILIES AND WORK	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Couple families with children under 15, both parents employed (of all couple families with children under 15)	%	1998	54.6	55.8	57.0	53.6	55.5	51.9	67.0	71.3	55.6
Couple families with children under 15, neither parent employed (of all couple families with children under 15)	%	1998	8.7	7.9	9.6	9.1	6.7	12.1	*6.3	3.3	8.5
One-parent families with children under 15, parent employed (of all one-parent families with children under 15)	%	1998	39.2	44.9	42.8	35.5	45.7	48.5	46.0	63.8	42.1
Children under 15 living in families where no parent is empoyed (of all children under 15)	%	1998	21.0	18.4	20.4	22.4	16.4	21.6	14.6	8.9	19.7

(a) All estimates for the Northern Territory other than household estimates and those for de facto couples, refer to mainly urban areas only.
(b) Includes same-sex couples.

Reference periods: Data on family formation are for the calendar year. Data on de facto couples are at census date. Data on other living arrangements, families, and work are at June.

Family — State summary continued

FAMILY FORMATION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Registered marriages											
Number of marriages	'000	1997	36.7	25.5	20.9	7.9	10.5	2.7	0.8	1.9	106.7
Crude marriage rate (per 1,000 population)	no.	1997	5.8	5.5	6.1	5.4	5.8	5.6	4.2	6.0	5.8
Marriages where both partners married for the first time (of all marriages)	%	1997	67.7	69.4	63.8	64.9	64.1	62.3	59.9	66.2	66.6
Median age of men at first marriage	years	1997	27.8	28.0	27.5	27.7	28.1	27.5	28.8	27.4	27.8
Median age of women at first marriage	years	1997	25.9	26.2	25.7	25.7	26.1	25.6	26.7	25.9	25.9
Median age at remarriage (divorced men)	years	1997	41.6	41.5	42.3	41.6	42.5	41.3	42.8	42.3	41.8
Median age at remarriage (divorced women)	years	1997	37.9	38.1	37.9	38.8	39.2	37.9	40.0	38.4	38.2
Divorce											
Number of divorces	'000	1997	14.7	12.5	11.7	4.1	5.0	1.3	0.4	1.5	51.3
Crude divorce rate (per 1,000 population)	no.	1997	2.3	2.7	3.5	2.8	2.8	2.8	2.2	(a)	2.8
Median duration between marriage and separation	years	1997	6.7	7.7	8.1	8.6	8.3	8.7	7.8	8.2	7.7
Divorces involving children under 18 (of all divorces)	%	1997	51.3	53.4	55.7	56.5	53.8	62.9	56.0	56.7	54.0
Children under 18 affected by divorce	'000	1997	13.7	12.5	12.4	4.3	5.0	1.6	0.5	1.7	51.7
Fertility											
Births	'000	1997	87.2	60.7	47.0	18.4	24.8	6.0	3.6	4.2	251.8
Total fertility rate (per woman)	no.	1997	1.83	1.69	1.80	1.70	1.79	1.80	2.17	1.60	1.78
Births to mothers aged under 20 (of all births)	%	1997	4.7	3.1	6.6	4.2	5.4	7.6	14.0	3.9	4.9
Births to mothers aged 35 and over (of all births)	%	1997	15.8	16.8	13.3	16.6	14.5	11.4	11.2	15.7	15.3
Births outside marriage (of all births)	%	1997	26.7	22.3	33.3	29.6	30.8	35.6	57.6	25.0	28.1
Births outside marriage acknowledged by father (of all births outside marriage)	%	1997	85.9	87.5	84.2	88.1	84.9	87.6	68.9	87.2	85.5

CHILD CARE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(b)	ACT	Aust.
Children aged under 3 using formal care (of all children under 3)	%	1996	20.5	21.5	23.9	19.7	20.6	16.3	30.2	38.5	21.6
Children aged under 3 using informal care (of all children under 3)	%	1996	39.8	41.5	34.2	45.2	39.2	41.6	26.7	33.3	39.3

(a) Based on the location of the Family Court where the divorce is granted and registered. Due to the large number of divorces granted in the ACT to usual residents of another State, the divorce rate for the ACT is not representative of the ACT population.

(b) Estimates for childcare for the Northern Territory refer to mainly urban areas only.

Reference periods: Data on de facto couples are at census date. Data on other living arrangements are at June. Data on child care are at March.

Family — definitions and references

Average family size — the total number of family members divided by the number of families.
Reference: *Labour Force Status and Other Characteristics of Families, Australia* (Cat. no. 6224.0).

Birth — the delivery of a child irrespective of the duration of pregnancy who, after being born, breathes or shows any other evidence of life such as a heart beat.
Reference: *Births, Australia* (Cat. no. 3301.0).

Births outside marriage — births where the father was not registered as married to the mother at the time of the birth, whether or not the parents were living together at the time of the birth, and whether or not the child may subsequently have been legitimated or adopted.
Reference: *Births, Australia* (Cat. no. 3301.0).

Births outside marriage acknowledged by father — births outside registered marriage where the father's name is recorded on the birth certificate.
Reference: *Births, Australia* (Cat. no. 3301.0).

Child under 15 — a related or unrelated person under 15 years of age who forms a parent-child relationship with one person over 15 years of age resident in the household.
Reference: *Labour Force Status and Other Characteristics of Families, Australia* (Cat. no. 6224.0).

Couple family — a family based on two persons who are in a registered or de facto marriage and who are usually resident in the same household. The family may include any number of dependents, non-dependents and other related individuals. It is not necessary for a parent-child relationship to be formed, thus a couple family can consist of a couple without children present in the household.
Reference: *Labour Force Status and Other Characteristics of Families, Australia* (Cat. no. 6224.0).

Couple-only family — a couple family with no dependent children or other family members (e.g. non-dependent children) present.
Reference: *Labour Force Status and Other Characteristics of Families, Australia* (Cat. no. 6224.0).

Crude divorce rate — the number of divorces granted in the calendar year per 1,000 of the estimated resident population at 30 June of that year.
Reference: *Marriages and Divorces, Australia* (Cat. no. 3310.0).

Crude marriage rate — the number of marriages registered in the calendar year per 1,000 of the estimated resident population at 30 June of that year.
Reference: *Marriages and Divorces, Australia* (Cat. no. 3310.0).

De facto marriage — the relationship between two people who live together in a consensual union who are not registered as married to each other.
Reference: 1996 Census of Population and Housing.

Divorces involving children — divorces of couples with unmarried children of the registered marriage who were under 18 at the time of application for divorce. Under the *Family Law Act 1975,* adopted and ex-nuptial children and children from a former registered marriage may be included (in certain cases). Children who are registered as married or aged 18 or more are not subject to custody and guardianship orders and are excluded.
Reference: *Marriages and Divorces, Australia* (Cat. no. 3310.0).

Employed — persons aged 15 and over who either worked during the reference week for pay, profit, commission, payment in kind or without pay in a family business, or who had a job but were not at work.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Estimated Resident Population — quarterly estimates of the Australian population are obtained by adding to the estimated population at the beginning of each period the components of natural increase (on a usual residence basis) and net overseas migration. For the States and Territories, account is also taken of estimated interstate movements involving a change of usual residence.
Reference: *Australian Demographic Statistics* (Cat. no. 3101.0).

Family — two or more persons, one of whom is at least 15 years of age, who are related by blood, marriage (registered or de facto), adoption, step or fostering; and who are usually resident in the same household. The basis of a family is formed by identifying the presence of a couple relationship, lone parent-child relationship or other blood relationship. Some households will, therefore, contain more than one family.
Reference: *Labour Force Status and Other Characteristics of Families, Australia* (Cat. no. 6224.0).

Formal child care — regulated care, away from the child's home during the previous week. Includes preschool; before and after school care program; long-day care centre; family day care; occasional care and other formal care.
Reference: *Child Care, Australia* (Cat no. 4402.0)

Household — a group of two or more related or unrelated people who usually reside in the same dwelling, who regard themselves as a household and who make common provision for food or other essentials for living; or a person living in a dwelling who makes provision for his or her own food and other essentials for living, without combining with any other person.
Reference: *Household Estimates, Australia* (Cat. no. 3229.0).

Informal child care — non-regulated care either in the child's home or elsewhere, in the previous week. It includes care by (step) brothers or sisters; care by relatives (including non-custodial parents) and by non-relatives such as friends, neighbours or baby sitters. It may have been paid or unpaid.
Reference: *Child Care, Australia* (Cat. no. 4402.0).

Family — definitions and references continued

Lone parent — a person who has no spouse or partner present in the household but who forms a parent-child relationship with at least one dependent or non-dependent child usually resident in the household.
Reference: *Labour Force Status and Other Characteristics of Families, Australia* (Cat. no. 6224.0).

Median — the value at which half the population falls above and half falls below.

Median age of mothers at first birth— actually the median age of mothers at first confinement. A confinement is a pregnancy which results in at least one live birth: multiple births (e.g. twins) may be involved.
Reference: *Australia's Mothers and Babies (1996)* Australian Institute of Health and Welfare.

Median duration of marriage to separation — the median interval between the date of registered marriage and the date of separation.
Reference: *Marriages and Divorces, Australia* (Cat. no. 3310.0).

One-parent family — a family consisting of a lone parent with at least one dependent or non-dependent child (regardless of age) who is also usually resident in the household. The family may also include any number of other dependent children, non-dependent children and other related individuals.
Reference: *Labour Force Status and Other Characteristics of Families, Australia* (Cat. no. 6224.0).

Persons who live alone — persons who are the only member of a household.
Reference: *Labour Force Status and Other Characteristics of Families, Australia* (Cat. no. 6224.0).

Registered marriages — refers to formally registered marriages for which the partners hold a certificate.
Reference: *Marriages and Divorces, Australia* (Cat. no. 3310.0).

Total fertility rate — the average number of children a woman would bear during her lifetime if she conformed to the current age-specific fertility rates.
Reference: *Births, Australia* (Cat. no. 3301.0).

Women giving birth for the first time — Multiple births (e.g. twins or triplets) may be involved at the time of first birth.
Reference: *Australia's Mothers and Babies (1996)* Australian Institute of Health and Welfare.

Spending time alone

FAMILY FUNCTIONING

In 1997, 32% of older people aged 65 years and over lived alone. During their waking hours, these people spent an average of 79% of their time alone (12 hours and 26 minutes per day).

Interaction with others is generally seen as a positive and necessary part of daily life. Naturally, the level of social interaction a person has can depend on a wide range of factors, such as where they live, whether they work, their health, and their personal preferences and aptitude for social interaction.

In terms of broad social trends, various changes in patterns of human activity suggest that people are generally interacting with a wider range of people than in the past. For instance, the increased participation of women in the labour force is likely to have increased the time women of prime working age spend with people outside their home. High and increasing rates of residential mobility would also have served to broaden social contacts. Between 1991 and 1996, 43% of people changed their address within Australia, up from 41% between 1986 and 1991.[1] More widely available telecommunication services, such as cellular phones and the internet, are also likely to have assisted in this process of change.

At the same time, there is evidence that some social bonds are weakening. Over recent decades, divorce rates have risen and increasing numbers of adults live as single parents or by themselves (see Family — national summary table, p. 28). As well as increases in the proportion of people of all ages who live alone, the amount of time people spend by themselves has been increasing. Overall, the average waking time

Measuring time spent alone

This review uses data from the Time Use surveys conducted by the ABS in 1997 and 1992. The data was compiled from a household questionnaire and a 48-hour diary of time use, filled out by respondents aged 15 years and over. In addition to changes in behaviour, some of the differences in figures between 1992 and 1997 may be due to minor differences in survey methodology.

Time spent alone per day is measured as the time individuals were alone while they had an opportunity for social interaction: that is, while they were awake. If sleeping time had been included in the measure of total time spent alone, the difference in time spent alone between persons living alone and those living with others would have been substantially higher due to lone people generally sleeping alone.

Time use data on social contact (time spent with other people) cannot give an indication of the degree and quality of interaction that takes place between people. Individuals may be in the company of others, but have little more than superficial interaction with them. However, it is likely that being in the company of others will reduce the extent to which people feel lonely or socially isolated.

Average waking time spent alone and proportions of people living alone, 1997, including changes since 1992

	Average time spent alone					
	Persons living with others		*Persons living alone*		*Proportion who lived alone*	
	Males	*Females*	*Males*	*Females*	*Males*	*Females*
Age group (years)	hrs:mins	hrs:mins	hrs:mins	hrs:mins	%	%
15–24	1:54	1:40	7:39	6:34	3.4	3.2
25–44	2:26	1:43	8:23	7:34	10.5	5.8
45–64	2:41	2:28	10:24	9:35	11.5	12.9
65 and over	1:40	1:37	13:00	12:12	20.3	40.4
	Change since 1992				*Percentage point change*	
Age group (years)	hrs:mins	hrs:mins	hrs:mins	hrs:mins	%	%
15–24	+0:16	+0:14	* *	* *	* *	* *
25–44	+0:07	+0:03	+1:41	+0:58	+3.4	+1.2
45–64	+0:20	+0:03	+0:17	–0:11	+3.7	+3.7
65 and over	+0:14	–0:02	+0:46	+0:42	+1.9	+1.1

Source: Unpublished data, Time Use Survey, 1992 and 1997.

per day spent alone among people aged 15 years and over increased from 2 hrs:38 mins in 1992 to 3 hrs:1 min in 1997, an increase of 23 minutes. The increases have been largest for people who live alone, and more so for men than women.

Taken together, these trends could imply increased loneliness and social isolation. Within the context of these broader trends, this review identifies those groups who may be at risk of having low levels of social interaction, mostly measured in terms of the time spent alone.

Who spends the most time alone?

Because of the opportunities to interact with other people at home, people who live with others generally spend less time by themselves than those who live alone. On average, in 1997, people who lived with others spent just over 2 hours per day (14% of their waking time) by themselves compared to just over 10 hours (65% of their waking time) for people who lived alone.

Among those who lived with others, the amount of time spent alone varied little with the age of the person (roughly between one and a half and two and a half hours) with those aged 15–24 and 65 and over spending less time alone than those between these two age groups. However, among those who lived by themselves, the amount of time spent alone increased steadily with age. Among men aged 65 and over who lived by themselves, the average time spent alone per day was 13 hours (83% of their waking time) and among women who lived alone, 12 hrs:12 mins per day (78% of their waking time). The likelihood of spending large amounts of time alone also increases with age in association with the increased chance of living alone. Among people aged 65 and over 20% of men and 40% of women lived by themselves.

Measuring disability status

Disability is defined as the presence of one or more impairments or restrictions (whether physical, sensory, psychological or intellectual) which has lasted, or is expected to last, for six months or more.

In the Time Use Survey, disability status was further defined according to the degree of restriction the disability causes to personal activity. The group identified in this review includes people with a severe or profound restriction in personal activity (i.e. people who required personal assistance with personal care, mobility and communication tasks), and people with a moderate restriction (i.e. people who required various aids, but not necessarily the assistance of others, with tasks).

Average waking time, spent alone and with others and incidence of having spare time, 1997

	Persons living with others					*Persons living alone*			
	Spent alone	*Spent with household members only*	*Spent with non-household members(a)*	*Always or often has spare time*	*Total living with others*	*Spent alone*	*Spent with non-household members*	*Always or often has spare time*	*Total living alone*
Age group (years)	hrs:mins	hrs:mins	hrs:mins	%	'000	hrs:mins	hrs:mins	%	'000
All persons									
15–24	1:47	6:24	6:24	11.6	2 509.4	7:07	8:05	12.8*	85.4
25–44	2:04	8:35	4:56	3.5	5 138.4	8:05	7:25	9.1	453.9
45–64	2:35	8:52	4:14	3.4	3 504.2	9:58	5:47	7.9	488.0
65 and over	1:38	11:49	1:46	5.1	1 282.2	12:26	3:17	11.7	591.9
Persons with a disability(b)									
15–44	2:05	9:02	4:08	10.7*	286.8	10:28*	4:48*	* *	25.0*
45–64	2:16	10:18	2:56	11.6*	267.7	9:56	5:09	14.7*	66.7
65 and over	1:49	11:20	1:40	16.8*	185.7	13:31	2:25	21.4*	102.1
Total population	**2:07**	**8:33**	**4:42**	**5.3**	**12 434.2**	**10:12**	**5:27**	**9.9**	**1 619.2**

(a) Household members may also be present.
(b) Persons with a severe, profound or moderate restriction in personal activity.

Source: Unpublished data, Time Use Survey, 1997.

People with moderate or more severe disabilities (most commonly older people) are at greater risk of social isolation than other people. Among those aged 65 and over who lived alone, the average time spent alone was 13 hrs:31 mins, 85% of their waking hours, and over one hour longer than for the general population in this age group.

Further identifying groups of concern

Spending time alone, even for those who spend large amounts of time alone, is not itself an indicator of diminished life quality in terms of feelings of loneliness or social isolation.[2] The simple expectation of having families and friends available to meet with on occasions or rely on when needed may well diminish potential feelings of loneliness. However, a likely symptom of loneliness is the feeling of inactivity or boredom.[2,3] One measure of such feelings available from the Time Use Survey is the extent to which people report that they always or often have spare time. The use of this measure in conjunction with time spent alone may be an indicator of the numbers of people who suffer from being alone.

Despite being at least risk of social isolation in terms of time spent alone, young people aged 15–24 were the most likely of all age groups to report that they always or often have spare time, regardless of whether they lived alone or not (13% and 12% respectively). This finding is consistent with other research which has identified youth, along with elderly people, to be most at risk of having feelings of loneliness.[3,4]

Nevertheless, after the formative years of adulthood, feelings of loneliness (or as shown here, feelings of always or often having spare time) are less common, but increase with age and are higher among older people who live alone, particularly those with disabilities. In 1997, of people aged 65 and over identified as having a moderate or more severe disability, 21% of those living alone and 17% of those living with others felt that they always or often had spare time. These proportions were substantially higher than for the general population in this age group (12% and 5% respectively).

Spending time with others

Whether people live alone or with family members, there is a general desire to spend some of their time with others. Irrespective of living arrangements, the proportion of time spent with people outside the household generally decreased with age. People aged 15–24 who live with others tend to spend more time with non-household members than any other age group (an average of 6 hrs:24 mins a day). Of those living with others, people aged 25–44 (most commonly families with young children, and in which high proportions of men and women are employed) spent less time with non-household members (4 hrs:56 mins per day) than those in the 15–24 year age group. Interaction with others drops off markedly among older age groups when most people have retired from work.

Among people aged 65 and over, those who live by themselves tend to spend more time with friends, acquaintances and other people than those who live with others (3 hrs:17 mins and 1 hr:46 mins respectively). However, those who live with others spend a great deal of their time (on average, 78% of their waking time) with other household members, commonly their husband or wife.

Social interaction: focusing more on older people

Patterns of social interaction with family and friends change among older people with increasing age. Slightly less time is spent

Social isolation

Although definitions vary, social isolation is generally understood to occur when a person has low levels of social participation and a perceived inadequacy of social activity.[2] This can happen when a person spends a lot of time alone and little time in social contact with family, friends and other people. Social isolation is associated with feelings of loneliness, boredom and lower satisfaction with life.

Addressing concerns

The Department of Veterans' Affairs has identified social isolation as a priority concern for the veteran community, and the wider community in general.[2] It has responded to concerns by establishing the Improving Social Networks Program, including pilot interventions and organising related research. It recognises that as people age, they are more likely to experience social isolation as a result of frailty, mobility problems, and loss of family and friends. To address this problem, the Department completed an extensive research project on the causes and effects of social isolation in the veteran community in 1998. It found that social isolation is a substantial problem and is mainly triggered by a lack of social support, poor health and restricted mobility.[2]

People aged 65–74 years and 75 years and over: average time spent, while awake, in different social contexts, 1997

	Persons living with partner only		*Persons living alone*	
	65–74 years	*75 years and over*	*65–74 years*	*75 years and over*
Social context	hrs:mins	hrs:mins	hrs:mins	hrs:mins
Alone	1:29	1:20	12:32	12:18
Partner only	11:13	12:05	n.a.	n.a.
Family outside household only	0:51	0:31	1:11	1:33
Family and friends(a)	1:03	0:45	0:11*	0:13*
Friends only	0:28	0:26	1:22	1:11
Other people only(b)	0:16	0:10	0:27	0:28
	'000	'000	'000	'000
Total persons ('000)	**674.8**	**280.7**	**333.9**	**258.0**

(a) Administrative, service and shop personnel, crowd or undescribed people may also be present.
(b) Administrative, service and shop personnel, crowd or undescribed people present.

Source: Unpublished data, Time Use Survey, 1997.

alone among those aged 75 and over than those aged 65–74, irrespective of living arrangements.

For people aged 65 and over, living with their partner, an increasing amount of time is spent with their partner only as they grow older (11 hrs:13 mins per day for those aged 65–74 and 12 hrs:5 mins per day for those aged over 75 years). Among those who live alone, on the other hand, more time is spent with family members who live in other households (relatives, children and grandchildren). On average, people aged over 75 years who lived alone spent over one hour longer per day with family members outside of the household than those in the same age group who live with their partner (1 hr:33 mins, and 31 minutes per day, respectively).

These patterns of social interaction indicate that with advancing age the loss of partners impacts heavily on the amount of time older people spend alone. They also indicate that families living in other households spend more of their time with elderly people when these people are at greater risk of social isolation.

Endnotes

1 Australian Bureau of Statistics 1996, *Population Growth and Distribution* (Cat. no. 2035.0), ABS, Canberra.

2 Commonwealth Department of Veterans' Affairs 1998, *Improving Social Networks: Improving Health and Social Isolation in the Australian Veteran Community,* DVA, Canberra.

3 Weeks, D.J. 1994, *A Review of Loneliness Concepts, with Particular Reference to Old Age,* International Journal of Geriatric Psychiatry, vol 9, 1994.

4 Wildermuth N.L. 1990, *Loneliness in adolescence: why it occurs and what to do about it* in Adolescence an Australian Perspective, Callan Harcourt Brace Jovanovich, Sydney, 1990.

Looking after the children

FAMILY FUNCTIONING

In 1997, mothers with children aged under five spent more than three times as much time per day on child care, and were less than half as likely to work full-time as mothers whose youngest was aged between 10 and 14 years.

One of the most important aspects of a child's upbringing is their relationship with their primary care givers – usually the child's parents. Parents spend time with their children for various reasons, including to nurture them, be role models, help with educational needs, and teach them life and socialisation skills. Ultimately, this time shapes the child's view of the world and lays the foundations for adult independence.

Increasingly, families with children under 15 years have both parents in paid work. For many, this introduces on-going challenges in balancing their family responsibilities and work commitments. Between 1988 and 1998, the proportion of couple families with children under 15, where both parents worked increased from 50% to 56%.

This review focuses on the time parents in couple families report being involved in child care activities. In particular, it examines how mothers and fathers differ in the time they spend looking after their children and in the types of child care activities they participate in, as their children get older.

Major patterns and trends

In 1992, on average, mothers spent 6hrs:46mins per day on child care activities, more than twice as much as fathers (2:hrs:31mins). On the other hand, reflecting traditional roles and responsibilities, fathers were far more likely to be employed full-time (83% of fathers compared to 19% of mothers). Nevertheless, the pattern has been changing. As women have been entering the work force, the time they spend with their children has been decreasing (6hrs:7mins in 1997). Little change was evident among fathers (2hrs:24mins per day in 1997) whose involvement in full-time work remained about the same between 1992 and 1997.

As children grow older, mothers are more likely to be employed (see *Australian Social Trends 1998*, Trends in women's employment, pp. 111–114), reflecting the lower level of care and supervision needed by children of school age. In 1997, mothers with children less than 5 years old spent an average of 8hrs:27mins per day on child care, and only 16% worked full-time. In comparison, mothers whose youngest child

Child care activities

Information on time spent on different activities is taken from the 1992 and 1997 Time Use Surveys. Time use data was compiled from a household questionnaire and a 48-hour diary of time use, completed by respondents aged 15 years and over. For each five-minute time slot in the diary, people could record up to two concurrent activities. In this review, the amount of time given to child care (as a main or concurrent activity) is examined for men and women in couple relationships (married or de facto) with children aged 0–14.

Child care activities relate to activities parents reported undertaking for their children. This includes the time spent as a main activity, or in association with another activity. In this article the three broad categories of child care are:

Active child care – requires the physical involvement of a parent such as the physical and emotional care of children; teaching, helping and reprimanding; and playing, reading and talking with children;

Passive child care – are activities requiring only the passive involvement of a parent such as minding or supervising children. Excludes minding children while parents are asleep;

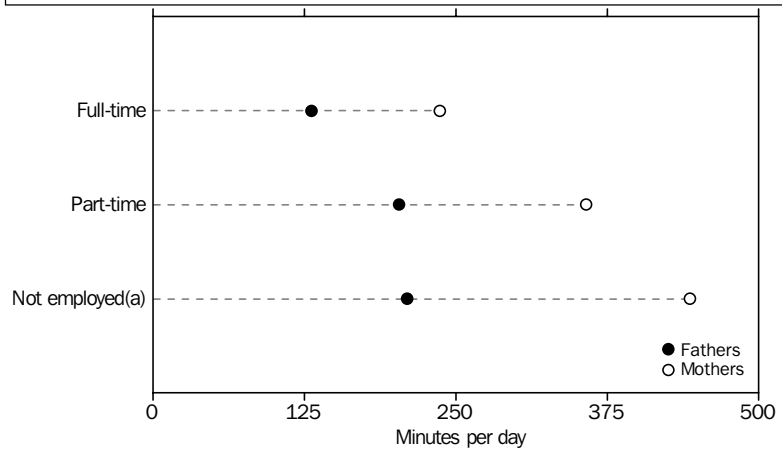
Associated child care – activities such as any travel or communication related to child care activities and visiting child care establishments (e.g. schools).

Mothers and fathers: average reported time spent per day on child care activities, and proportion employed full-time

	Fathers		*Mothers*	
	Child care	*Employed full-time*	*Child care*	*Employed full-time*
	hrs:mins	%	hrs:mins	%
Age of youngest child in 1997				
0–4 years	3:06	82.6	8:27	15.5
5–9 years	2:13	81.9	4:58	21.5
10–14 years	1:06	84.3	2:11	37.2
Number of children in 1997				
One	1:53	82.5	4:50	31.2
Two	2:43	86.7	6:33	18.8
Three or more	2:40	76.5	7:22	13.1
Total 1997	**2:24**	**82.8**	**6:07**	**21.9**
Total 1992	**2:31**	**83.1**	**6:46**	**19.4**

Source: Unpublished data, Time Use Survey, 1992 and 1997.

Fathers and mothers: average reported time spent on child care activities, by employment status, 1997



(a) Includes people unemployed and not in the labour force.

Source: Unpublished data, Time Use Survey, 1997.

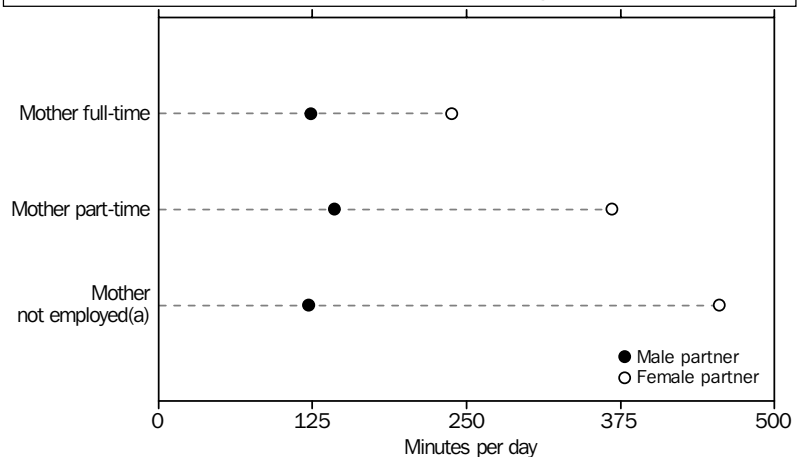
was aged 10–14 reported spending less than a third as much time on child care (2hrs:11mins per day) and were more than twice as likely to work full-time (37% compared to 16%).

Unlike mothers, the proportion of fathers in full-time employment did not change much with the age of the youngest child. 83% of fathers with children aged 0–4 years worked full-time compared to 82% whose youngest was 5–9 and 84% whose youngest was 10–14. As was the case for mothers, the average time fathers spent on child care decreased as children became older.

The time spent on child care was also higher in families where several children were present. As with age of children, the influence of the number of children was greater for mothers than fathers, both in terms of the time spent with children and the likelihood of being in full-time employment.

Both mothers and fathers who were employed part-time, or not employed, spent more time with their children than those working full-time. However, the time spent by parents on child care not only depends on their own employment status, but also on many other factors, including the employment status of their partners. For example, in the more usual situation, where the father was working full-time, the mother spent progressively less time with their children as her hours of employment increased. However, for fathers in such families, the time spent with their children bore little relationship to the mother's hours of work. In fact, men spent slightly less time with their children, on average, when women worked full-time than when they worked part-time.

Fathers and mothers: average reported time spent on child care activities where the father was employed full-time, 1997



(a) Includes people unemployed and not in the labour force.

Source: Unpublished data, Time Use Survey, 1997.

Types of child care activities

Parents provide care for their children in various ways, often just passively minding them while they are attending to other activities such as cooking or cleaning – or just relaxing. However, they also spend time actively looking after the personal needs of their children, such as feeding, cuddling, reading or talking to their children, as well as some time on extra tasks such as organising their daily activities. The extent to which mothers and fathers share their time in attending to various child care activities can be demonstrated by focusing on parents with similar work commitments – for example, where both parents are employed full-time.

In general, in families where both parents worked full-time, mothers spent about twice as much time as fathers on child care (nearly 4hrs for mothers and 2hrs:4mins for fathers). Moreover, mothers spent more time than fathers on all types of child care activities, for children of all age groups.

Children under school age commonly require much more personal attention than older children. Consequently, both mothers and fathers (where both were working full-time) spent more time with children aged 0–4 years. For fathers, this time was fairly evenly divided between active and passive child care activities (1hr:27mins and 1hr:33mins, respectively), while mothers spent more time on active child care (3hrs:15mins, compared with 2hrs:47mins on passive child care), particularly on the physical and emotional care of these children (1hr:50mins per day, on average). Mothers spent more time than

Fathers and mothers: average reported time spent per day on child care activities in families where both parents worked full-time, 1997

	Age of youngest child						*Total*	
	0–4 years		5–9 years		10–14 years		0–14 years	
	Fathers	*Mothers*	*Fathers*	*Mothers*	*Fathers*	*Mothers*	*Fathers*	*Mothers*
Child care activity	hrs:mins	hrs:mins	hrs:mins	hrs:mins	hrs:mins	hrs:mins	hrs:mins	hrs:mins
Active child care(a)	*1:27*	*3:15*	*0:36*	*1:29*	*0:18*	*0:52*	*0:48*	1:53
Physical and emotional care	0:37	1:50	0:06	0:25	0:01*	0:10	0:15	0:50
Playing reading and talking with children	0:49	1:24	0:27	0:58	0:16	0:36	0:31	0:59
Passive child care	1:33	2:47	1:30	2:12	0:22*	0:33	1:07	1:48
Associated child care(b)	0:10	0:23	0:10*	0:17	0:07*	0:12	0:09	0:17
Total	**3:10**	**6:26**	**2:17**	**3:59**	**0:47**	**1:37**	**2:04**	**3:58**

(a) Includes time spent teaching, helping, or reprimanding children.
(b) Includes time spent visiting child care establishments, associated travel and communication, and child care activities not elsewhere classified, such as getting children's things ready for the next day.

Source: Unpublished data, Time Use Survey, 1997.

fathers on the physical and emotional care of older children, too, but for both partners this declined sharply with the age of the child. Time spent playing, reading and talking with their children declined less sharply with the age of the child, and became the dominant type of active care for both parents of older children, particularly fathers.

After children reach school age, parents spent more time on passive than active child care – almost as much for 5–9 year olds (1hr:30mins for fathers and 2hrs:12mins for mothers) as for 0–4 year olds (1hr:33mins and 2hrs:47mins, respectively). Much less time was spent on the passive care of children in the 10–14 years age group (22mins and 33mins, respectively).

Other child care activities, such as getting children's things ready for the next day, visiting child care establishments and associated travel, took up much less time – less than 25 minutes per day for both parents, for children of any age.

Partners: proportions feeling rushed for time(a), 1997

	Men	Women
	%	%
Male partner employed full-time		
Women with children(b)		
Employed full-time	55.6	69.5
Employed part-time	61.4	67.2
Not employed	47.2	51.3
Women without children(c)		
Employed full-time	44.3	52.3
Employed part-time	40.1	34.8
Not employed	34.6	13.6
All couples		
With children(b)	50.7	59.8
Without children(c)	23.4	25.9

(a) Proportion who stated they were always or often rushed or pushed for time.
(b) Children aged 0–14 years.
(c) Children of any age (i.e. couple only families).

Source: Unpublished data, Time Use Survey, 1997.

Juggling work and family

Managing work and family responsibilities can often be difficult for parents, especially mothers. This can be observed in terms of the proportion of parents who state that they always or often feel rushed or pushed for time. In general, mothers were more likely than fathers to report that they always or often felt rushed or pushed for time, while men and women without dependent children were less likely to report this feeling. For example, of couples where both worked full-time, 70% of mothers stated they always or often felt rushed or pushed for time, compared to 56% of fathers and 52% of women with no dependent children. Similarly, of women who worked part-time whose partners worked full-time, 67% of mothers stated they always or often felt rushed or pushed for time, compared to 35% of women with no dependent children.

Caring for children after parents separate

LIVING ARRANGEMENTS

In April 1997, there were 978,000 Australian children who were living with one natural parent and who had a natural parent living elsewhere. The vast majority (88%) lived with their natural mother in either one-parent families (68%) or in step or blended families (20%).

The family is the fundamental social unit for the care and nurture of children. However the capacity to care for children can come under extreme stress when the parents' relationship breaks down and the family unit is split due to separation or divorce. A key objective of family law and government social policy in Australia is to ensure the ongoing care and wellbeing of children after their parents separate. The Child Support Agency was set up in 1988 to ensure that children of separated parents receive adequate financial support, and that both parents share the cost of supporting their children according to their capacity to pay.[1] Family law reforms introduced in 1996 reinforce the rights of children to have regular contact with both parents and emphasise joint parental responsibility for children following separation.[2]

Children with a natural parent living elsewhere

When parents separate, the children generally live with one parent, usually their mother, but may continue to have contact with the other parent on a more or less regular basis. In April 1997, there were 978,000 Australian children who were living with one natural parent and who had a natural parent living

Family Characteristics Survey

The statistics on living arrangements, parental care arrangements and child support payments presented in this article are derived from the ABS Family Characteristics Survey, 1997. They relate to children with a natural parent living elsewhere.

Children with a natural parent living elsewhere refers to children under 18 years of age who live with one natural parent, either in a one-parent family, a step-family or blended family, and have another natural parent who is not usually resident in the same household.

Natural parent/child refers to a parent/child, each of whom is related to the other by either birth or adoption.

Usual resident refers to a person who has lived, or intends to live, with the household for a total of six months or more and regards it as his or her own (or main) household.

Step-family refers to a couple family with one or more children, at least one of whom is the natural child of either partner but not of the other (step child), and none of whom is the natural child of both partners.

Blended family refers to a couple family with two or more children, of whom at least one is the natural child of both partners, and at least one is the step-child of either partner.

Children with a natural parent living elsewhere, April 1997

	Age of child (years)			
	0–4	*5–11*	*12–17*	*Total*
	%	%	%	%
Living with natural mother	*95.9*	*89.2*	*81.8*	*87.9*
One-parent family	88.7	69.7	54.6	68.2
Step-family	5.6	10.7	15.3	11.3
Blended family	1.5*	8.8	11.9	8.4
Living with natural father	*4.1*	*10.8*	*18.2*	*12.1*
One-parent family	3.7	8.7	12.6	9.1
Step-family	* *	* *	3.7	2.0
Blended family	* *	* *	1.9	1.1
Total with a natural parent living elsewhere	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000
Total with a natural parent living elsewhere	**207.9**	**409.8**	**360.8**	**978.4**

Source: Unpublished data, Family Characteristics Survey, April 1997.

elsewhere. The vast majority (88%) lived with their mother in either one-parent families (68%) or in step or blended families (20%).

Children of all ages were more likely to live with their mother than their father, and this was particularly so for younger children. In 1997, 96% of 0–4 year olds, 89% of 5–11 year olds and 82% of 12–17 year olds whose parents had separated were living with their mother. Boys aged 12–17 were more likely to live with their natural father than girls of the same age (21% compared to 15%). In the younger age groups, there was little difference in the proportions of boys and girls who lived with their father.

Contact with natural parent living elsewhere

It is generally agreed that, in most cases, children are better off when they have an ongoing relationship with both their parents, even after their parents have separated. A recent report[3] by the Family Law Council concluded that 'Most children want and need contact with both parents. Their long term development, education, capacity to adjust and self esteem can be detrimentally affected by the long-term or permanent absence of a parent from their lives. The wellbeing of children is generally advanced by their maintaining links with both parents as much as possible.'

In 1997, 3% of children whose parents had separated were in a shared care arrangement, (i.e. each natural parent cared for the child for at least 30% of the time). The vast majority (97%) were in a sole care arrangement (i.e. the natural parent with whom they lived cared for them for more than 70% of the time). Of those children in a sole care arrangement, 42% spent time with their other natural parent fortnightly or more frequently. However, over one third (36%) saw their other natural parent rarely (once a year or less) or never. Of those children (aged two years or older) who saw their other natural parent rarely or never, 33% had some contact by telephone or letter.

As children get older they are less likely to see their other natural parent on a frequent basis. In 1997, more than half of 0–4 year olds in a sole care arrangement visited their other natural parent fortnightly or more often. The proportion declined with age to about a third of 12–17 year olds. This may be due to a

Shared parental responsibility

The *Family Law Reform Act 1995,* which came into effect in June 1996, made significant changes to the concepts used in the Family Law Act in relation to caring for children after the separation of their parents. In order to better reflect its focus on the needs and rights of the children, rather than the rights of parents, the traditional concepts of custody, access and guardianship were replaced by a broader concept of parental responsibility.[4]

The new principles now set out in section 60B(2) of the Family Law Act are that, except where it is or would be contrary to a child's best interests:

- children have a right to know and be cared for by both parents;
- children have a right of contact, on a regular basis, with both parents and any other person significant to the care, welfare and development of the child;
- parents share the duties and responsibilities concerning the care, welfare and development of the child; and
- parents should agree about the future parenting of the child.[4]

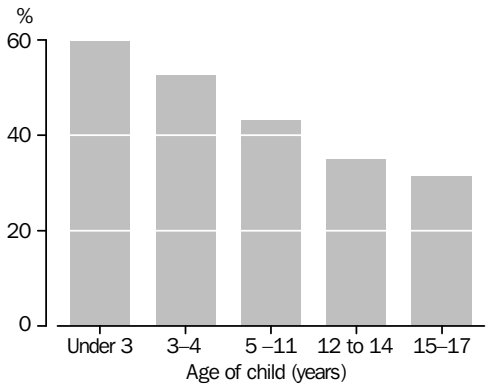
Frequency of visits(a), April 1997

	%
Daily	4.4
Weekly	22.2
Fortnightly	15.6
Monthly	7.6
Once every three months	8.7
Once every six months	5.3
Once a year	5.4
Less than once a year/never	30.5
Total(b)	**100.0**

(a) With natural parent living elsewhere.
(b) Children in sole care arrangement.

Source: Family Characteristics, Australia (Cat. no. 4442.0).

Fortnightly or more frequent visits(a)(b), April 1997



(a) With natural parent living elsewhere.
(b) Children in sole care arrangement.

Source: Family Characteristics, Australia (Cat. no. 4442.0).

number of factors which can come into play as time passes after separation, including the increasing independence of children, conflicting commitments of children and the non-resident parent, a change in locality of either household, or the repartnering of either parent. Older children (with a natural parent living elsewhere) are more likely than their younger counterparts to be living in step or blended families. In 1997, 33% of those aged 12–17 years were living in step or blended families compared to 8% of 0–4 year olds.

Child support

In 1997, 42% of all families (with at least one child with a natural parent living elsewhere) were receiving cash child support payments. Over half (54%) of these families were paid directly by the liable parent while over one third (38%) were paid through the Child Support Agency. The remainder used either a combination of the above two methods (3%) or some other method (4%) such as through a solicitor. Most families (82%) received child support payments on a monthly basis while others received less frequent payments. Cash payments ranged from under $50 to over $600, on average, per child per month, with over half (60%) of families receiving $200 or less. Almost one third of families received an average of $100 or less per child per month.

In 1997, one in three families (with at least one child with a natural parent living elsewhere) were receiving in-kind child support (i.e. payment in the form of goods or services used by the children and/or their families). Families who received cash child support were more likely to receive payment in kind (40%) than those who did not receive cash payments (28%). For most families who received in-kind support, the in-kind payments were limited to clothes, pocket money or other personal expenses for the child. However, families who received both cash and in-kind support were more likely to receive in-kind payment in the form of other expenses such as school fees, health insurance or mortgage payments (46%) than those families who received in-kind payments only (33%).

Cash child support, April 1997

Average monthly payment per child	%
$1–50	13.3
$51–100	17.7
$101–150	14.2
$151–200	15.2
$201–250	6.9
$251–300	8.8
$301–350	4.8
$351–400	5.1
$401–600	6.8
$601 and over	2.8
Total families receiving cash child support(a)	**100.0**

(a) Includes a small number of 'not stated' responses.

Source: Family Characteristics, Australia (Cat. no. 4442.0).

Child Support Agency

The Child Support Agency (CSA) commenced operations in June 1988 and is responsible for administering the Child Support (Registration and Collection) Act 1988 and the Child Support (Assessment) Act 1989.[5] The primary purpose of the CSA is to ensure adequate financial support for children of separated parents, and that both parents share the cost of supporting their children according to their capacity to pay. While the CSA has the authority to collect child support through the taxation system, liable parents are encouraged to make payments directly to the parent with whom their children live.[1]

Parents are also encouraged to make their own arrangements about the amount and frequency of child support payments.[6] However, in cases where parents are unable to reach a satisfactory agreement, the CSA also has the role of assessing the amount of child support regularly payable by a liable parent. Parents who separated after 1 October 1989, or who had a child born after that date, no longer have to go to court to get child support (if unable to reach a private agreement) though this option is still available.[5]

Endnotes

1 Australian Bureau of Statistics 1998, *Family Characteristics, Australia,* Cat. no. 4442.0, ABS, Canberra.

2 Carberry, F. 1998, *Parents sharing care of children – family law and income support,* paper presented at AIFS Conference, Melbourne, November 1998.

3 Family Law Council 1992, *Patterns of Parenting after Separation,* AGPS, Canberra.

4 Commonwealth of Australia 1997, *Family Law Council Annual Report 1996–97,* AGPS, Canberra.

5 Commonwealth of Australia 1990, *Annual Report of the Commissioner of Taxation 1989–90,* AGPS, Canberra.

6 Commonwealth of Australia 1996, *Annual Report of the Commissioner of Taxation 1995–96,* AGPS, Canberra.

Remarriage trends of divorced people

FAMILY FORMATION

Of all marriages in 1997, 33% involved a person who had previously been married. This proportion was up from 14% in 1967.

Currently, almost one third of registered marriages celebrated in Australia involve at least one previously divorced partner. This is a consequence of the increase in divorces over the past few decades, which has resulted in more divorced people in the population (see *Australian Social Trends 1995*, Trends in marriage and divorce, pp. 33–37). Among people who were aged 20 years or over in 1997 and not married, 19% had been divorced compared to 10% in 1976.

The remarriage of divorced people represents an important form of family formation: one that can often create complex family interactions. Previously-divorced partners may still have responsibilities from their earlier marriage, such as the care or maintenance of children. A remarriage may affect other family relationships, such as that between grandparents and grandchildren. Of course, divorced people may choose to enter into a de facto partnership rather than formally remarry. However, these partnerships are not discussed in this review because there is no available data to support this analysis.

An increasing proportion of remarriages

Remarriages represented 33% of marriages in 1997, increasing from 14% in 1967. Of marriages celebrated in 1997, 67% were couples who had both never married before; 12% were couples who were both previously divorced; 10% were celebrated by couples in which the bridegroom had previously been divorced and the bride had never previously married; 8% were couples in which the bridegroom had never previously married and the bride had previously been divorced; and 4% involved a widowed partner.

Although the large majority of remarriages of divorced people in 1997 were second marriages, 13% of bridegrooms and brides were marrying for the third time, and a further 1%, the fourth time.

Remarriages

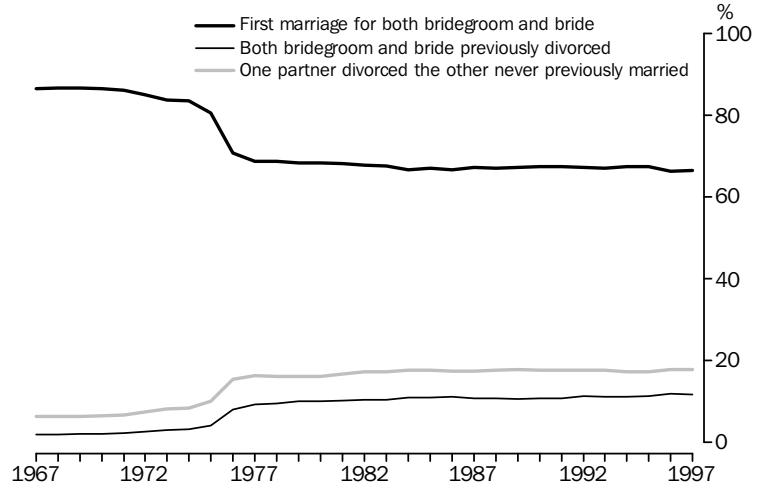
In this review, marriages are limited to registered marriages carried out in accordance with the *Australian Marriage Act 1961*. Marriage registration forms are collected by the State and Territory Registrars of Births, Deaths and Marriages and collated into a national data set by the Australian Bureau of Statistics. This information is published annually in *Marriages and Divorces, Australia* (Cat. no. 3310.0). Although de facto partnerships are often included with registered marriage to form a category of social marriage, the lack of regular information on the formation and dissolution of de facto partnerships precludes their inclusion in this review.

Information on the length of remarriages is available only up to the year 1994 because the previous marital status of each partner of a divorcing couple is no longer collected by the Family Court of Australia.

This review excludes a relatively small number of remarriages that involved a divorced person and a widowed person.

The introduction of the *Family Law Act 1975*, which came into operation in January 1976, gave rise to a large increase in the crude divorce rate in 1976. By 1979, once the backlog of applications was cleared, the divorce rate dropped and stabilised, but at a higher level than that which had occurred prior to the introduction of the Act.

Previous marital status of partners in marriages, proportion of all marriages, 1967–1997

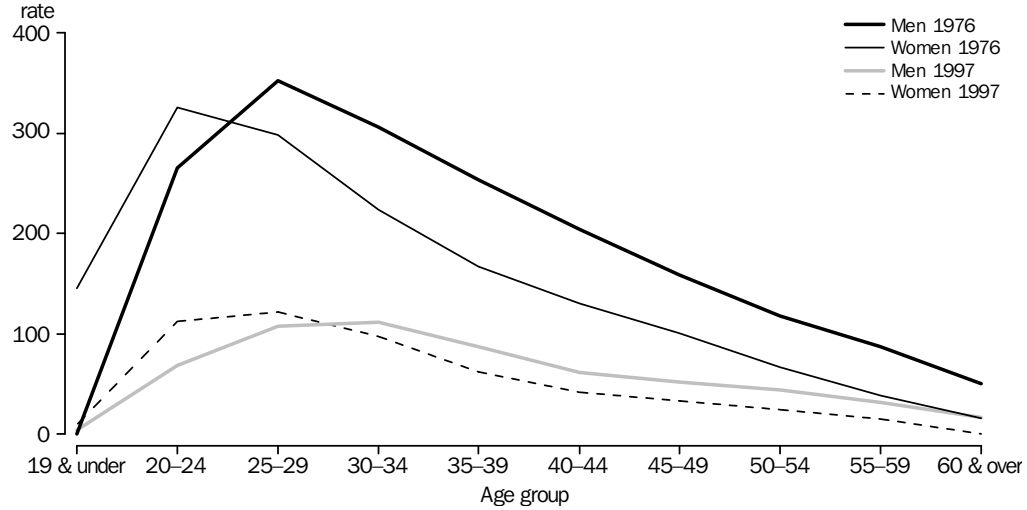


Source: Marriages and Divorces, Australia, 1997 (Cat. no. 3310.0).

Remarriage rates for divorcees

Remarriage rates for divorcees express the proportion of divorcees in a particular age group that remarried in that year. For example, in 1997 the overall remarriage rate for divorced men was 54 marriages for every 1,000 divorced men in the population while

Remarriage rates(a) for divorced men and women, 1976 and 1997



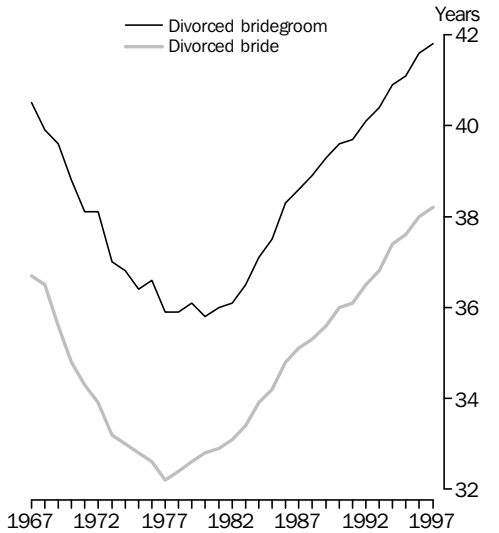
(a) The number of men or women remarrying per 1,000 divorced of either sex.

Source: Marriages and Divorces, Australia, 1997 (Cat. no. 3310.0).

that for divorced women was 41 marriages for every 1,000 divorced women in the population.

The highest remarriage rates for divorced people were 111 per 1,000 among men aged 30–34 and 122 per 1,000 among women aged 25–29. These rates represent a considerable decline in remarriage rates from those prevalent in 1976 when the highest rate for men was 353 per 1,000 among those aged 25–29 and the highest rate for women was 326 per 1,000 among women aged 20–24. However, since a large number of divorces were granted soon after the introduction of the Family Law Act in January 1976, remarriage rates for 1976 were particularly high. A large proportion of the decline in remarriage rates, indicating fewer people choosing to marry, can be attributed to the growth in de facto partnering. More couples are choosing a de facto relationship in preference to registered marriage or as a prelude to marriage (in 1997, about 78% of marriages involving partners who were both previously divorced were preceded by a period of cohabitation[1]). The same explanation probably underlies the similar decline in marriage rates for first marriages.

Median age(a) of previously divorced bridegrooms and brides, 1967–1997



(a) At date of remarriage.

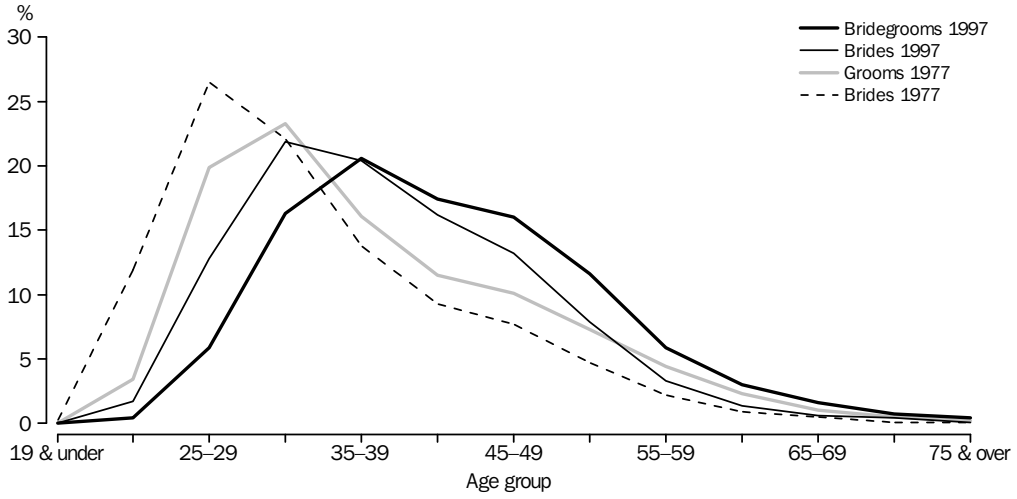
Source: Marriages and Divorces, Australia, 1997 (Cat. no. 3310.0).

Age at remarriage

Over the past 30 years, the median age of remarriage declined to 36 and 32 respectively for remarrying bridegrooms and brides in 1977, before steadily rising to the ages of 42 and 38 years in 1997.

The age at which people remarry is dependent on the age at which they first married, the length of their first marriage and the intervals between their separation, divorce, and remarriage. Of these factors, the age at first marriage is the main influence on the age at remarriage, the other factors have been more stable. The median age at first marriage has been increasing since the mid 1970s: for bridegrooms it increased from

Age distribution of previously divorced brides and bridegrooms who remarried, 1977 and 1997



Source: Unpublished data, Marriages and Divorces, Australia.

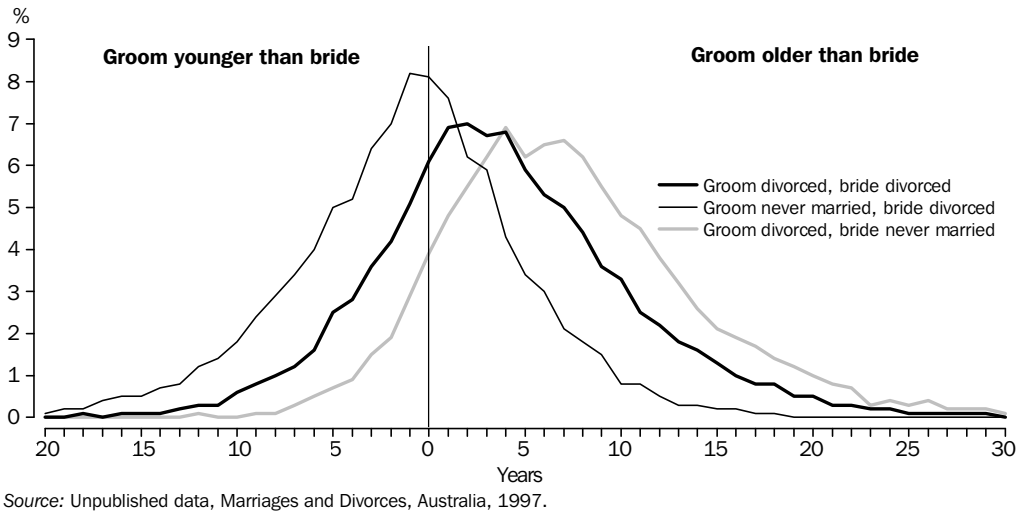
23.3 years to 27.8 years between 1974 and 1997, and for brides from 20.9 years to 25.9 years (see *Australian Social Trends 1997*, Age at first marriage, pp. 27–29). Among people who divorced for the first time in 1994, the median duration of marriage until final separation was 9 years, the same as that experienced by people who divorced in 1987, and only one year longer than that experienced by couples who divorced in 1977. For couples divorcing in 1997, the median interval between separation and divorce was 3 years while the median interval between divorce and remarriage for people remarrying in 1997 was also about 3 years. These intervals have only increased slightly from those experienced ten years ago.

The difference in age distributions between 1977 and 1997 of remarrying brides and bridegrooms further illustrates the shift towards older ages for remarrying. In 1977, the most common age group for previously divorced brides was 25–29 years and for previously divorced bridegrooms, 30–34 years. In 1997, the most common age groups had moved up to 30–34 years for brides and 35–39 years for bridegrooms.

Differences in age between brides and grooms

Among first marriages in 1997, the bridegroom was on average older than the bride by about two years, although the move

Distribution of the difference in age between couples remarrying, 1997



Source: Unpublished data, Marriages and Divorces, Australia, 1997.

towards an increasing proportion of bridegrooms marrying older brides continued (see *Australian Social Trends 1997*, Age at first marriage, pp. 27–29). Among remarriages, the difference between bridegrooms and brides was on average about four years. However, the age differences seem to be related to whether both or only one partner is divorced.

When both the bridegroom and the bride were remarrying after divorce, the bridegroom was likely to be older than the bride (69% were older): most commonly about 1–4 years older than the bride. When the bridegroom was divorced, and his bride had not been married before, the bridegroom was even more likely to be older than the bride (87% were older): most commonly about 4–7 years older.

However, when the bridegroom had not been married before, but his bride was previously divorced, the bridegroom was more likely to be younger than the bride (53% were younger): most commonly up to one year younger. These patterns seem to be fairly stable since the distributions of age difference between partners in remarriages celebrated in 1977 were very similar.

Length of remarriages

The act of remarriage could be taken to reaffirm a commitment to lifelong partnership despite the experience of marriage breakdown. However, the reality is that couples that were previously divorced are slightly more likely to divorce than those who had not been previously married[2].

Information on the length of remarriages that ended recently is not available because the previous marital status of divorcing couples is no longer recorded. However, divorce data from the last year of availability, 1994, can be used to show the differences between the lengths of first marriages and remarriages among people who had been divorced.

Of the divorces made absolute in 1994, those made between couples who had both been in their first marriage had had a median marriage length until separation of nine years. Couples who had both been divorced previously had had a shorter median length of marriage until separation of five years.[3]

Previously divorced bridegrooms and brides who remarried in 1997, children from previous marriage

Children under 16 from previous marriage	*Bridegrooms*	*Brides*
No children	14 484	13 482
Had children	9 405	9 127
Total(a)	**23 940**	**22 634**
Number of children(b)	15 662	15 267

(a) Includes not stated.
(b) Children of bridegrooms and brides should not be added since double counting is possible if a divorced couple with children remarried in the same year.

Source: *Marriages and Divorces, Australia, 1997* (Cat. no. 3310.0).

Children and remarriages

Partners entering into a remarriage provide some information about dependent children from their previous marriage on the registration form. Since this information is asked only of previously married people, information on children from de facto relationships is not available.

The information supplied on the marriage registration forms of previously divorced people remarrying in 1997 indicates that about 40% of brides and 39% of bridegrooms had children under 16 from their previous marriage. However, this information does not indicate that these people had responsibility for the day-to-day care of these children.

Endnotes

1 Australian Bureau of Statistics 1997, Marriages and Divorces, Australia, unpublished data.

2 Australian Bureau of Statistics 1995, *How many marriages end in divorce?* in Marriages and Divorces, Australia, 1994, Cat. no. 3310.0, ABS, Canberra.

3 Australian Bureau of Statistics 1994, Marriages and Divorces, Australia, unpublished data.

Health

Health — national summary

HEALTH STATUS	Units	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Life expectancy												
Male life expectancy at birth	years	73.0	73.1	73.3	73.9	74.4	74.5	75.0	75.0	75.0	75.2	75.6
Female life expectancy at birth	years	79.5	79.5	79.6	80.1	80.4	80.4	80.9	80.9	80.8	81.1	81.3
Male life expectancy at 65 years	years	14.7	14.8	14.7	15.2	15.4	15.4	15.7	15.7	15.7	15.8	16.1
Female life expectancy at 65 years	years	18.6	18.7	18.7	19.0	19.1	19.2	19.5	19.7	19.5	19.6	19.8
Male disability-free life expectancy at birth	years	n.a.	58.4	n.a.	n.a.	n.a.	n.a.	58.4	n.a.	n.a.	n.a.	n.a.
Female disability-free life expectancy at birth	years	n.a.	63.4	n.a.	n.a.	n.a.	n.a.	64.2	n.a.	n.a.	n.a.	n.a.
Mortality												
Total number of deaths	'000	117.3	119.9	124.2	120.1	119.1	123.7	121.6	126.7	125.1	128.7	129.4
Crude death rate (per 1,000 population)	no.	7.2	7.2	7.4	7.0	6.9	7.1	6.9	7.1	6.9	7.0	7.0
Standardised death rate (per 1,000 population)	no.	7.6	7.5	7.6	7.2	6.9	6.9	6.6	6.7	6.5	6.4	6.2
Infant mortality rate (per 1,000 live births)	no.	8.7	8.7	8.0	8.2	7.1	7.0	6.1	5.9	5.7	5.8	5.3
Perinatal mortality rate (per 1,000 live births and fetal deaths combined)	no.	11.5	11.6	11.0	11.3	10.6	10.7	9.2	9.1	9.4	10.0	9.2
Disability												
Disability with specific restrictions (per 100 population)(a)	%.	n.a.	13.6	n.a.	n.a.	n.a.	n.a.	13.6	n.a.	n.a.	n.a.	n.a.

CAUSES OF DEATH	Units	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Death rates per 100,000 population —												
Leading causes(a)												
Cancer	no.	180	184	183	181	181	181	180	181	r177	177	171
Ischaemic heart disease	no.	208	199	200	186	176	177	162	161	151	145	137
Stroke	no.	82	79	78	72	69	67	65	67	63	61	56
Selected cancers(a)												
Male lung cancer	no.	64	65	64	60	60	59	57	59	56	55	52
Female lung cancer	no.	15	17	18	17	18	18	19	19	19	20	19
Female breast cancer	no.	27	27	27	27	27	25	27	27	26	25	24
Prostate cancer	no.	30	31	32	32	31	34	35	35	33	33	29
Skin cancer	no.	6	6	6	7	6	7	7	7	7	7	6
Heart disease and diabetes(a)												
Male ischaemic heart disease	no.	282	271	271	250	237	235	219	216	204	196	182
Female ischaemic heart disease	no.	150	143	145	136	127	130	117	118	109	105	101
Diabetes mellitus	no.	13	13	13	13	13	14	14	15	14	15	14
Accidents and suicide												
Motor vehicle traffic accident(a)	no.	17	19	17	15	13	12	11	11	11	11	10
Male 15–24 years motor vehicle traffic accident	no.	54	55	49	42	38	31	33	30	32	32	29
Female 15–24 years motor vehicle traffic accident	no.	18	18	18	14	12	12	10	10	11	8	10
Suicide(a)	no.	14	13	13	13	14	13	12	13	13	13	15
Male 15–24 years suicide	no.	24	28	24	27	27	27	25	27	25	25	31
Female 15–24 years suicide	no.	6	4	3	4	6	6	4	4	6	4	7
AIDS(a)												
AIDS-related	no.	n.a.	1	2	3	3	4	4	4	4	3	2

(a) Rates are age-standardised.

Reference periods: All health status data and causes of death data are for the calendar year.

Health — national summary continued

RISK FACTORS	Units	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Immunisation status												
Children not fully immunised aged 3 months to 6 years (of children 3 months to 6 years)	%	n.a.	n.a.	n.a.	45.9	n.a.	n.a.	n.a.	n.a.	47.9	n.a.	n.a.
Drinking and smoking												
Alcohol: apparent consumption per person per day	mls	30.4	30.7	30.2	29.9	28.6	27.3	26.5	27.3	r26.8	26.5	26.3
Tobacco: apparent consumption per person per day	grams	6.1	5.8	5.5	5.6	5.2	5.3	4.7	4.3	4.1	3.9	3.9
Diet and exercise												
Total fats: apparent consumption per person per day	grams	56.3	55.8	55.4	54.5	r53.5	r53.3	r52.2	r53.0	r51.8	r52.7	49.4
Persons who do not exercise for sport, recreation or fitness (of persons 18 years and over)(a)	%	n.a.	n.a.	n.a.	35.8	n.a.	n.a.	n.a.	n.a.	34.0	n.a.	n.a.

SERVICES	Units	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Hospital separations (per 1,000 population)	no.	n.a.	214	n.a.	225	n.a.	237	247	260	274	285	289
Hospital beds (per 1,000 population)	no.	5.4	5.3	5.2	5.0	5.0	4.5	4.4	4.2	4.3	4.3	4.2
Average length of stay in hospital	days	6.3	6.2	5.9	5.6	5.1	4.8	4.8	4.7	r4.5	4.3	4.2
Doctors (per 100,000 population)	no.	n.a.	n.a.	n.a.	n.a.	225	n.a.	n.a.	n.a.	n.a.	241	n.a.
Nursing home and hostel beds (per 1,000 population aged 70 years and over)	no.	n.a.	98.4	97.2	95.1	94.0	94.2	94.1	92.6	90.0	90.9	89.2
Medicare usage												
Average Medicare services processed per person(a)	no.	8.0	8.2	8.5	8.5	8.5	8.9	9.7	10.0	10.3	10.5	10.5
Average Medicare services processed per male(a)	no.	6.4	6.6	6.8	6.9	6.9	7.2	7.8	8.2	8.4	8.7	8.7
Average Medicare services processed per female(a)	no.	9.6	9.8	10.2	10.1	10.1	10.6	11.5	11.8	12.2	12.4	12.4
Average Medicare services processed per person aged 65 years and over	no.	14.6	14.8	15.2	15.3	15.4	16.4	17.9	18.8	19.6	20.5	20.9
Proportion of Medicare services used by persons aged 65 years and over	%	19.8	19.7	19.6	20.0	20.6	21.0	21.4	22.0	22.5	23.0	23.6

EXPENDITURE	Units	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
Persons with private health insurance	%	48.3	47.0	45.5	44.5	43.7	41.0	39.5	37.2	34.9	33.6	31.9
Total health expenditure per person per year (1989–90 prices)	$	1 571	1 603	1 661	r1 700	r1 713	r1 736	r1 785	1 835	r1 891	p1 963	p1 996
Total health expenditure as a proportion of GDP	%	8.0	7.8	7.7	7.8	r8.2	r8.5	8.6	8.5	r8.4	r8.4	p8.4

(a) Rates are age-standardised.

Reference periods: Immunisation status data are at April. Apparent consumption and expenditure data (except private health insurance data which are at the June quarter) and services data (except doctors per 100,000 population which is at census date) are for the year ended 30 June.

Health — State summary

HEALTH STATUS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Life expectancy											
Male life expectancy at birth	years	1997	75.4	75.8	75.4	75.7	75.7	74.8	70.0	77.1	75.6
Female life expectancy at birth	years	1997	81.2	81.4	81.3	81.5	81.6	80.1	74.7	81.3	81.3
Mortality											
Total number of deaths	'000	1997	45.6	33.3	21.9	11.7	10.8	3.8	0.9	1.3	129.4
Crude death rate (per 1,000 population)	no.	1997	7.3	7.2	6.5	7.9	6.0	8.0	4.8	4.3	7.0
Standardised death rate (per 1,000 population)	no.	1997	6.3	6.2	6.2	6.1	6.0	6.8	9.8	6.0	6.2
Infant mortality rate (per 1,000 live births)	no.	1997	5.2	4.9	5.8	4.7	5.3	6.5	12.5	3.8	5.3
Perinatal mortality rate (per 1,000 live births and fetal deaths combined)	no.	1997	9.8	8.6	9.1	8.2	8.1	11.6	15.5	6.6	9.2
Morbidity and disability (per 100 population)(b)											
Cancer	%	1995	2.1	1.8	2.6	1.9	2.1	2.4	2.0	1.9	2.1
Heart disease	%	1995	2.9	2.8	2.8	2.7	2.4	3.6	*1.4	2.7	2.8
Diabetes	%	1995	2.0	2.4	2.0	2.7	2.5	2.6	2.5	2.0	2.3
Asthma	%	1995	10.4	11.2	13.3	11.2	11.5	10.2	12.7	11.2	11.3
Injury	%	1995	5.8	5.6	7.7	6.4	7.6	7.2	8.7	7.6	6.4
Disability with specific restrictions(b)	%	1998	16.6	15.7	17.8	18.9	17.6	18.7	16.1	16.7	16.9

CAUSES OF DEATH	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Death rates per 100,000 population —											
Leading causes(b)											
Cancer	no.	1997	167	176	169	169	171	182	207	158	171
Ischaemic heart disease	no.	1997	141	132	147	136	119	142	164	124	137
Stroke	no.	1997	59	52	56	57	52	62	96	63	56
Selected cancers(b)											
Male lung cancer	no.	1997	51	53	54	52	51	56	61	30	52
Female lung cancer	no.	1997	18	20	20	18	20	23	41	22	19
Female breast cancer	no.	1997	24	27	22	24	24	19	20	25	24
Prostate cancer	no.	1997	30	31	29	28	27	34	33	18	29
Skin cancer	no.	1997	7	5	7	5	6	4	1	6	6
Heart disease and diabetes(b)											
Male ischaemic heart disease	no.	1997	184	175	195	185	162	198	194	182	182
Female ischaemic heart disease	no.	1997	106	98	106	98	85	101	134	80	101
Diabetes mellitus	no.	1997	9	18	14	15	15	14	37	13	14
Accidents and suicide											
Motor vehicle traffic accident(b)	no.	1997	9	10	12	10	12	7	25	6	10
Male 15–24 years motor vehicle traffic accident(c)	no.	1997	24	28	35	26	38	* *	* *	* *	29
Female 15–24 years motor vehicle traffic accident(c)	no.	1997	9	8	17	10	12	* *	* *	* *	10
Suicide(a)	no.	1997	15	14	16	13	14	11	22	13	15
Male 15–24 years suicide(c)	no.	1997	31	30	37	29	25	* *	* *	* *	31
Female 15–24 years suicide(c)	no.	1997	7	5	9	7	7	* *	* *	* *	7
AIDS(b)											
AIDS-related	no.	1997	2	2	1	1	1	* *	2	* *	2

(a) Morbidity and disability estimates for Northern Territory relate to mainly urban areas only.
(b) Rates are age-standardised.
(c) Data for Tasmania, Northern Territory and Australian Capital Territory are not available as numbers are too low for reliable rates.

Reference periods: All health status data and causes of death data are for the calendar year.

Health — State summary continued

RISK FACTORS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Immunisation status											
Children not fully immunised aged 3 months to 6 years (of children 3 months to 6 years)	%	1995	46.1	48.8	52.5	50.3	40.7	57.0	46.5	36.5	47.9
Drinking and smoking(b)											
Male medium/high-risk drinkers (of males 18 years and over)	%	1995	10.9	8.9	11.4	10.2	11.4	9.6	24.6	12.2	10.6
Female medium/high-risk drinkers (of females 18 years and over)	%	1995	6.4	5.3	6.5	6.4	6.6	4.7	5.9	7.1	6.1
Male current smokers (of males 18 years and over)	%	1995	27.1	26.7	29.0	26.6	26.6	27.2	30.2	23.6	27.3
Female current smokers (of females 18 years and over)	%	1995	20.0	20.0	21.7	20.0	18.8	24.5	26.0	19.3	20.3
Diet and exercise(b)											
Male overweight/obese adults (of males 18 years and over)	%	1995	62.5	64.6	62.1	64.7	60.5	66.4	58.9	63.1	63.0
Female overweight/obese adults (of females 18 years and over)	%	1995	45.3	48.9	43.5	49.4	45.3	53.6	43.5	50.4	46.5
Males who do not exercise for sport, recreation or fitness (of males 18 years and over)	%	1995	34.5	34.2	33.8	34.0	29.7	33.8	42.6	22.6	33.7
Females who do not exercise for sport, recreation or fitness (of females 18 years and over)	%	1995	37.4	32.4	34.8	34.8	28.5	36.1	34.6	28.0	34.4
High blood pressure(b)											
Male hypertension (of males 18 years and over)	%	1995	17.1	17.1	19.6	18.3	15.6	17.7	17.3	16.9	17.6
Female hypertension (of females 18 years and over)	%	1995	14.6	15.0	15.1	17.2	15.6	17.4	9.3	13.7	15.1

SERVICES	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Hospital separations (per 1,000 population)	no.	1996–97	282	297	300	320	266	277	261	238	289
Hospital beds (per 1,000 population)	no.	1996–97	4.0	4.1	4.5	4.8	4.2	4.3	4.0	3.4	4.2
Average length of stay in hospital	days	1996–97	4.3	4.0	4.4	4.2	4.0	5.1	3.8	3.9	4.2
Doctors (per 100,000 population)	no.	1996	250	237	233	264	221	220	249	259	241
Nursing home and hostel beds (per 1,000 population aged 70 years and over)	no.	1996–97	89.0	84.7	95.0	90.6	91.4	88.0	102.8	87.3	89.2
Medicare usage											
Average Medicare services processed per person(b)	no.	1996–97	11.3	10.6	10.5	9.7	9.6	9.5	6.4	9.4	10.5
Average Medicare services processed per male(b)	no.	1996–97	9.4	8.8	8.4	8.1	7.7	7.4	5.1	7.7	8.7
Average Medicare services processed per female(b)	no.	1996–97	13.1	12.4	12.4	11.3	11.6	11.5	8.0	11.1	12.4
Average Medicare services processed per person aged 65 years and over	no.	1996–97	22.0	21.1	20.7	19.4	19.3	17.8	12.3	19.1	20.9
Proportion of Medicare services used by persons aged 65 years and over	%	1996–97	24.1	24.4	22.2	27.1	21.1	23.7	7.0	16.0	23.6

EXPENDITURE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Persons with private health insurance(c)	%	1997	32.1	31.4	30.0	32.8	35.2	34.9	24.4	n.a.	31.9

(a) Risk factor estimates for NT relate to mainly urban areas only.

(b) Rates are age-standardised.

(c) The ACT is included in NSW.

Reference periods: Immunisation status data are at April. Overweight/obese and hypertension data are for the year ended March 1996. Services data (except for doctors per 100,000 population which is at census date) are for the year ended 30 June. Private health insurance data are at the June quarter.

Health — definitions and references

AIDS-related death — death where AIDS is mentioned anywhere on the death certificate as a contributing factor or an underlying cause.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Alcohol: apparent consumption — millilitres of pure alcohol (not total alcoholic beverages) consumed, divided by the population 15 and over. Apparent consumption of beer and spirits is based on the quantities on which excise duty was paid, and imports cleared for consumption. Apparent consumption of wine comprises quantities sold by winemakers and imports cleared for consumption. Home-made beer and wine are included.
Reference: *Apparent Consumption of Foodstuffs and Nutrients, Australia* (Cat. no. 4306.0).

Apparent consumption — equals (commercial production + estimated home production + imports + opening stocks) minus (exports + usage for processed food + non-food usage + wastage + closing stocks) divided by the population.
Reference: *Apparent Consumption of Foodstuffs and Nutrients, Australia* (Cat. no. 4306.0).

Asthma — the number of people per 1,000 population reporting asthma as a recent condition (within two weeks) or a long-term condition (lasting or expecting to last six months or more), asthma being a narrowing of the airways within the lung.
Reference: *National Health Survey: Users' Guide, Australia* 1995, (Cat. no. 4363.0).

Average length of stay in hospital — the total number of occupied bed days in both public and private hospitals divided by the total number of separations.
Reference: *Private Hospitals, Australia* (Cat. no. 4390.0); *Australian Hospital Statistics, 1996–97,* Australian Institute of Health and Welfare.

Average Medicare services processed — average number of services processed per Australian resident.
Reference: Health Insurance Commission, *Financial Statements and Statistical Tables, 1996-97*

Breast cancer deaths — malignant neoplasm of the female breast. ICD-9 code 174.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Cancer deaths — malignant neoplasms. ICD-9 codes 140–208.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Cancer — the number of people per 1,000 population reporting cancer as a recent condition (within two weeks) or a long-term condition (lasting or expecting to last six months or more), including both benign and malignant cancers.
Reference: *National Health Survey: Users' Guide, Australia* 1995, (Cat. no. 4363.0).

Children not fully immunised — the proportion of children reported as not having received all the required vaccinations for diphtheria, tetanus, poliomyelitis, whooping cough, measles and mumps for their age. The required vaccinations are based on the 1986 NH&MRC Standard Childhood Vaccination Schedule.
Reference: *Children's Immunisation, Australia* (Cat. no. 4352.0).

Coronary heart disease — coronary heart disease includes heart attack (acute myocardial infarction, coronary occlusion) and angina (angina pectoris). ICD-9 codes 410–414.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Crude death rate — number of deaths registered per 1,000 of the estimated resident population at 30 June of that year.
Reference: *Deaths, Australia* (Cat. no. 3302.0).

Current smokers — persons aged 18 years and over who smoke one or more manufactured (packet) cigarettes, roll-your-own cigarettes, cigars or pipes per day. Smoking excludes chewing tobacco and smoking of non-tobacco products.
Reference: *National Health Survey: Health Risk Factors* (Cat. no. 4380.0).

Diabetes mellitus deaths — deaths where diabetes mellitus is mentioned on the death certificate as the underlying cause. ICD-9 code 250.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Diabetes — the number of people per 1,000 population reporting diabetes as a recent condition (within two weeks) or a long-term condition (lasting or expecting to last six months or more), including Diabetes Mellitus Type 1 and 2 and unspecified diabetes.
Reference: *National Health Survey: Users' Guide, Australia,* 1995 (Cat. no. 4363.0).

Disability-free life expectancy — the average number of years at birth a person might expect to live free of disability. Disability is the presence of a limitation, restriction or impairment due to a physical, emotional or nervous condition which had lasted or was likely to last 6 months or more.
Reference: *Australian Health Trends, 1995,* Australian Institute of Health and Welfare.

Disability with specific restrictions — people with a disability which causes difficulty or they need assistance with, or use an aid for, self-care, mobility, communication, employment and/or education activities. Includes all children aged under 5 with a disability .
Reference: *Disability, Aging and Carers: Summary of Findings, Australia,* 1998 (Cat. no. 4430.0).

Doctors per 100,000 population — the number of practising general and specialist medical practitioners per 100,000 estimated mean resident population.
Reference: *Australia's Health,* 1998, Australian Institute of Health and Welfare

Exercise (persons who do not exercise) — persons who reported that within the two-week reference period they did not undertake exercise activities for sport, recreation or fitness, so as to cause a moderate increase in heart rate or breathing.
Reference: *National Health Survey: Users' Guide, Australia,* 1995 (Cat. no. 4363.0).

Fetal death — the delivery of a child weighing at least 400 grams at delivery (or, when birthweight is unavailable, of at least 20 weeks gestation) which did not, at any time after delivery, breathe or show any other evidence of life such as a heart beat.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Heart disease — the number of people per 1,000 population reporting heart disease as a recent condition (within two weeks) or a long-term condition (lasting or expecting to last six months or more), including heart attack, coronary thrombosis, angina and leaking valve.
Reference: *National Health Survey: Users' Guide, Australia,* 1995 (Cat. no. 4363.0).

Hospital beds (per 1,000 population) — the total number of beds in all hospitals (public and private) providing acute care services per 1,000 estimated mean resident population. Hospitals providing acute care services are those in which the treatments typically require short durations of stay.
Reference: *Private Hospitals, Australia* (Cat. no. 4390.0); Australian Institute of Health and Welfare, National Public Hospital Establishments Database (unpublished data).

Health — definitions and references continued

Hospital separations (per 1,000 population) — the total number of separations in all hospitals (public and private) providing acute care services per 1,000 estimated resident population at 31 December of the reference year. A separation is an episode of care which can be a total hospital stay (from admission to discharge, transfer or death) or a portion of a hospital stay ending in a change of status (for example from acute care to rehabilitation). The inclusion of status changes has been progressively introduced since 1995–96. Hospitals providing acute care services are those in which the treatments typically require short durations of stay.
Reference: *Australian Hospital Statistics 1996–97* and earlier editions, Australian Institute of Health and Welfare

Hypertension — high blood pressure, either treated or untreated. People are considered hypertensive if they are on tablets for blood pressure and/or their systolic blood pressure is 160 mmHg or greater and/or their diastolic blood pressure is 95 mmHg or greater.
Reference: *National Nutrition Survey: Users' Guide, Australia,* 1995 (Cat. no. 4801.0)

ICD-9 — International Classification of Diseases 9th revision, clinical modification.
Reference: *International Classification of Diseases 9th Revision:* (ICD-9) National Center for Health Statistics, United States.

Infant mortality rate — the number of deaths of children under one year of age per 1,000 live births.
Reference: *Deaths, Australia* (Cat. no. 3302.0).

Injury — the number of people per 1,000 population reporting injury as a recent condition (within two weeks) or a long-term condition (lasting or expecting to last six months or more), including fractures, dislocations, sprains, wounds, bruising, crushing, burns, poisoning and surgical complications.
Reference: *National Health Survey: Users' Guide, Australia,* 1995 (Cat. no. 4363.0).

Life expectancy — the average number of years a newborn infant of a given sex would be expected to live if the age-specific death rates of the reference period continued throughout his or her lifetime. For persons aged 65 of a given sex, it is the average additional years of life expected if the age specific death rates of the reference period continued throughout his or her remaining life.
Reference: *Deaths, Australia* (Cat. no. 3302.0).

Live birth — the delivery of a child weighing at least 400 grams at delivery (or, when birthweight is unavailable, of at least 20 weeks gestation) who after being born, breathed or showed any other evidence of life such as a heart beat.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Lung cancer deaths — malignant neoplasm of the trachea, bronchus and lung. ICD-9 code 162.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Medium/high-risk drinkers — men aged 18 and over who reported drinking 50–75ml of absolute alcohol (medium-risk) or more than 75ml (high-risk) per day, and women aged 18 and over who reported drinking 25–50ml of absolute alcohol (medium-risk) or more than 50ml (high-risk) per day.
Reference: *National Health Survey: Health Risk Factors* (Cat. no. 4380.0).

Motor vehicle traffic accident deaths — ICD-9 codes E810–E819.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Neonatal death — deaths of any child weighing at least 400 grams at delivery (or, when birthweight is unavailable, of at least 20 weeks gestation) who was born alive (as defined under live birth) and who died within 28 days of birth.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Nursing home and hostel beds — the number of beds which are provided for long-term nursing care to chronically ill, frail or disabled persons, and beds provided for people who are unable to live wholly independently but do not require nursing care, per 1,000 of the population aged 70 and over.
Reference: *Nursing Homes in Australia 1996–97: A statistical overview,* AIHW; *Hostels in Australia 1996–97: A statistical overview,* AIHW and DHFS.

Overweight or obese adults — overweight is defined by a body mass index (BMI) greater than or equal to 25 and less than 30, while obesity is defined by a BMI greater than or equal to 30, as recommended by WHO (1995). BMI is body weight in kilograms divided by the square of the height in metres.
Reference: *National Nutrition Survey Selected Highlights, Australia,* 1995 (Cat. no. 4802.0).

Perinatal mortality rate — the annual number of fetal and neonatal deaths per 1,000 live births and fetal deaths combined (where birthweight was at least 400 grams).
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Persons with private health insurance — proportion of the total population with private basic hospital insurance.
Reference: Private Health Insurance Administration Council, *Annual Reports*.

Prostate cancer — malignant neoplasm of the prostate gland. ICD-9 code 185.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Skin cancer — malignant neoplasm of the skin, including both melanoma and non-melanocytic skin cancer. ICD-9 codes 172–173.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Standardised rates — these enable the comparison of rates between populations with differing age structures by relating them to a standard population. These rates are the overall rates that would have prevailed in a standard population if it had experienced at each age the rates of the population being studied. Mortality and Medicare usage rates use the 1991 Australian population as the standard population. All other standardised rates use the Australian population of the year that the survey was last collected.
Reference: *Deaths, Australia* (Cat. no. 3302.0)

Stroke — cerebrovascular disease, being a diseased condition of the brain due to an interruption of the blood supply. Caused by a blockage (embolism) or rupture (haemorrhage) of blood vessels within or leading to the brain. ICD-9 codes 430-438.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Suicide — ICD-9 codes E950–E959.
Reference: *Causes of Death, Australia* (Cat. no. 3303.0).

Tobacco: apparent consumption — grams of tobacco consumed divided by the population aged 15 and over. Apparent consumption of tobacco is based on the quantity on which import duty and excise (on cigarettes only) was paid and does not include duty or excise-free tobacco.
Reference: Unpublished ABS International Trade data.

Total fats: apparent consumption — the total fat content of food apparently consumed, in grams, divided by the total population.
Reference: *Apparent Consumption of Foodstuffs and Nutrients, Australia* (Cat. no. 4306.0).

Total health expenditure as a proportion of GDP/per person — total health expenditure as a proportion of gross domestic product, in current prices. Total health expenditure per person is expressed in Australian dollars at constant 1989–90 prices.
Reference: *Health Expenditure Bulletin,* Australian Institute of Health and Welfare.

Health of older people

HEALTH STATUS

In 1995, 64% of older people rated their health as good, very good or excellent. Fewer older people smoked (11%) than in 1989–90 (14%), but more of them were likely to be overweight or obese (45%, up from 41%).

As indicated by falling levels of mortality, the health of the population, including people aged 65 years or more, has greatly improved during this century. For example, a boy born in Australia during 1995–97 could expect to live to 76 years of age, and a girl to 81 years, compared to 55 and 59 years respectively for those born in the period 1901–10.[1,2]

ABS population projections indicate that by 2051 the proportion of the total population who are aged 65 years or more could almost double (see *Australian Social Trends 1999,* Our ageing population, pp. 6–10). This has prompted community and government concerns about future health care costs. Health expenditure on older people (on average $4,919 per person aged 65 or more in 1993–94) was nearly four times that on people aged under 65 years ($1,301). However, the Australian Institute of Health and Welfare has estimated that only 22% of the total increase in health costs over the last two decades (1975–76 to 1996–97), could be accounted for by increases in the proportion of older people in the population.[3]

Mortality trends and cause of death

Improvements in life expectancy are a direct result of the lowering of mortality rates at all ages. Over the last 30 years, improvements in mortality rates for older people were most marked for those aged in their mid to late 60s. Between 1967 and 1997, the death rate for those aged 65–69 decreased by 47% (from 3,120 to 1,660 per 100,000 people), while that for persons aged 85 and over declined by 29% (from 20,580 to 14,610 per 100,000 people).[1] The faster decline among the younger age group has been partly due to the dramatic drop in deaths from cardiovascular diseases.[3] Over the last decade (1986 to 1996), the overall death rate for persons aged 65 and over (standardised for age composition changes) fell by 12% to 4,532 deaths per 100,000 in 1996.

The leading causes of death for people aged 65 years and over did not change over the last decade (1986 to 1996). There were, however, some changes in their ranking, particularly for older men. This was because of substantial declines in deaths from some of these

Health status

Older people in this review comprise people aged 65 years and over.

Standardised death rates enable the comparison of rates between populations of differing age structures by relating them to a standard population. The population of men and women aged 65 and over have different age profiles and, in addition, their age profiles have changed over time. Death rates in this review have been standardised to take these factors into account.

Causes of death classifications used in this review are based on the ninth revision of the *International Classification of Diseases* (ICD–9 code) as follows: ischaemic heart disease (410–414); cancer ((140–208); stroke (430–438); respiratory disease (460–519); dementia (290, 294.1, 331.0); digestive system disease (520–579); genitourinary disease (580–629); diabetes mellitus (250); accidents, poisonings and violence (E800–E999); accidents (E800–E949); and suicide (E950–E959).

Recent or long-term conditions refer to medical conditions (illness, injury or disability) experienced in the two weeks prior to interview, or to medical conditions which have lasted at least six months or which the respondent expects to last for six months or more.

Recent health actions refer to activities related to a person's health taken during the two weeks prior to interview, such as visiting a doctor, taking medication, or changing daily routines in response to a health condition.

Leading causes of death for persons aged 65 and over(a)

	1986			*1996*		
	Males	*Females*	*Persons*	*Males*	*Females*	*Persons*
Causes of death	rate	rate	rate	rate	rate	rate
Ischaemic heart disease	2 064	1 263	1 602	1 506	928	1 172
Cancer	1 541	797	1 104	1 571	815	1 124
Stroke	711	692	707	557	516	537
Respiratory disease	681	237	411	592	299	412
Dementia	92	87	90	158	175	171
Digestive system disease	195	152	172	153	115	131
Diabetes mellitus	109	92	98	138	96	113
Genitourinary disease	118	86	97	113	84	94
Accidents, poison, violence	*139*	*87*	*109*	*117*	*67*	*88*
Accidents	107	79	91	88	60	72
Suicide	31	7	17	26	5	14
All causes	**6 542**	**4 195**	**5 172**	**5 695**	**3 711**	**4 532**

(a) Age-standardised death rates per 100,000 of the 1996 population aged 65 years and over.

Source: Unpublished data, Causes of Death collection.

diseases, such as ischaemic heart disease, stroke and diseases of the digestive system. The lower mortality rates for circulatory diseases (which include ischaemic heart disease and stroke) stemmed from reductions in tobacco smoking, improvements in medical treatments and control of some of the cardiovascular risk factors, such as high blood pressure and high cholesterol levels.[3]

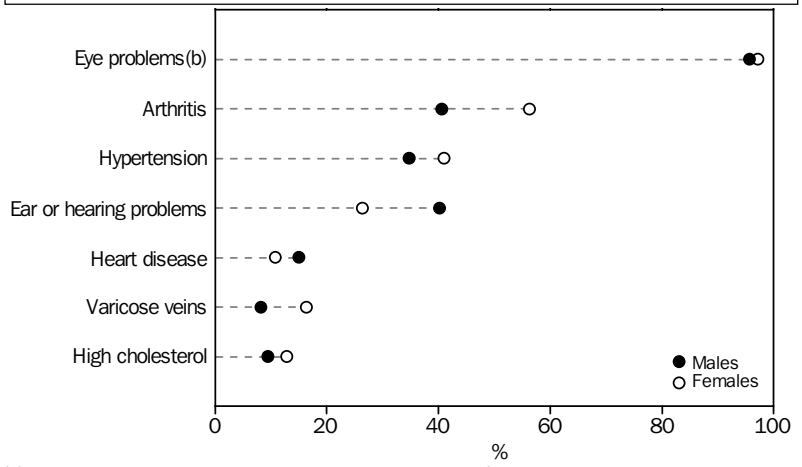
In 1996, ischaemic heart disease remained the leading cause of death for older people (26% of all deaths, down from 31% in 1986). Cancer deaths, the second most common cause, contributed 25% of all deaths – up from 22% in 1986. Older men in 1996 were slightly more likely to die of cancer than of ischaemic heart disease.

Between 1986 and 1996, the standardised death rate for breast cancer declined, while the rate for some other cancers increased, and these varied between men and women. For example, the standardised death rate for older men from lung cancer decreased from 409 to 374 per 100,000, while that from prostate cancer increased (245 to 287). During the same period, the standardised death rate for older women from lung cancer increased (from 86 to 114 per 100,000) and that from breast cancer declined (118 to 111).

Stroke remained the third leading cause of death overall, although respiratory diseases, as the fourth most common cause, were closing the gap (and had become the third most common cause of death for older men). Dementia, which included Alzheimer's disease, was the fifth leading cause of death. This is a strongly age-related condition and as the proportion of the elderly population aged 85 years and over increases, so will the proportion of deaths from dementia. In 1996, dementia deaths accounted for 3.8% of the deaths of older people compared with 1.7% in 1986. Some of this increase may be because of changes in diagnostic practices.[4]

There were differences in the most common cause of death depending on the age at which people died. However, the patterns were the same for both men and women. Deaths among those aged 65–74 years were more likely to have resulted from cancer than ischaemic heart disease, whereas deaths among those aged 85 years and over were more likely to have been from ischaemic heart disease than from cancer.

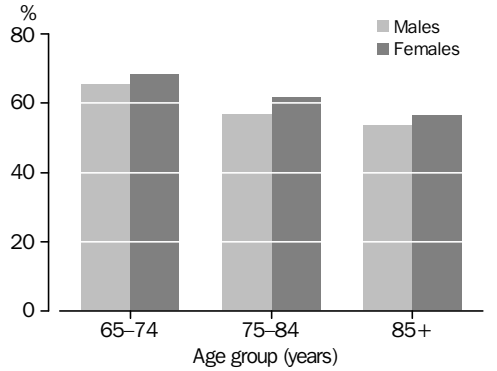
Long-term conditions(a) for persons aged 65 and over, 1995



(a) People may report more than one illness condition, therefore components may not add to total.
(b) Includes eye problems which can be corrected by glasses.

Source: Unpublished data, 1995 National Health Survey.

Self-assessed health status(a) of persons aged 65 and over, 1995



(a) Proportion of persons in each age group who assessed their own health as excellent, very good or good.

Source: Unpublished data, 1995 National Health Survey.

Self-assessed health status

Studies suggest that people's perceptions of their own health generally give a good indication of their mental and physical condition and are also predictors of mortality for those aged 65 and over.[5] Information collected from the 1995 National Health Survey indicated that 63% of older men and 65% of older women rated their own health as good, very good or excellent. However, proportions with good to excellent self-rated health decreased with age.

Recent and long-term conditions

In 1995, 89% of older people reported experiencing a recent illness, or a recent or recurrent episode of a long-term illness, in the two weeks prior to the survey. Of those who experienced a recent illness only, the most common were fluid problems (11%),

Health risk factors, for persons aged 65 and over(a), 1989–90 and 1995

	1989–90		1995	
	Males	Females	Males	Females
Health risk factors	%	%	%	%
Body mass(b)				
Underweight	7.5	15.3	5.4	12.4
Acceptable weight	47.2	46.6	46.2	45.0
Overweight	37.4	27.5	39.3	29.9
Obese	8.0	10.5	9.1	12.7
Smoker status				
Smoker	17.2	10.9	14.4	8.8
Ex-smoker	54.2	19.4	58.1	23.5
Never smoked	28.6	69.8	27.5	67.7
Alcohol risk level(c)				
Did not consume alcohol	39.0	63.6	40.5	65.2
Low consumption level	53.8	31.9	53.0	29.6
Medium consumption level	4.4	3.7	3.5	4.5
High consumption level	2.8	0.8	3.0	0.6
Exercise level(c)				
Did not exercise	37.0	46.2	38.3	47.3
Low exercise level	26.7	32.6	28.4	30.2
Medium exercise level	17.0	12.8	16.8	13.7
High exercise level	19.2	8.4	16.4	8.9

(a) Age and sex standardised to the 1995 Australian population.
(b) Calculated as reported weight in kilograms divided by the square of reported height in metres. Excludes not known and not stated.
(c) Based on reported activity during the two weeks prior to interview.

Source: Unpublished data, 1989–90 and 1995 National Health Surveys.

headaches (9%), insomnia (9%), dental problems (7%), hypertension (5%) and nerves, tension and nervousness (5%).

Most older people (99%) had one or more long-term health conditions. The four most common long-term conditions reported by older people were eye problems – including problems corrected by glasses – (96%), arthritis (49%), hypertension (38%) and ear or hearing problems (32%). However, not all people with these conditions had taken a recent health action for them.

For example, very few older people (6% or less) with long-term eye problems and ear or hearing problems had taken a recent health action in relation to these conditions. However, 86% of older people with long-term hypertension had taken some recent action for that condition – commonly medication to keep their blood pressure down. Fewer older people with high cholesterol or arthritis had recent treatment or medication for their condition (44% and 37% respectively).

There were some differences over time in the proportions of people with certain health conditions (the combined total of recent and long-term conditions). After allowing for changes in age distribution, there were higher proportions of older people reporting hypertension (41%) and high cholesterol (12%) in 1995, than in 1989–90 (37% and 5% respectively). However, the increase may have been because of factors such as greater public awareness of the importance of regular blood pressure and cholesterol checks to monitor for potential heart disease. There was also a substantial increase in the prevalence of varicose veins in older women (16% compared with 7% in 1989–90).

Health risk factors

There are a number of factors which are known to have an impact on the general health of the population and which can contribute to an increased risk of diseases such as cardiovascular disease and cancer. These factors include cigarette smoking,

excessive alcohol and fat consumption, high blood pressure and cholesterol levels, limited exercise and being overweight.[6]

Between 1989–90 and 1995, the main changes in risk behaviour by older people were a reported reduction in cigarette smoking from 17% to 14% for men, and from 11% to 9% for women, and an increase in the proportion of people who reported being overweight or obese (up from 45% to 48% for men, and from 38% to 43% for women). Increasing overweight and obesity levels in the community could slow the current reduction in cardiovascular mortality.

More objective measures of body mass available from the 1995 National Nutrition Survey indicated that a larger proportion of older people were overweight or obese (71% of men and 62% of women) than was revealed by the self-reporting measures obtained from the 1995 National Health Survey.

For all risk factors shown, except participation in exercise, older women demonstrated lower levels of risk behaviours than older men.

Recent health actions

Most older people spend some time taking care of their health, whether it is preventative or on-going care, or attention to a specific health problem. In 1995, more than nine out of ten older people took some type of health-related action in the two weeks prior to the survey. The most common health-related actions taken were the use of medication – excluding vitamins and herbal medicines – (92%), and visiting the doctor (41%). Of all older people, 28% took vitamins or minerals and 13% used natural or herbal medications.

Older women were about as likely as older men to visit the doctor or take medication, but more likely to take vitamins or minerals (31%) or natural or herbal medications (15%) than men (25% and 10% respectively).

Health actions taken(a) by persons aged 65 and over, 1995

	Males	*Females*
	%	%
Used medication		
Vitamins/minerals	24.6	30.9
Natural/herbal medications	10.1	15.4
Other medications	92.6	92.4
Consulted doctor	42.3	40.7
Consulted other health professionals	10.9	13.7
Days of reduced activity	10.5	12.7
Consulted dentist	6.3	5.6
Casualty/emergency/ outpatients visit	5.5	4.1
Other health related contact	3.3	3.8
Day clinic visit	2.1	2.3
Hospitalisation	1.9	2.0
	'000	'000
Total who took action(b)	**851.9**	**1 146.7**

(a) Health actions taken in the two weeks prior to the survey.
(b) Includes other health actions. People may undertake more than one type of action, therefore components may not add to total.

Source: Unpublished data, 1995 National Health Survey.

Disability status of persons aged 65 and over, 1998

	Persons			*Males*	*Females*
	65–74 years	*75–84 years*	*85 years and over*	*65 years and over*	*65 years and over*
Disability status	%	%	%	%	%
No disability	55.5	38.9	15.8	45.9	46.2
Disability	44.5	61.1	84.2	54.1	53.8
Core activity restriction(a)	*38.0*	*57.0*	*83.2*	*47.0*	*50.1*
Self care	14.3	28.3	63.1	19.6	27.0
Mobility	32.6	50.6	80.0	39.4	46.3
Communication	10.7	23.8	48.5	20.8	17.2
No core activity restriction	6.5	4.2	1.0	7.1	3.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000
Total	**1 294.8**	**750.5**	**226.0**	**993.3**	**1 277.9**

(a) People may have more than one type of restriction, therefore components may not add to total.

Source: Unpublished data, 1998 Survey of Disability, Ageing and Carers.

Trends in disability

Older people with disabilities have particular health care needs and are more likely to need assistance (see *Australian Social Trends 1995,* Older people with disabilities, pp. 55–57). As this care will need to be provided by others, there is interest in the effect increasing longevity may have on the prevalence of disability.

Disability rates in Australia have been rising since data first became available in 1981.[7] In 1998, more than half of men and women aged

65 years and over had a disability (54% each). Most of these also had a core activity restriction (87% and 93% respectively) which meant that they had difficulty with one or more daily tasks such as bathing, dressing, eating, getting out of a chair or bed, walking, using public transport or communicating with others.

Of core activity restrictions, mobility restriction was the most common type of restriction for older men and women (39% and 46% respectively), followed by self-care restriction for women (27%) and communication restriction for men (21%).

There were higher proportions of women than of men for self care and mobility restrictions. This is partly because women are more highly represented in the oldest age group (85 and over), a group whose disabilities tend to be more serious.

Both disability and core activity restriction increase with age, so there was a greater proportion of those aged 85 years and over who felt they needed assistance (92%) than of those aged between 65 and 74 years (32%).

Apparent trends in the United States of America during the 1980s suggest that disability-free life expectancy has increased.[8] In this country, at 65 years of age the number of remaining years of life expected to be disability-free has remained much the same for men (6.7 years in 1988 compared to 6.6 years in 1998, when adjusted to 1988 definitions of disability). For women, there has been a slight increase, from 8.6 years to 9.0 years. Overall, at birth, boys in 1998 could expect to have 58 years of disability-free life, and girls 62 years.[9]

Endnotes

1 Australian Bureau of Statistics, *Deaths, Australia,* Cat. no. 3302.0, various years, ABS, Canberra.

2 Australian Bureau of Statistics 1997, *Australian Demographic Trends 1997,* Cat. no. 3102.0, ABS, Canberra.

3 Australian Institute of Health and Welfare 1998, *Australia's Health 1998,* AIHW, Canberra.

4 Australian Bureau of Statistics 1996, *Causes of Death, Australia, 1995,* Cat. no. 3303.0, ABS, Canberra.

5 McCallum, J. et al. 1994, 'Self-rated health and survival: a 7-year follow-up study of Australian elderly', in *American Journal of Public Health,* vol. 84, 1994, pp.1100–1105.

6 Australian Institute of Health and Welfare and Commonwealth Department of Health and Family Services 1997, *First Report on National Health Priority Areas 1996,* AIHW Cat. no. PHE 1, AIHW and DHFS, Canberra.

7 Australian Bureau of Statistics 1999, *Disability, Ageing and Carers: Summary of Findings, Australia, 1998,* Cat. no. 4430.0, ABS, Canberra.

8 Crimmins E.M., Saito Y. and Ingegneri D. 1997, *Trends in disability-free life expectancy in the United States, 1970–90* in NUPRI reprint series no. 69, January 1998, NUPRI, Tokyo.

9 Australian Bureau of Statistics, 1998 Survey of Disability, Ageing and Carers (unpublished data).

Health and socio-economic disadvantage of area

HEALTH STATUS

Those living in areas of greater socio-economic disadvantage rated their own health more negatively, had higher rates of some illnesses, and had less healthy lifestyles than those in other areas. They visited their doctors more often, but made less use of some preventative health measures.

There is a substantial body of evidence that people of lower socio-economic status have worse health than others. One measure of socio-economic status which combines information regarding a number of relevant variables, such as income, education and occupation, is the index of relative socio-economic disadvantage of area. Best regarded as a measure of the economic and social characteristics of a person's local environment, and to an extent indicative of individual socio-economic status, the index is based on aggregate census data for small areas. Two National Health Surveys, in 1989/90 and 1995, confirmed that those in more disadvantaged areas scored more negatively than others on several health indicators.[1]

These results may partly reflect downward mobility among people with disabling conditions. Moreover, the survey data are self-reported, and so any variation by socio-economic status may result from differences in reporting behaviour rather than differences in health. However, it is widely accepted that socio-economic status affects health.

A number of ways in which this may happen have been suggested.[2] Different economic resources may result in differences in nutrition, the standard of housing and in access to medical care. Education appears to have an effect, independent of its connection to higher income, possibly related to the ability to obtain information and services. The general degree of security people have is seen as influencing health, with policy analysts concerned about the levels of anxiety, social isolation and marginalisation among those of lower socio-economic status. Many studies show a higher level of health risk behaviours among people of lower socio-economic status.[2]

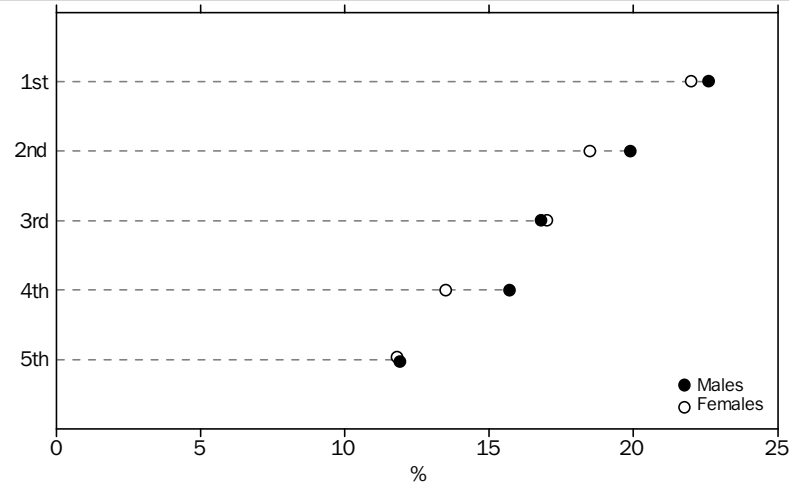
Measuring socio-economic status

The ABS has developed indexes to describe the socio-economic status of populations living in different geographic areas.[3] Using 1991 population census data, these have been derived by a multivariant technique known as principal component analysis. This technique summarises a large number of socio-economic variables into a single measure which can then be used to rank areas (from highest to lowest) on a broad socio-economic scale. By allocating the index value of each area to individuals living in those areas, people in low socio-economic status areas can be readily distinguished from those living in high socio-economic status areas.

In this review, socio-economic status has been determined using the index of relative socio-economic disadvantage constructed for Census Collection Districts (CDs). CDs are usually clusters of approximately 200–250 dwellings. CDs with the greatest relative disadvantage typically have high proportions of low income families, unemployed people, people without educational qualifications, households renting public housing and people in unskilled and semi-skilled occupations. Conversely, the least disadvantaged areas tend to have higher proportions of high income earners, professional workers and more highly qualified people, as well as low unemployment rates.

In this review, people have been ranked according to their index score and divided into five equal groups (quintiles) from highest to lowest. The first quintile lived in the most disadvantaged areas, the fifth quintile in the least disadvantaged areas.

Proportion(a) who rated their own health as fair or poor, by quintiles of socio-economic disadvantage of area(b), 1995



(a) Aged 15 years and over. Age-standardised rates.
(b) 1st quintile – most disadvantaged; 5th quintile – least disadvantaged.

Source: Unpublished data, National Health Survey, 1995.

Self-rating of health

A person's perception of their own general health status is considered a useful measure of their current physical and mental health, and a predictor of mortality in people aged 60 and over.[4] In 1995, a greater proportion of both males and females in the areas of

Proportion(a) who had selected conditions(b) by quintile of socio-economic disadvantage of area, 1995

	Quintile of socio-economic disadvantage of area(c)					
	1st	*2nd*	*3rd*	*4th*	*5th*	*Total*
Conditions	%	%	%	%	%	%
Arthritis	16.6	15.7	15.0	13.8	13.2	14.7
Hayfever	12.4	13.0	12.7	14.0	16.8	13.9
Asthma	12.7	10.5	11.5	10.9	11.0	11.3
Hypertension	11.8	11.3	10.9	10.2	9.6	10.7
Deafness	10.3	9.5	10.1	9.1	9.0	9.5
Back problems	6.8	6.3	7.0	6.5	6.5	6.6
Injuries	6.4	6.5	6.2	6.1	6.4	6.4
Varicose veins	5.6	5.5	5.3	5.5	5.4	5.5
High cholesterol	5.3	5.5	4.7	5.3	5.1	5.1
Dental problems	4.9	4.6	5.0	4.9	5.7	5.1
Bronchitis/emphysema	5.2	4.6	4.1	4.2	3.7	4.3
Ulcer (gastro-intestinal)	3.7	3.4	2.7	2.4	2.5	2.9
Heart disease	2.8	2.9	2.8	2.9	2.6	2.8
Hernia	2.6	2.8	3.2	3.0	2.3	2.7
Diabetes	3.1	2.3	2.1	2.2	1.7	2.3
All other conditions(d)	82.6	82.1	83.3	83.6	85.2	83.5
Total (people with at least one condition)(d)	**87.4**	**87.1**	**87.8**	**88.3**	**89.6**	**88.1**

(a) Of total population (all ages). Age-standardised rates.
(b) The fifteen most common conditions, excluding conditions classed as minor.[1]
(c) 1st quintile – most disadvantaged; 5th quintile – least disadvantaged.
(d) Includes minor conditions.

Source: Unpublished data, National Health Survey, 1995.

greatest disadvantage rated their health as poor or fair (rather than good, very good or excellent) than those from other areas. There was a clear gradient of more negative assessment of health with greater disadvantage of area. Among all people, aged 15 years and over, 17% rated their health as fair or poor, with this percentage ranging from 12% of those in the least disadvantaged areas to 22% of those in the most disadvantaged areas.

Illness

Despite the clear gradient in negative perception of health, there was no clear gradient in the total rate of illness by socio-economic disadvantage of area, after adjustment for age differences. The great majority of the population (88%) had at least one condition in the two weeks prior to interview, and proportions for each quintile ranged between 87% and 90%.

The high proportion who had at least one condition results partly from the prevalence of some extremely common minor conditions, both chronic and acute, such as eyesight problems correctable by glasses, headache and the common cold. Out of the fifteen most common non-minor illnesses recorded in the survey, five were more common in the most disadvantaged areas. These were: arthritis, asthma, bronchitis/emphysema, ulcer and diabetes. There were two conditions which showed the reverse pattern: hayfever and dental problems were more common in the least disadvantaged areas. (The least disadvantaged quintile also made more use of dental services. The diagnosis of dental problems is more likely when people visit the dentist regularly.) For these seven conditions, the rates for males and females followed a generally similar pattern by quintile of socio-economic disadvantage of area.

Those conditions which showed no clear pattern by socio-economic status of area included some serious conditions such as heart disease. However, an examination of mortality data for adults aged 25–64 years found that death rates from ischaemic heart disease were higher in more disadvantaged areas (after adjusting for age differences between quintiles).[1] Other conditions or causes with higher death rates in the most disadvantaged areas included: bronchitis/emphysema, pneumonia/influenza, lung cancer, diabetes, cerebrovascular disease (mostly strokes), suicide and traffic accidents. Both the total death rate and the rate of avoidable death in the most disadvantaged areas were substantially higher than in the least disadvantaged areas.

There are a number of possible reasons why some illness rates recorded in the National Health Survey may not show gradients similar to death rates compiled from death certificates. It may be that there are important differences in the severity of particular illnesses, or in the co-occurrence of illnesses, which are not captured by the data on illness rates, but contribute to higher death rates in more disadvantaged areas. Some deaths, such as deaths through injury, or some heart attacks, are not necessarily preceded by illness. Moreover, it is possible that the likelihood of a condition being diagnosed, and hence reported to interviewers, may vary according to socio-economic disadvantage. Finally, some serious conditions occur in relatively small numbers in the population, and for these conditions it is more difficult to calculate a reliable rate from a sample survey.

Proportion(a) with selected risk factors by quintile of relative socio-economic disadvantage of area, 1995(b)

	Current smoker		*Medium/high risk alcohol*		*Being overweight/obese*		*Did not exercise*	
	Males	Females	Males	Females	Males	Females	Males	Females
Quintile of disadvantage	%	%	%	%	%	%	%	%
1st (most disadvantaged)	35.9	27.1	7.3	3.5	44.4	33.6	35.8	37.7
2nd	30.9	22.6	4.4	2.4	47.1	33.6	35.0	34.6
3rd	27.2	20.1	5.7	2.6	44.9	32.1	35.1	32.7
4th	25.6	20.0	5.2	2.8	48.3	30.8	33.5	33.4
5th (least disadvantaged)	18.2	14.8	4.5	4.0	46.0	27.4	25.8	27.9
Total	**27.0**	**20.6**	**5.4**	**3.1**	**46.2**	**31.2**	**32.7**	**33.1**

(a) Age-standardised rates.
(b) For smoker status and alcohol consumption, data relate to the population aged 18 years and over. For weight and exercise, data relate to the population aged 15 years and over.

Source: Unpublished data, National Health Survey, 1995.

Risk factors

A healthy lifestyle, comprising good nutrition, regular exercise, and not smoking or drinking alcohol at a high risk level, is promoted by health experts in the interest of reducing the incidence of some major causes of illness, disability and death in the population. Smoking has been associated with several cancers and chronic lung disease. Excessive intake of alcohol has been associated with liver disease, high blood pressure, cancers of the digestive system, and injuries from accidents and violence. Lack of exercise and being overweight have been associated with mature onset diabetes. In addition, all four of these risk factors have been associated with coronary heart disease and stroke.[5] In 1995, the prevalence of these potentially modifiable risk factors varied according to socio-economic disadvantage of area.

In 1995, both males and females (aged 18 years and over) in more disadvantaged areas were more likely to smoke. The lower proportions who smoked in less disadvantaged areas partly reflected the higher proportions who had never smoked in these areas. 48% of males and 62% of females in the least disadvantaged areas had never smoked, compared to 33% of males and 51% of females in the most disadvantaged areas. Further, of those who had ever smoked, a larger proportion in the least disadvantaged areas were ex-smokers (65% of males and 61% of females) compared to those in the most disadvantaged areas (47% of males and 45% of females).

A small proportion of the population aged 18 years and over (4%) drank alcohol at a medium or high risk level (based on information they gave about alcohol consumption in the week prior to interview). For males, the proportion was highest among those in the most disadvantaged areas (7%). For females, the highest proportions were recorded in the most and the least disadvantaged quintiles (4%).

A larger proportion of females in the areas of greatest disadvantage were overweight or obese than in the least disadvantaged areas (34% compared to 27%). However, this pattern was not observed for males. A larger proportion of both males and females in the areas of greatest disadvantage did no exercise, compared to those in the areas of least disadvantage.

Preventative health care

In general, people from the more disadvantaged areas were less likely to have taken preventative health actions such as immunising children against contagious diseases, or having certain cancer screening tests.

The Child Immunisation Survey, 1995, found that the proportion of children fully immunised against the seven diseases listed on the National Health and Medical Research Council immunisation schedule was lowest in the areas of greatest disadvantage. The highest rates of immunisation were recorded for measles (92%) and mumps (90%) – for these diseases the difference in the immunisation rate by socio-economic disadvantage of area was relatively small. The lowest immunisation rate was recorded for

Proportion of children aged 3 months to 6 years fully immunised(a), by quintile of socio-economic disadvantage of area, April 1995

	Diptheria/ Tetanus(b)	*Whooping cough*	*Polio*	*Measles*	*Mumps*	*Rubella*	*HIB*
Quintile of disadvantage	%	%	%	%	%	%	%
1st (most disadvantaged)	61.9	54.6	75.9	89.5	87.0	72.2	39.9
2nd	67.4	58.9	81.4	90.8	88.2	72.5	44.0
3rd	68.5	59.0	81.0	90.7	88.2	75.4	49.9
4th	71.3	62.3	87.1	94..0	93.1	78.6	56.0
5th (least disadvantaged)	72.9	63.7	86.2	93.1	91.2	79.4	58.7
Total	**68.6**	**59.9**	**82.6**	**91.7**	**89.7**	**75.9**	**50.2**

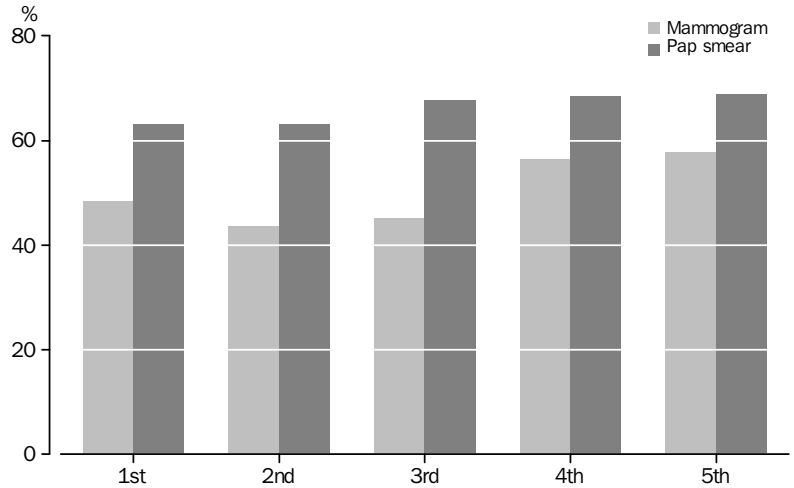
(a) Children aged less than one year were excluded when calculating the rate of immunisation against Measles, Mumps and Rubella.
(b) Vaccines for these diseases are usually given together.

Source: Unpublished data, Children's Immunisation Survey, Australia, April 1995.

the disease Haemophilus Influenzae type b (Hib) (50%), which at the time of survey had only recently been included in the immunisation schedule. The proportion immunised against HIB was 40% in the areas of the greatest socio-economic disadvantage and 59% in the areas of the least socio-economic disadvantage. The difference between the immunisation rate for the lowest and highest quintiles was also relatively large for whooping cough and diptheria/tetanus.

Women from the more disadvantaged areas were less likely to have had certain recommended cancer screening tests than others. (Women who reported having had these tests would have included some who had them in response to symptoms or family history rather than as a general screening test.) In 1995, 51% of women aged 50–69 had had a mammogram (to detect breast cancer) within the last two years. The rate was highest among women from the least disadvantaged areas – 56% of the 4th quintile and 58% of the fifth quintile – while the rate for the other quintiles ranged between 44% and 48%. Of women aged from 20 to 69 years, 66% had had a pap smear (to detect cancer and precancerous conditions of the cervix) within the last two years. The rate was somewhat lower in the most disadvantaged areas (63% of the 1st and 2nd quintiles) than in other areas (68% to 69% of the other quintiles).

Women in target age groups(a) who had had a cancer screening test within the previous two years by quintile of socio-economic disadvantage of area(b), 1995



(a) Women aged 20–69 years for pap smear tests; aged 50–69 years for mammograms.
(b) 1st quintile — most disadvantaged; 5th quintile — least disadvantaged.

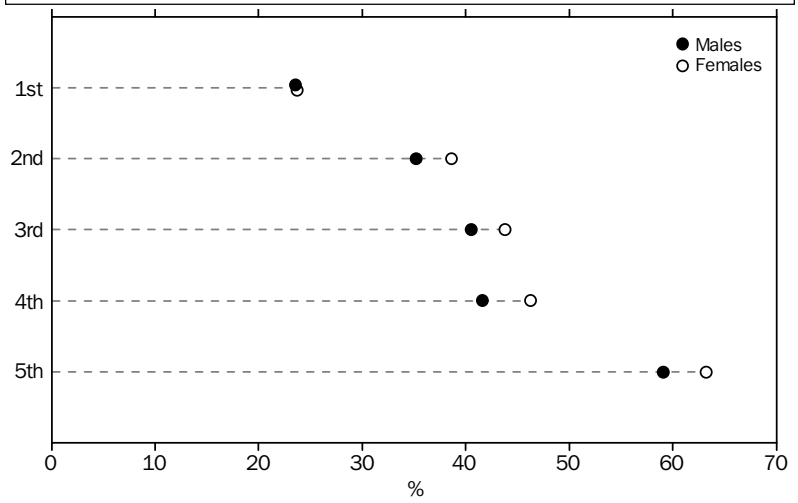
Source: Unpublished data, National Health Survey, 1995.

Those in the most disadvantaged areas were also less likely to check their skin regularly for cancers, although the difference between quintiles was relatively small. There were 54% of males and 62% of females in the most disadvantaged areas who said that they regularly checked their skin for cancers, compared to 59% of males and 67% of females in the least disadvantaged areas.

Health insurance

Taking out private health insurance is one way of planning for health expenses. Depending on a person's insurance cover, this may include planning for some services not covered by Medicare (the public health scheme), such as dental services, physiotherapy services or the cost of eye-glasses. Those with hospital cover may be able to have some hospital-based services, such as surgery, performed in a more timely fashion, through recourse to services in private hospitals.

Proportion of the population who had private health insurance by quintile of socio-economic disadvantage of area, 1995



(b) 1st quintile – most disadvantaged; 5th quintile – least disadvantaged.

Source: Unpublished data, National Health Survey, 1995.

People in the areas of greatest disadvantage were least likely to have private health insurance. Of those in the most disadvantaged areas, 24% had private health insurance compared to 61% in the least disadvantaged areas. The three middle quintiles were more closely grouped: the proportion with private health insurance ranged from 40% to 44%.

Apart from Medicare, there are some other government health schemes which make it easier to access some health services. Most of these apply income tests to ensure that assistance is restricted to those less able to afford medical expenses. Data from the health survey confirmed that those from the most disadvantaged areas were most likely to be covered by a government health care card or a veteran's concession card. 53% of those in the most disadvantaged areas were covered by such a card compared to 22% of those in the least disadvantaged areas.

Primary health care

People from the areas of greater socio-economic disadvantage were more likely than others to have visited a doctor in the two weeks preceding interview. They were also more likely to have used outpatient/casualty services in the two weeks prior to interview than those from less disadvantaged areas. This pattern of greater use of certain medical services confirms that of other studies and is consistent with people from more disadvantaged areas having poorer health.[1] In contrast, a greater proportion of those in the least disadvantaged areas had visited a dentist. As dental services are not covered by public health arrangements to the same extent as are the use of doctors or hospital services, this is consistent with those in less disadvantaged areas being more likely to hold private medical insurance and to have higher incomes.

Endnotes

1 Mathers, C. 1994, *Health differentials among adult Australians aged 25–64 years* (Health monitoring series no 1.) pp. 296–297.

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3 Australian Bureau of Statistics 1991, *Information paper: 1991 Census – Socio-economic Indexes for areas*, Cat. no. 2912.0, ABS, Canberra..

4 McCallum, J. et al 'Self-rated health and survival: a seven year follow up of Australian elderly' *American Journal of Public Health*, vol 84, 1994, pp. 1100–1105.

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Health service use(a) by quintile of socio-economic disadvantage of area, 1995

	Doctor visits		*Dentist visits*		*Outpatient/casualty visits*	
	Males	Females	Males	Females	Males	Females
Quintiles of disadvantage	%	%	%	%	%	%
1st (most disadvantaged)	22.7	28.0	4.7	5.3	3.9	3.2
2nd	20.7	26.1	4.5	5.0	3.2	3.1
3rd	20.9	25.1	5.2	5.6	2.9	2.5
4th	20.0	25.5	4.7	6.0	2.7	2.4
5th (least disadvantaged)	20.1	24.9	6.8	7.2	1.9	2.1
Total	**20.8**	**25.9**	**5.3**	**5.9**	**2.9**	**2.7**

(a) Percentage of the population who said they had used this service in the two weeks prior to interview. Age standardised.

*Source:*Unpublished data, National Health Survey, 1995.

Asthma

MORTALITY AND MORBIDITY

In 1995, it was estimated that over two million Australians (11% of the total population) had asthma. Between 1989–90 and 1995, self-reported asthma prevalence increased by about one third.

The risk of dying from asthma is low and continues to decline in Australia. However, prevalence of asthma appears to be increasing and is a cause of concern for health authorities and the general population because of the personal, social and economic costs associated with the disease.

Between the 1989–90 and the 1995 National Health Surveys, the proportion of the population reporting asthma (as a recent illness and/or as a long term condition) increased by about one third. The increase in self-reported asthma prevalence was greater among adults (41%) than among children (17%) and, for both children and adults, the increase was greater among females than males. Improvements in identification and treatment of asthma, increased public awareness of the condition, and small differences in survey methodology between 1989–90 and 1995 may all have contributed to greater reporting of asthma in 1995. However, it is not possible to measure how much of the increase in reporting is due to these factors and how much reflects actual increases in asthma prevalence.

The 1995 National Health Survey (NHS) estimated that over 2 million Australians (11% of the total population) had asthma. Prevalence rates were highest among 5–14 year olds (21% among boys and 17% among girls). Asthma prevalence was also

Self-reported prevalence of asthma among children and adults

	Number	*Prevalence rates*		
	1995	*1995*	*1989–90*	*Increase 1989–90 to 1995*
	'000	%	%	%
Children (0–14 years)	*632.6*	*16.3*	*13.9*	*17.3*
Boys	363.4	18.3	16.3	12.3
Girls	269.2	14.3	11.4	25.4
Adults (15 years and over)	*1 408.8*	*9.9*	*7.0*	*41.4*
Men	618.2	8.8	6.4	37.5
Women	790.6	11.0	7.5	46.7
Total	*2 041.4*	*11.3*	*8.5*	*32.9*
Males	981.6	10.9	8.7	25.3
Females	1 059.8	11.7	8.3	41.0

Source: 1995 National Health Survey: Asthma and Other Respiratory Conditions, Australia (Cat. no. 4373.0); and unpublished data, 1989–90 National Health Survey.

Asthma

Asthma is a disease characterised by airway-wall inflammation.[1] It is a chronic (long-term) condition which may be punctuated with acute (short-term) episodes at varying intervals and varying degrees of severity. Severe acute attacks can result in death.

In the short term, asthma causes bronchial hyperresponsiveness, variable airway narrowing and mucus production, giving rise to the typical symptoms of asthma – wheeze, dyspnoea (difficult or painful breathing), and cough. Over many years, persistent airway inflammation may cause fixed airway narrowing, with a reduced response to broncho-dilating agents.[1]

The underlying causes of asthma are not known, but the combination of genetic factors and exposure to allergens (e.g. house dust mite, animal dander, moulds) or chemicals (e.g. formaldehyde, PVC, latex) results in sensitisation and airway inflammation.[2] Acute episodes may be triggered by exercise, some food additives, some medications, and a range of common irritants such as environmental tobacco smoke (passive smoking), pressurised aerosols, soap powders, solvents and airconditioning.[1]

Self-reported prevalence of asthma

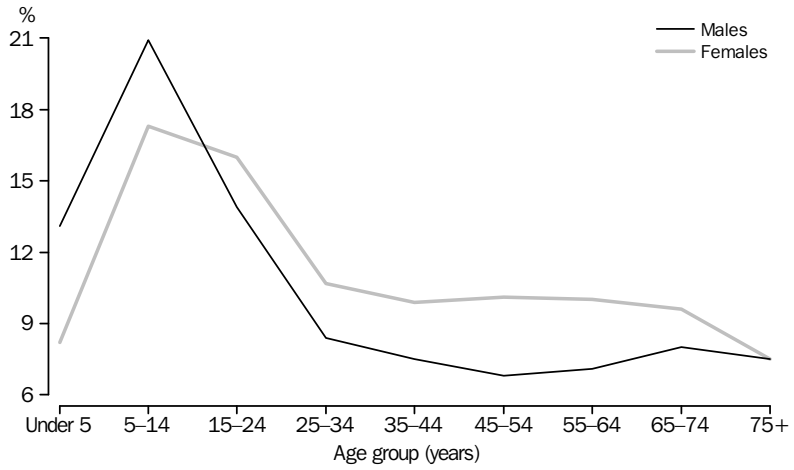
Statistics on self-reported prevalence of asthma in Australia were compiled by the ABS using information collected from households in two National Health Surveys – conducted in 1989–90 and 1995. Where possible, a personal interview was conducted with each adult. A parent or guardian was asked to provide information about children in the household. Respondents may have reported asthma as a recent illness, a long-term condition, or both.

Recent illness – respondents may have reported asthma as the reason for taking one or more specified health-related actions during the two weeks before interview (e.g. doctor consultation, medication use, time away from work/school) or as an illness episode in the two-week reference period for which no specified action was taken.

Long-term condition – respondents also had the opportunity to report having asthma as a long-term health condition (i.e. a condition which has lasted, or is likely to last, for six months or more) regardless of whether they had experienced a recent episode or taken any recent health-related action for their asthma.

Reported information on medical conditions was not medically verified, and was not necessarily based on diagnosis by a medical practitioner. Self-reported information on medical conditions may differ from information which might be obtained from other sources.

Self-reported asthma prevalence rates by age, 1995



Source: 1995 National Health Survey: Asthma and Other Respiratory Conditions, Australia (Cat. no. 4373.0).

relatively high among 15–24 year olds, with 16% of females and 14% of males in this age group reporting that they had asthma in 1995. Up to 15 years of age, asthma was more common among boys than girls. In older age groups, however, the condition was generally more common among women than among men, with prevalence rates converging for persons aged 75 and over.

Smoking and asthma

A recent report[3] by the National Health and Medical Research Council (NHMRC) found that passive smoking is firmly linked, as a likely causal factor, to a range of health problems including lower respiratory tract disease and asthma in children. The NHMRC estimates that children exposed to environmental tobacco smoke are about 1.4 times as likely to suffer from asthma as children who are not exposed, and that around 8% of childhood asthma cases are attributable to passive smoking.

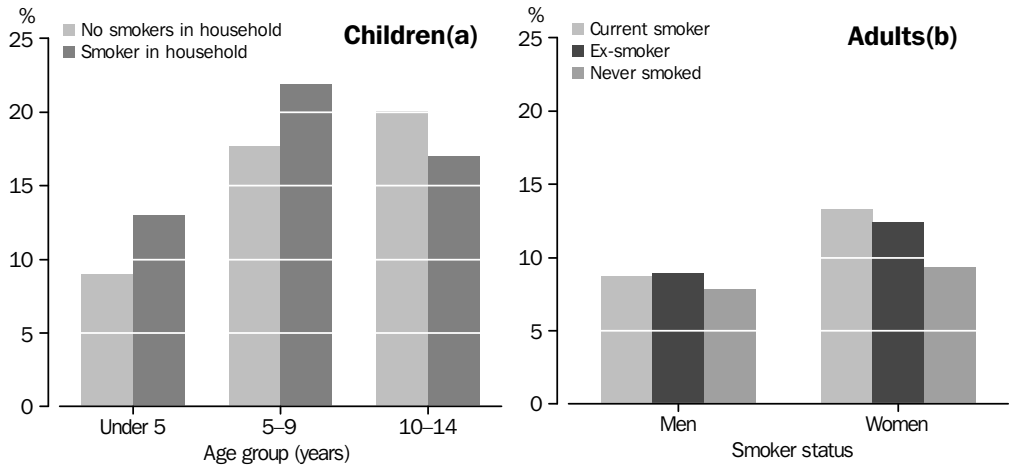
The 1995 NHS found that prevalence of asthma was higher (about 4 percentage points) among young children living in households with one or more smokers than in households with no smokers present. Among 10–14 year olds, however, prevalence of asthma was lower in households with smokers present. The Survey did not collect any information about whether children had ever been exposed to household smoking in the past, or whether they were currently exposed to smoking outside the home.

The 1995 NHS also found that asthma prevalence was higher among women who were either current smokers or ex-smokers than among those who had never smoked. For men, however, the relationship between asthma and smoking status appeared to be much weaker.

Treatment of asthma

Asthma can be controlled with preventive medications and strategies to reduce airway inflammation.[1] In 1995, an estimated 1.1 million people (55% of all people with asthma) reported using medication for their asthma during the two weeks before

Smoking and self-reported asthma prevalence rates, 1995



(a) Aged under 15 years.
(b) Aged 18 years and over. Prevalence rates have been age standardised to the total population (aged 18 years and over) at 30 June 1995.

Source: 1995 National Health Survey: Asthma and other Respiratory Conditions, Australia (Cat. no. 4373.0).

People who took recent(a) health-related actions because of their asthma, 1995

	Age group (years)					
	0–14	*15–24*	*25–44*	*45–64*	*65 and over*	*Total*
Type of action taken	%	%	%	%	%	%
Used medication	48.6	52.7	57.1	61.6	68.2	55.3
Consulted doctor	6.9	2.2	3.5	4.4	5.6	4.6
Took day(s) off work/school	3.8	1.2	0.8	0.5*	* *	1.7
Other day(s) of reduced activity	2.5	0.7	1.3	1.5	2.5	1.7
Consulted other health professional	1.5	1.1	0.5	0.6*	* *	1.0
Hospital casualty/emergency/outpatients	1.0	0.7	* *	* *	* *	0.6
Total who took action for asthma(b)(c)	49.3	53.0	57.5	62.0	68.7	55.8
Total who had asthma	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000	'000
Total who had asthma	**632.6**	**404.9**	**508.3**	**315.5**	**180.0**	**2 041.4**

(a) During the two weeks before interview.
(b) People may have taken more than one type of action. Therefore components may not add to totals.
(c) Includes people who took vitamins/minerals, used natural/herbal medicines, visited a hospital day clinic or were admitted to hospital as inpatients.

Source: Unpublished data, 1995 National Health Survey.

interview. The proportion using medication increased steadily with age, from 49% of 0–14 year olds to 68% of those aged 65 years and over.

While children were less likely than other age groups to have used medication for their asthma, they were more likely to have seen a doctor. In 1995, 7% of 0–14 year olds with asthma had seen a doctor about it in the previous two weeks. Among adults, the proportion who consulted a doctor increased steadily with age, from 2% of 15–24 year olds to 6% of those aged 65 years and over.

Even with careful management, acute attacks of asthma cannot always be prevented and severe attacks may require treatment in hospital. The 1995 NHS estimated that 1% of children with asthma (6,400) had visited hospital casualty, emergency or outpatients units for asthma treatment during the two weeks before interview.

Hospital statistics compiled by the Australian Institute of Health and Welfare[4] show that asthma is the most common medical condition for which children are admitted to hospital. For the year 1996–97, hospitals in Australia recorded asthma as the primary reason for 62,000 inpatient episodes, half of which related to children under 15 years of age. Asthma was the primary reason for 10% of all hospital inpatient episodes among 1–4 year olds and 5% among 5–14 year olds.

Reduced activity due to asthma

The 1995 NHS estimated that 1 in 26 children with asthma had taken one or more days off school (in the past two weeks) because of their asthma. Other than days away from school, 1 in 40 children with asthma had reduced their usual activities (e.g. sport, exercise) or stayed in bed for one or more days during the previous two weeks because of their asthma.

On the whole, asthma appeared to cause less disruption to the usual activities of adults than of children. For example, fewer than 1% of 25–64 year olds with asthma had taken a day off work in the past two weeks because of their asthma. With the exception of older people (aged 65 years and over), adults were also less likely than children to have had other days of reduced activity (i.e. other than days away from work or school) because of their asthma.

Deaths due to asthma

The risk of dying from asthma is relatively low. In 1997, asthma was the underlying cause of 715 deaths which represented 5% of deaths from respiratory diseases and less than 1% of all deaths in Australia. Asthma was recorded as a contributing cause in a further 1,157 deaths. As for most other causes of death, the rate of asthma deaths increases with age. In 1997, age-specific death rates

Deaths due to asthma: age-standardised rates(a)

(a) Age standardised death rate per 100,000 of the total population at 30 June 1991.

Source: Unpublished data, Causes of Death collection.

from asthma ranged from less than 1 death per 100,000 of the population aged under 35 years, to just over 22 deaths per 100,000 of the population aged 65 years and over.

Age-standardised death rates from asthma (as the underlying cause of death) increased during the 1980s, peaking in 1989, but have since declined to below the 1982 rates for both males and females. Several researchers[5,6,7] have found evidence to suggest that some of the increase in asthma death rates during the 1980s may have been due to diagnostic transfer, resulting in overstatement of asthma deaths, particularly among older people. Diagnostic transfer refers to a tendency to diagnose one condition rather than another owing to similarities in symptoms and changing recognition of diseases.

Endnotes

1 Jenkins, C.R. and Woolcock, A.J. 1997, 'Asthma in adults', *Medical Journal of Australia,* vol. 167, pp. 160–165.

2 Sporik, R., Holgate, S., Platt-Mills, T., Cogswell, J. 1990, 'Exposure to house dust mite allergen (Der p1) and the development of asthma in childhood. A prospective study', *New England Journal of Medicine,* vol. 323, pp. 502–507

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6 Campbell, D.A., McLennan, G., Coates, J.R., Frith, P.A., Gluyas, P.A., Latimer, K.M., Martin, A.J., Roder, D.M., Ruffin, R.E., Yellowlees, P.M. 1992, 'Accuracy of asthma statistics from death certificates in South Australia', *Medical Journal of Australia,* vol. 156, pp. 860–863.

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Mental health

HEALTH STATUS

In 1997, 2.4 million people aged 18 years and over (18% of all adults) had experienced a mental disorder during the last 12 months.

A mental disorder can occur at any age and in any social group. Most people in Australia enjoy good mental health. Nevertheless, in 1997, 2.4 million people aged 18 years and over (18% of all adults) had experienced a mental disorder during the last 12 months. Many causal factors of mental disorders have been identified (e.g. stress) although the links between these factors and mental disorder is not clear.

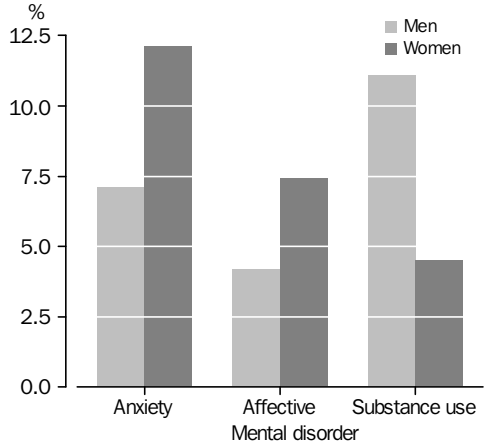
For society, mental disorders represent a major expense through the loss of productivity and the costs of treatment. For the individual, it can affect the ability to work and participate fully in society. In addition, individuals may feel isolated and discriminated against due to the attitudes of many people who are uninformed about the nature of mental disorders. In a severe form, this may lead to suicide.

In recognition of the need to highlight issues of quality of life and rights of people with mental disorders, in 1992 the National Mental Health Strategy was developed and in 1996 mental health was designated as a National Health Priority Area.

Types of mental health disorders

The prevalence of mental disorder was similar for men and women (17% and 18% respectively). However, there were differences in the prevalence of mental disorders of different types among men and women and at different ages. Women were more likely to have experienced anxiety disorders (12% for women compared to 7% for men) and

Proportion of people with a mental disorder(a), 1997



(a) Of persons aged 18 years and over and during the 12 months prior to interview.

Source: Mental Health and Wellbeing Profile of Adults, Australia, 1997 (Cat. no. 4326.0).

1997 Survey of Mental Health and Wellbeing

This review presents information obtained from the 1997 Survey of Mental Health and Wellbeing of Adults (18 years and over). Measuring the prevalence of mental disorders in the community is a complex task, as mental disorders are usually determined through clinical diagnosis. For this reason, the survey did not attempt to cover all disorders, only those considered to have the highest prevalence in the community and which were able to be identified in an interviewer-based household survey. For this reason, the prevalence of organic mental disorders, which, more commonly affect older people (e.g. senile dementia), were not collected.

The diagnostic component of the survey was administered through a modified version of the Composite International Diagnostic Interview (for more detailed information refer to the 1997 *Survey of Mental Health and Wellbeing of Adults, User Guide,* Cat. no. 4327.0).

Physical conditions refer to the presence of any of the following: asthma, chronic bronchitis, anaemia, high blood pressure, heart trouble, arthritis, kidney disease, diabetes, cancer, stomach or duodenal ulcer, chronic gall bladder or liver trouble, hernia or rupture.

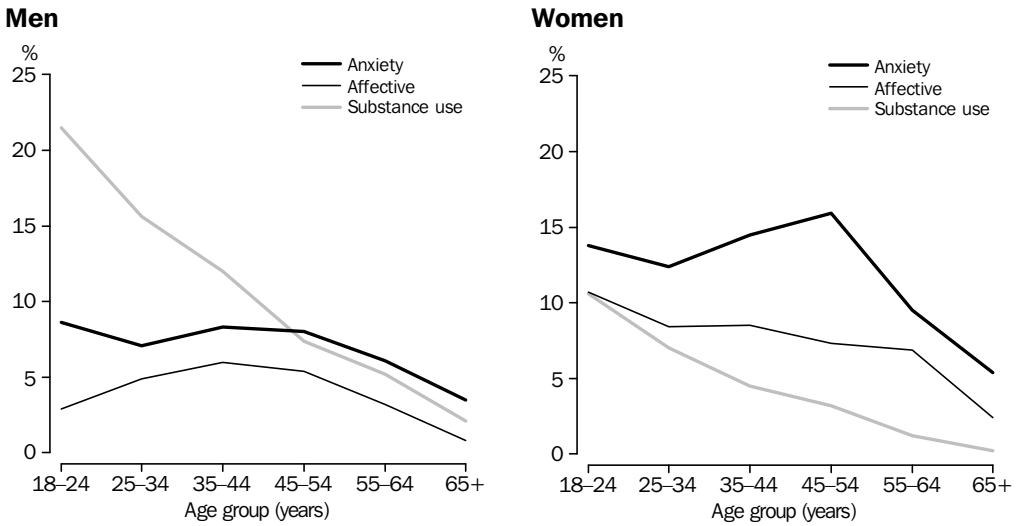
Mental disorder is a general term which implies the existence of a clinically recognisable set of symptoms or behaviour associated with interference with personal functions.[1] Disorders can be broadly separated into three groups: affective, anxiety, and substance abuse disorders.

Affective disorders are characterised by a disturbance of mood accompanied by either manic or depressive symptoms. They tend to be recurrent and the onset of episodes can often be related to stressful events. The affective disorders in this review include depression, dysthymia (depressive neurosis), mania, hypomania, and bipolar (manic depressive illness).

Anxiety disorders are characterised by chronic feelings of tension, distress or nervousness. These include panic disorders, agoraphobia, social phobia, obsessive-compulsive disorder, generalised anxiety disorder and post-traumatic stress disorder.

Substance-use disorders are harmful use or dependence on drugs (illegal and prescription drugs) or alcohol.

Prevalence of mental disorders(a), 1997



(a) During the 12 months prior to interview.

Source: Mental Health and Wellbeing Profile of Adults, Australia 1997 (Cat. no. 4326.0).

affective disorders (7% compared to 4%). On the other hand, men were more than twice as likely as women to have had a substance use disorder (11% compared to 4%).

The prevalence of anxiety disorders for women aged 18–44 ranged between 12% to 15%. Women aged 45–54 had the highest rate of anxiety disorders, 16%, which steadily declined in older age groups to 5% for those aged over 64. For men, the prevalence of anxiety disorders varied little with age until age 55, after which it declined. The prevalence of affective disorders was highest at 11% for women aged 18–24, more than three times the rate for men of this age. For women, the prevalence of affective disorders generally declined with age, while for men, rates increased in the middle years before declining after age 55.

Men aged 18–24 had the highest rate of substance use disorders, particularly from excessive alcohol intake, with more than one in five being affected (22%). The equivalent rate for women in this age group was half this (11%). For men and women, the prevalence of substance use disorders declined steadily with age. Alcohol use disorders were about three times more common than any other substance use disorder (7% compared to 2%).

The presence of a mental disorder may predispose individuals to other disorders. For example, people who experience social phobia may also experience depression and alcohol dependence. People with an affective disorder were the most likely to have more than one mental disorder. Of those with an affective disorder, 61% also had an anxiety or substance use disorder. In comparison, 43% of those with an anxiety disorder also had an affective or substance use disorder and 31% of those with a substance use disorder had an affective or anxiety disorder.

Impact on daily life

People with a mental disorder (or physical condition) are not necessarily restricted in their day to day activities. However, the presence of mental and/or physical conditions in combination often increases the likelihood of disability, compounding the difficulties that these people face.

The 1997 National Survey of Mental Health and Wellbeing used the Brief Disability Questionnaire (BDQ), based on a standard international questionnaire, as a measure of disability. The BDQ asks participants whether they are limited in a number of activities, and whether they have cut down or stopped activities they were expected to do as part of their routine. Participants were then allocated a score characterising them as having a mild, moderate or severe disability, or none.

People who reported physical conditions only were more likely to have a disability than those who reported mental disorders only (55% compared to 30%). This may partly reflect the emphasis the BDQ places on the physical rather than the mental aspects of disability. Even so, adults with mental disorders, were on average more likely to be disabled than adults in general (44% compared to 34%).

Mental disorders and physical conditions(a) by disability status(b), 1997

	None	Mild	Moderate	Severe	Total	Total persons
Mental disorder(s) and/or physical condition(s)	%	%	%	%	%	'000
Physical condition(s) only	45.4	17.2	25.3	12.1	100.0	4 198.3
Mental disorders						
Mental disorder(s) only	70.4	13.0	12.5	4.1	100.0	1 361.8
Mental disorder(s) and physical condition(s)	37.1	17.3	27.5	18.1	100.0	1 021.3
Total	*56.1*	*14.9*	*18.9*	*10.1*	*100.0*	*2 383.1*
No mental disorder or physical condition	81.8	9.6	6.7	1.9	100.0	6 883.4
Total	**65.9**	**12.9**	**14.7**	**6.5**	**100.0**	**13 464.8**

(a) During the twelve months prior to interview.
(b) During the four weeks prior to interview, according to the Brief Disability Questionnaire.

Source: Mental Health and Wellbeing Profile of Adults, Australia, 1997 (Cat. no. 4326.0).

Combinations of disorders have a cumulative effect on disability. People with both physical conditions and mental disorders were the worst affected (63% had a disability and 18% had a severe disability). Similarly, people without chronic physical conditions but with combinations of mental disorders were more likely to be disabled than those with one mental disorder only (45% compared to 30%).

Health service use

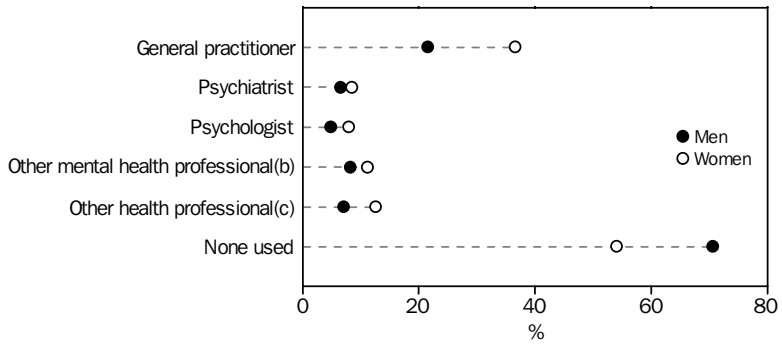
Some people experience a mental disorder once and fully recover. For others, it recurs throughout their lives or in episodes. The vast majority of mental illnesses are able to be treated if they have access to appropriate care and services[2].

Of those with mental disorders in 1997, 38% used a health service for their mental health problems in the previous 12 months. Women were more likely than men to use health services (46% of women compared to 29% of men). The most commonly used health service for both men and women was consulting a general practitioner (22% and 37% respectively).

The likelihood of using health services for a mental health problem was closely related to the type of mental disorder. Of those with affective disorders only, 56% used health services, compared to 28% of those with anxiety only and 14% of those with substance use disorders only. Those with combinations of mental disorders were the most likely to use services for mental health problems (66%).

For those with a disability, service use for mental disorders increased with the severity of the disability. A small proportion of people with no mental disorders also used services for mental health problems (5%). These people may have consulted a health professional for a sub-clinical mental disorder such as stress, or for a mental disorder not included in the analysis of the National Survey of Mental Health and Wellbeing.

People with a mental disorder by type of service used(a), 1997



(a) In the last 12 months. A person may have used more than one service, therefore the components do not add to the total.
(b) Includes social worker, welfare officer, drug and alcohol counsellor, and mental health team.
(c) Includes medical specialist, nurse, chemist, ambulance officer, etc.

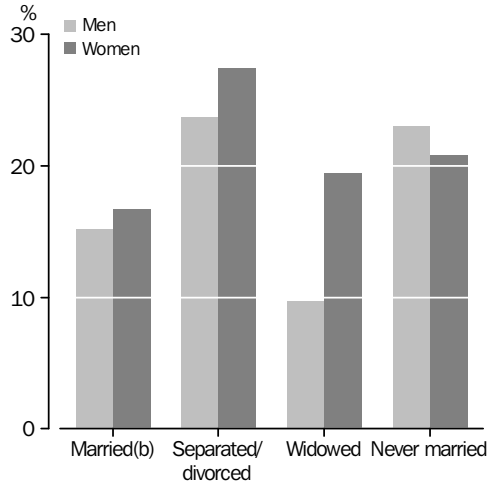
Source: Mental Health and Wellbeing Profile of Adults, Australia, 1997 (Cat. no. 4326.0).

Living arrangements

Overall, the proportion of people with a mental disorder decreased as the number of people living in the household increased. This may reflect the difficulties that some of these people have in forming and maintaining relationships.

After adjusting for age, the prevalence of mental disorder was highest for both men and women living alone. This was the case for anxiety, affective and substance use disorders individually.

Proportion of people with a mental disorder(a) by marital status, 1997



(a) Age-standardised rate of mental disorders from the major groups (anxiety, affective and substance use).
(b) Includes de facto relationships.

Source: Mental Health and Wellbeing Profile of Adults, Australia 1997 (Cat. no. 4326.0).

Age standardised rates were higher among people who were separated or divorced (24% of men and 27% of women) compared to people who were married, widowed or never married. In particular, people who were separated or divorced had higher rates of anxiety or affective disorders (18% and 12% respectively) than the other groups. People who had never married also had higher rates of mental disorder than those who were married. In particular, this group, had higher rates of substance use disorders (14%).

Employment

People with mental disorders not only find it more difficult to obtain jobs (see *Australian Social Trends 1997*, Employment of people with a handicap, pp. 104–108), but unemployment may also contribute to their disorder. Higher unemployment rates among people with mental disorders could be the result of a combination of factors including the disabling effects of mental disorders, lack of training and negative employer attitudes.

Proportion of people with a mental disorder(a) by labour force status, 1997

	Age standardised rate	
	Men	*Women*
Labour force status	%	%
Employed full-time	15.1	14.7
Employed part-time	22.4	16.3
Unemployed	26.9	26.4
Not in the labour force	26.4	21.7

(a) Mental disorders from the major groups (anxiety, affective and substance use disorders).

Source: Mental Health and Wellbeing Profile of Adults, Australia 1997, (Cat. no. 4326.0).

After adjusting for age, rates of mental disorders were highest for men and women who were unemployed or not in the labour force. In particular, unemployed people had relatively high rates of substance use disorders (19% of men and 11% of women) compared to employed people and people not in the labour force. It is unclear whether substance use predisposes people to unemployment, unemployment predisposes people to substance use, or both.

Unemployed women also had relatively high rates of anxiety disorders (20%) compared to employed women and women not in the labour force.

Suicide

Suicide is thought to be higher among people with mental disorders. However, the incidence of suicide among people with mental disorders is not known.

Results from the 1997 Survey of Mental Health and Wellbeing indicate that people with a mental disorder were nearly four times as likely to have thought about suicide since the age of 18 as people without a mental disorder (37% compared to 9%). Furthermore, they were nearly 7 times more likely to have attempted suicide (10% compared to 1.5%).

Endnotes

1 World Health Organisation (WHO) 1992, *The ICD-10 Classification of Mental and Behavioural Disorders, Clinical Descriptions and Diagnostic Guidelines*, WHO, Geneva.

2 National Mental Health Strategy brochure 1997, *Mental illness – facts,* AGPS, Canberra.

Education

Education — national summary

PARTICIPATION	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
School students	'000	3 022	3 031	3 042	3 075	3 099	3 098	3 099	3 109	3 143	3 172	3 199
Students in government schools	%	72.7	72.4	72.1	72.1	72.1	71.9	71.5	71.0	70.7	70.3	70.0
Females – of all Year 11 and 12 students	%	51.8	52.2	52.1	51.3	51.0	51.1	51.4	51.8	51.8	51.8	52.0
Year 12 retention rate – males	%	53.4	55.5	58.3	66.1	72.5	71.9	69.6	66.7	65.9	66.2	65.9
Year 12 retention rate – females	%	61.8	65.2	69.9	76.7	82.0	81.4	79.9	77.9	77.0	77.8	77.7
Education participation of 15–19 year olds (of all 15–19 year olds)	%	66.0	66.8	67.4	71.3	73.2	74.1	74.0	73.7	74.6	77.0	73.6
Education participation of 20–24 year olds (of all 20–24 year olds)	%	19.5	21.3	22.3	25.2	26.4	27.0	26.3	28.3	29.4	30.2	29.8
15–24 year olds attending TAFE	%	8.2	8.7	8.5	8.8	8.7	8.9	8.4	8.5	9.0	9.2	8.0
15–24 year olds attending higher education	%	8.7	9.9	10.3	11.9	12.5	12.9	12.9	13.6	13.9	15.2	15.3
Females—of all higher education students aged 15–24(a)	%	48.0	51.2	53.2	49.3	52.9	53.9	51.5	53.3	52.8	55.2	54.2
Vocational Education and Training (VET) clients(b)	'000	952	932	967	986	1 043	1 121	1 132	1 273	1 347	1 459	n.y.a.
Females – of all VET clients(b)	%	47.1	47.2	44.8	45.1	45.1	45.9	45.9	47.2	47.6	48.1	n.y.a.
Higher education students	'000	420.9	441.1	485.1	534.5	559.4	575.6	585.4	604.2	634.1	658.8	671.9
Overseas students (of all higher education students)(c)	%	n.a.	4.8	5.1	5.5	6.1	6.4	6.9	7.6	8.4	9.6	10.7

ATTAINMENT	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
With post-school educational qualifications (of all aged 15–64)	%	n.a.	39.2	39.7	40.8	41.7	39.1	39.0	41.0	42.3	40.4	41.9
Bachelor degree or higher	%	n.a.	7.9	8.4	9.0	9.6	10.1	11.5	11.9	12.8	13.6	14.3
Undergraduate or associate diploma	%	n.a.	n.a.	n.a.	n.a.	n.a.	9.0	8.6	9.1	8.8	7.7	7.9
Skilled or basic vocational qualification	%	n.a.	n.a.	n.a.	n.a.	n.a.	20.0	18.9	19.9	20.6	19.1	19.7
Did not complete highest level of secondary school (of all aged 15–64)	%	n.a.	39.6	37.4	36.0	34.3	37.3	37.6	36.0	34.7	36.3	34.1
Females—of all with post-school educational qualifications(a)	%	n.a.	41.8	42.4	43.0	43.6	42.6	44.0	44.0	44.1	44.6	45.1
Higher education students completing courses	'000	86.9	90.5	94.7	107.6	120.6	132.9	138.7	140.9	145.3	155.1	n.y.a.

EDUCATION AND LABOUR FORCE	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Unemployment rate												
With bachelor degree or higher	%	n.a.	2.4	3.2	3.9	4.3	4.8	4.7	3.6	3.8	3.5	3.1
With undergraduate or associate diploma	%	n.a.	n.a.	n.a.	n.a.	n.a.	5.9	5.8	5.4	5.2	4.7	4.6
With skilled or basic vocational qualifications	%	n.a.	n.a.	n.a.	n.a.	n.a.	8.9	7.0	6.6	6.4	7.1	6.6
Without post-school qualifications(a)	%	n.a.	7.9	8.2	12.0	13.4	13.7	12.6	10.7	10.9	11.2	10.5
Trainees and apprentices	'000	156.3	163.9	172.8	160.2	151.9	137.5	131.1	135.8	158.0	175.4	195.5

(a) From 1993, figures refer to participation/attainment in courses leading to recognised qualifications only.

(b) Data prior to 1994 are not strictly comparable to more recent data due to changes in scope and collection methodology. Community education providers were included in the collection in 1995, and private providers were included in 1996.

(c) Prior to 1996, New Zealand students were counted as being overseas students.

Reference periods: Schools data are at July, except for 1991 and 1995–1998 (August). TAFE data comprise enrolments in the calendar year to 31 December. Higher education data are at 31 March from 1989; prior to that the reference date was 30 April. Data on educational attainment, participation rates, unemployment rates and apprentices are at May. Overseas student data are at 31 March. VET data are at 30 June.

Education — national summary continued

EXPENDITURE	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total expenditure on education (of GDP)	%	r5.1	r5.0	r5.0	r5.4	r5.6	r5.6	r5.5	r5.4	r5.2	r5.4	n.y.a.
Government expenditure on education (of GDP)	%	r4.7	r4.4	r4.3	r4.7	r4.9	r4.9	r4.8	r4.7	r4.5	r4.6	n.y.a.
Government outlay on education												
Primary and secondary	$'000m	8.4	9.4	9.9	10.7	11.6	12.0	12.2	12.5	13.0	13.9	n.y.a.
Tertiary	$'000m	4.6	4.7	5.0	5.9	6.4	6.9	7.1	7.6	7.6	8.1	n.y.a.

RESOURCES	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Schools	no.	10 054	10 036	10 007	9 980	9 957	9 865	9 679	9 648	9 630	9 609	9 587
Government schools	%	74.9	74.9	74.8	74.8	74.8	74.7	74.0	73.8	73.6	73.2	73.0
School student/teaching staff ratio												
All students	ratio	15.3	15.3	15.3	15.4	15.3	15.3	15.5	15.4	15.4	15.3	15.3
Government school students	ratio	15.0	14.9	15.0	15.2	15.1	15.2	15.4	15.4	15.4	15.3	15.3
Primary students	ratio	18.5	18.7	18.4	18.5	18.4	18.4	18.5	18.1	18.1	17.9	17.9
Secondary students	ratio	12.6	12.6	12.4	12.5	12.4	12.4	12.6	12.6	12.7	12.7	12.7
Females – of all primary teachers	%	71.7	72.3	73.5	73.7	74.2	74.4	74.7	76.1	76.2	76.9	77.5
Females – of all secondary teachers	%	48.3	48.8	50.1	50.4	50.6	51.1	51.3	52.3	52.6	53.1	53.5
Females – of all higher education academic staff	%	27.3	27.8	30.1	30.8	31.9	32.6	32.8	33.5	34.1	34.4	35.1

Reference periods: Expenditure data are for financial years. Schools data are at July, except for 1991 and 1995–1998 (August). Higher education data are at 31 March from 1989; prior to that the reference date was 30 April.

Education — State summary

PARTICIPATION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
School students	'000	1998	1 081.6	787.4	584.6	249.5	314.0	84.1	36.7	60.8	3 198.7
Students in government schools	%	1998	70.6	66.2	72.0	70.7	72.2	74.9	77.8	64.3	70.0
Females – of all Year 11 and 12 students	%	1998	52.3	52.7	51.1	51.9	51.3	52.3	52.7	48.8	52.0
Year 12 retention rate – males	%	1998	61.6	68.5	72.3	61.2	65.8	58.3	38.2	91.2	65.9
Year 12 retention rate – females	%	1998	73.0	83.7	82.6	72.4	76.8	66.0	48.0	90.7	77.7
Education participation of 15–19 year olds (of all 15–19 year olds)	%	1998	75.3	78.5	67.4	70.7	70.0	70.6	65.3	80.2	73.6
Education participation of 20–24 year olds (of all 20–24 year olds)	%	1998	31.6	32.8	26.1	25.6	26.6	24.4	n.a.	40.4	29.8
15–24 year olds attending TAFE	%	1998	9.4	8.2	5.1	7.8	9.0	7.8	n.a.	7.2	8.0
15–24 year olds attending higher education	%	1998	15.1	17.4	15.8	10.8	13.3	10.7	n.a.	21.3	15.3
Females – of all higher education students aged 15–24(b)	%	1997	55.8	52.8	53.7	59.2	60.2	51.0	*25.3	65.6	55.2
Vocational Education and Training (VET) clients	'000	1997	508.5	417.4	218.2	141.5	111.5	26.6	16.2	18.7	1458.6
Females – of all VET clients	%	1997	51.3	44.2	46.6	53.0	46.2	44.0	48.1	48.1	48.1
Higher education students(b)	'000	1998	210.6	182.2	117.9	48.0	65.7	12.6	4.7	19.9	671.9
Overseas students (of all higher education students)(b)	%	1998	9.3	13.1	9.7	9.1	14.9	9.6	3.7	7.9	10.7

ATTAINMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
With post-school educational qualifications (of all aged 15–64)	%	1998	44.2	41.0	40.0	38.3	42.8	37.1	42.3	50.6	41.9
Bachelor degree or higher	%	1998	15.1	15.2	13.1	10.7	13.8	10.1	15.0	25.4	14.3
Undergraduate or associate diploma	%	1998	8.0	8.4	7.3	7.0	8.1	6.2	8.6	8.5	7.9
Skilled or basic vocational qualification	%	1998	21.1	17.4	19.5	20.6	20.9	20.7	18.7	16.6	19.7
Did not complete highest level of secondary school (of all aged 15–64)	%	1998	32.9	34.0	35.5	37.8	34.0	41.4	33.3	18.2	34.1
Females – of all with post-school educational qualifications	%	1998	46.5	44.8	43.5	44.7	44.0	43.8	44.1	48.3	45.1
Higher education students completing courses	'000	1997	47.1	44.0	24.9	15.1	12.0	3.1	1.0	5.0	155.1

EDUCATION AND LABOUR FORCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Unemployment rate (aged 15–64)											
With bachelor degree or higher	%	1998	3.2	3.4	2.6	4.5	2.5	3.4	1.4	3.6	3.1
With undergraduate or associate diploma	%	1998	3.8	4.6	6.3	4.9	4.4	3.3	1.5	3.3	4.6
With skilled or basic vocational qualifications	%	1998	5.1	8.1	7.0	7.7	7.0	8.5	3.7	5.2	6.6
Without post-school qualifications	%	1998	10.8	10.2	10.8	12.8	8.2	11.8	6.7	9.0	10.5
Trainees and apprentices	'000	1998	53.1	48.9	46.3	17.5	19.0	5.5	2.3	3.0	195.5

(a) Estimates for Northern Territory except all schools data and VET clients refer to mainly urban areas only.
(b) State totals exclude students of the Australian Catholic University which has campuses in more than one State.

Reference periods: Schools data are at August. TAFE data comprise enrolments in the calendar year to 31 December. Higher education data are at 31 March. Data on educational attainment, participation rates, unemployment rates and apprentices are at May. Overseas student data are at 31 March. VET data are at 30 June.

Education — State summary continued

RESOURCES	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Schools	no.	1998	3 075	2 329	1 726	827	1 028	286	179	137	9 587
Government schools	%	1998	71.1	70.6	75.8	76.2	74.3	76.9	83.2	70.8	73.0
School student/teaching staff ratio											
All students	ratio	1998	15.3	15.3	15.5	15.0	15.4	14.8	13.5	15.5	15.3
Government school students	ratio	1998	15.3	15.4	15.6	14.7	15.5	14.7	13.3	15.3	15.3
Primary students	ratio	1998	18.1	18.4	17.4	17.4	17.9	16.7	15.0	19.1	17.9
Secondary students	ratio	1998	12.7	12.6	13.3	12.0	12.6	13.0	11.0	12.8	12.7
Females – of all primary teachers	%	1998	79.1	77.8	75.6	74.8	75.5	78.7	80.8	84.5	77.5
Females – of all secondary teachers	%	1998	54.0	54.2	54.4	47.3	51.2	52.3	57.5	61.4	53.5
Females – of all higher education academic staff(a)	%	1998	34.2	37.8	34.3	36.4	35.0	25.9	42.5	25.6	35.1

(a) State totals exclude students of the Australian Catholic University, which has campuses in more than one State.

Reference periods: Schools data are at August. Higher education data are at 31 March.

Education — definitions and references

Associate diploma — course lasting from one to two years full-time (or equivalent) providing skills and knowledge for those wanting to work in advanced trade, technical or associate professional occupations.
Reference: *Transition from Education to Work, Australia* (Cat. no. 6227.0).

Basic vocational qualification — award for completion of a course lasting one semester to one year full-time (or equivalent) providing practical skills and knowledge for those wanting to work at the operative level in various fields. Prior to 1993, basic vocational qualifications were included with undergraduate or associate diplomas.
Reference: *Transition from Education to Work, Australia* (Cat. no. 6227.0).

Bachelor degree or higher — a bachelor degree (including honours), a graduate or post-graduate diploma, master's degree or a doctorate.
Reference: *Transition from Education to Work, Australia* (Cat. no. 6227.0).

Did not complete highest level of secondary school — a person without post-school qualifications who did not complete the highest level of secondary schooling available at the time they left school.
Reference: *Transition from Education to Work, Australia* (Cat. no. 6227.0).

Full-time equivalent (FTE) — a measure of the total level of staff resources used. The FTE of a full-time staff member is equal to 1.0. The calculation of FTE for part-time staff is based on the proportion of time worked compared to that worked by full-time staff performing similar duties. Casual staff are excluded.
Reference: *Schools, Australia* (Cat. no. 4221.0).

GDP (gross domestic product) — the current price measure which is the sum of all final expenditure, changes in stocks and imports less exports.
Reference: *Expenditure on Education, Australia* (Cat. no. 5510.0).

Government expenditure on education — government final expenditure, personal benefit payments, advances to persons for the Higher Education Contribution Scheme (HECS) and other government expenditure.
Reference: *Expenditure on Education, Australia* (Cat. no. 5510.0).

Government school — one administered by the Department of Education in each State/Territory.
Reference: *Schools, Australia* (Cat. no. 4221.0).

Higher education institutions — includes all institutions providing higher education courses e.g. universities and university colleges, institutes of tertiary education, agricultural colleges, and some institutes of technology.
Reference: *Participation in Education, Australia* (Cat. no. 6272.0).

Higher education student — a person for whom there is a full-time, part-time or external enrolment in a course at a higher education institution at the reference date. Data for proportion of 15–24 year olds attending higher education are from *Transition from Education to Work* (Cat. no. 6227.0). State totals are based on the student's usual State of residence. Data for higher education students and overseas higher education students are obtained from Department of Education, Training and Youth Affairs administrative data. State totals are the number of students enrolled at all higher education institutions within a particular State or Territory.
Department of Education, Training and Youth Affairs, *Selected Higher Education Statistics*.

Non-government school — any school not administered by a Department of Education, but including special schools administered by government authorities other than the State and Territory education departments.
Reference: *Schools, Australia* (Cat. no. 4221.0).

Overseas higher education students — full-fee paying students at higher education institutions whose residence is usually overseas.
Reference: Department of Education, Training and Youth Affairs, *Selected Higher Education Statistics*.

Post-school educational qualification — an award for attainment as a result of formal learning from an accredited post-school institution. Educational qualifications are classified according to the *ABS Classification of Qualifications* (ABSCQ) (Cat. no. 1262.0). The level of attainment includes higher degrees, postgraduate diplomas, bachelor degrees, undergraduate and associate diplomas, and skilled and basic vocational qualifications.
Reference: *Transition from Education to Work, Australia* (Cat. no. 6227.0).

Primary education — full-time education which typically commences around age five and lasts for seven to eight years. It does not include sessional education such as pre-school education.
Reference: *Schools, Australia* (Cat no. 4221.0)

School — an educational institution which provides primary or secondary education on a full-time daily basis, or by radio or correspondence.
Reference: *Schools, Australia* (Cat. no. 4221.0).

School student — a person who is enrolled in a school and active in a course of study, other than pre-school or Technical and Further Education (TAFE) courses.
Reference: *Schools, Australia* (Cat. no. 4221.0).

School student/teaching staff ratio — number of full-time school students divided by full-time equivalent teaching staff.
Reference: *Schools, Australia* (Cat. no. 4221.0).

Secondary education — education which typically commences after completion of primary education, at around age 12, and lasts for five or six years.
Reference: *Schools, Australia* (Cat no. 4221.0).

Education — definitions and references continued

Skilled vocational qualification — an award for completion of a course lasting two to four years, and typically involving some on-the-job training, for those wanting to work in a specific vocation, recognised trade or craft that requires a high degree of skill in a range of related activities. Prior to 1993, skilled vocational qualifications referred to trade qualifications only.
Reference: *Transition from Education to Work, Australia* (Cat. no. 6227.0).

Tertiary education — education provided by any institution offering post-school courses. Includes TAFE, higher education and other post-school systems.
Reference: *Transition from Education to Work, Australia* (Cat. no. 6227.0).

Total expenditure on education — government expenditure on education plus private final expenditure on education.
Reference: *Expenditure on Education, Australia* (Cat. no. 5510.0).

Trainees and apprentices — persons undertaking vocational training through contract of training arrangements. Contracts of training are legal agreements entered into by employers and trainees who are engaged in employment-based training. Under the terms of the contract, the employer agrees to provide employment and training in a particular vocation (on-the-job training) and agrees to allow the trainee to attend the appropriate course of instruction, or other training, as determined by individual State and Territory training authorities (off-the-job training). In return, the trainee agrees to complete both the on and off-job components of the training to the best of his or her ability.
Reference: National Centre for Vocational Education Research, *Australian apprentice and trainee statistics 1997/98*.

Undergraduate diploma — course lasting three years full-time (or equivalent) for those wanting to work as professionals or associate professionals.
Reference: *Transition from Education to Work, Australia* (Cat. no. 6227.0).

Unemployment rate — the number of unemployed persons in any group expressed as a percentage of the labour force in the same group.
Reference: *Transition from Education to Work, Australia* (Cat. no. 6227.0).

Vocational Education and Training (VET) client — a person aged 15–64 for whom there is a full-time or part-time vocational stream enrolment in a TAFE college or a course provided by some private or adult and community education providers in the reference year. Does not necessarily equate to individuals, as some people may have more than one enrolment.
Reference: National Centre for Vocational Education Research, *Australian Vocational Education and Training Statistics: in detail*.

Year 12 apparent retention rate — the percentage of full-time students of a given cohort group who continue from the first year of secondary schooling to Year 12.
Reference: *Schools, Australia* (Cat. no. 4221.0).

Educational profile of Australians

EDUCATIONAL ATTAINMENT

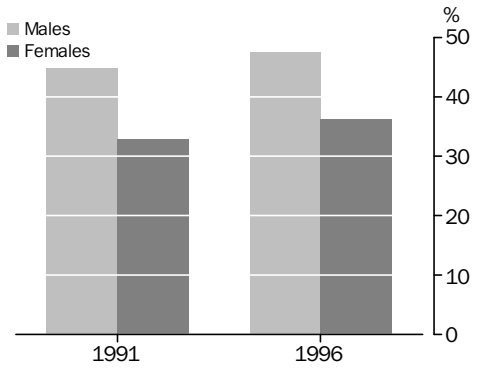
In 1996, among the 5.8 million people aged 15 years and over who held a post-school qualification, 1.5 million held a bachelor degree or higher as their highest qualification, and 1.5 million held a skilled vocational qualification.

In 1996, 42% of the population aged 15 years and over (5.8 million people) had at least one post-school qualification – up from 39% in 1991. The proportion of men (aged 15 years and over) with a qualification increased from 45% to 48%, and for women the proportion increased from 33% to 36%.

Continuing increases in levels of educational attainment over recent decades[1] have occurred because of progressive increases in levels of participation in post-school educational programs by school leavers; greater opportunities for study for older people; inflows of people with qualifications from overseas (see *Australian Social Trends 1996,* Migrants and education, pp. 86–91); and the mortality of people born before World War II, who were less likely to have obtained a post-school qualification. Progressively higher levels of participation in higher education among younger women (see *Australian Social Trends 1999*, Education — national summary table, pp. 76–77) reflect significant changes in women's roles and responsibilities in society.

The types of qualifications held by men and women, in terms of level of attainment (e.g., whether they had a university degree or a vocational certificate) and field of study, differ substantially. Comparisons by age reveal that some of the differences are a legacy of the different patterns of involvement in education among older generations of men and women. Differences between younger men and women, while reflecting traditional norms, tend to be less marked.

People with a post-school qualification, 1991 and 1996



Source: Unpublished data, 1991 and 1996 Censuses of Population and Housing.

Post-school qualifications

This review is based on data collected in the 1996 Census of Population and Housing, which asked people aged 15 years and over a series of questions about their highest qualification obtained since leaving school. The questions (like those in previous censuses) provided information about the level and field of study in which the qualification was held, as well as the year in which the person completed their qualification. As the information was obtained only for the highest level of qualification, the Census provides an incomplete picture of the full range of qualifications held.

Levels of qualification are classified according to the ABS Classification of Qualifications into:

- *bachelor degree and above*, comprising bachelor degree (including honours), graduate or postgraduate diploma, master's degree or doctorate;
- *undergraduate diploma*, comprising courses lasting three years full-time (or equivalent) for professional or associate professional occupations;
- *associate diploma*, comprising courses lasting from one to two years full-time (or equivalent) for advanced trades, technical or associate professional occupations;
- *skilled vocational qualification*, which requires two to four years study and is for work in a high skilled trade or craft; and
- *basic vocational qualification*, which requires one semester to one year study for those wanting to work at the operative level in various fields.

Level of attainment

In 1996, the most common types of qualifications held by men were skilled vocational certificates (19%), bachelor or higher degrees (11%) and, to a lesser extent, associate or undergraduate diplomas (5%). Among women, on the other hand, while similar proportions had a bachelor degree or higher (10%), and slightly higher proportions had an associate or undergraduate diploma (7%), relatively few had a skilled vocational qualification (3%). Women were more likely than men to have a basic vocational qualification (4% and 2%, respectively).

Those aged between 25 and 44 years in 1996 were the most highly qualified – many of those in younger age groups were still students, and many of those in older age groups had had fewer opportunities to obtain a post-school qualification. Among those aged

Proportions with a post-school qualification, 1996

	Bachelor degree or higher	*Associate or undergraduate diploma*	*Skilled vocational*	*Basic vocational*	*Total with post-school qualifications(a)*
Age (years)	%	%	%	%	%
Males					
15–24	4.2	2.4	8.6	1.6	27.8
25–34	14.6	5.9	23.4	2.3	54.5
35–44	16.2	6.9	23.3	2.5	57.6
45–54	13.5	7.0	21.5	2.4	53.8
55 and over	6.6	4.4	17.8	1.5	45.8
Total	*10.8*	*5.2*	*18.9*	*2.0*	*47.7*
Females					
15–24	6.8	4.6	2.4	3.6	28.7
25–34	16.6	8.5	4.2	5.2	44.4
35–44	15.3	9.5	3.0	5.1	43.5
45–54	10.7	8.6	2.8	3.8	36.9
55 and over	3.6	4.5	1.8	1.5	30.3
Total	*10.1*	*6.9*	*2.8*	*3.7*	*36.4*

(a) Includes those whose level of qualification was not stated or inadequately described.

Source: Unpublished data, 1996 Census of Population and Housing.

25–44, older men (those aged 35–44) were more likely to have a post-school qualification than those aged 25–34 (58% and 55% respectively). For women, however, the younger of the two age groups were more likely to have a post-school qualification. The difference by age is more pronounced among men and women holding a degree or higher qualification, to the extent that a higher proportion of women aged 25–34 had a degree or higher qualification than men.

The level of attainment of those aged 15–24 compared to those in older age groups indicates further change. In the 15–24 years age group, a slightly higher proportion of women than men had attained a post-school qualification, and women were more likely to hold a bachelor or higher degree (7% compared to 4%).

Field of study

Australia has a diverse economy and a well-developed system of tertiary level educational institutions allowing qualifications to be obtained in a broad range of fields. Some fields of study are associated with courses conducted at particular levels of study, and this is reflected in the types of qualifications attained by men and women. For example, in 1996, people who held qualifications in the broad field of architecture and building usually held them at

Field of study

Fields of study are classified according to the ABS Classification of Qualifications. The broad fields of study are:

- *business and administration* includes studies in business management, management support services, sales and marketing, and financial services;
- *health* comprises studies in medicine, nursing, health sciences, dental and veterinary fields, and health and safety services;
- *education* includes school, post-school and special education teacher training;
- *society and culture* includes economics, law, behaviour, welfare, languages, religion and philosophy, librarianship, visual and performing arts, geography, communication, recreation and leisure, and policing;
- *natural and physical sciences* includes life and physical sciences, mathematics, statistics, and computer science;
- *engineering* includes electrical, electronic, mechanical, aeronautical, metallurgical and mining, automotive, chemical, industrial and civil engineering, surveying and cartography, textiles, and woodworking studies;
- *architecture and building* includes architecture and building design and construction;
- *agriculture and related fields* comprises agriculture, horticulture, and fisheries and forestry studies; and
- *miscellaneous fields* includes studies in hairdressing and beauty therapy, food and hospitality services, transport, and plant and machine operation.

the skilled vocational level (84% of those who stated their level). On the other hand, people qualified in natural and physical sciences mostly did so at the bachelor degree level or higher (72%). Other fields of study were more evenly distributed. For example, people were about as likely to hold a qualification in business and administration at the associate or undergraduate diploma level (31%) as at the basic vocational level (28%) or at the bachelor degree level or higher (36%).

Among people with bachelor degrees or higher, the most commonly held qualifications were in the fields of society and culture (357,800 people), education (278,500), business and administration (227,000) and health (213,600). Aside from the field of business and administration, there were more women than men with higher educational qualifications in these fields (particularly in the fields of education and health, where 70% and 66%, respectively, of all those with degrees were women).

Among the 846,500 people whose highest qualification was an associate or undergraduate diploma, the three most common fields of study, all dominated by women, were business and administration (194,700 people), health (176,200) and education (155,400).

The two major fields of study among people, mostly men, with skilled vocational qualifications, were engineering (835,600 people, 96% of whom were men) and architecture and building (291,800, 99% of whom were men). These two fields alone, while covering a diverse range of specialised skills, accounted for 76% of all people with a skilled vocational qualification.

Among the 398,700 people whose highest qualification was from a course designed to provide a basic vocational skill, almost two thirds (65%) were women, most of whom had completed courses in the fields of business and administration, and health. Within the broad field of business and administration (142,300 women and 34,800 men), women were more likely than men to have a qualification concerned with providing management support services (73% compared with 9% for men), particularly keyboarding and shorthand (56%, compared with 3%). Men, on the other hand, were more likely to have a basic qualification in management (38%, compared with 4% for women), sales and marketing (24%, compared with 8%) or financial services (15%, compared with 3%).

State and Territory differences

The educational attainment profile of people differs according to the geographical region in which they live.[2] The extent to which people in the towns and cities of each State and Territory have access to institutions offering certain qualifications may be part of the reason. However, as particular industries need and attract people with specialised skills, differences in the regional mix of industries are likely to be important in determining whether high proportions of people in any one region have certain types of qualifications. The populations of the States

People with post-school qualifications, by type of qualification(a), 1996

	Bachelor degree or higher		*Associate or under-graduate diploma*		*Skilled vocational*		*Basic vocational*	
Broad field of study	'000	% female	'000	% female	'000	% female	'000	% female
Business and administration	227.0	35.7	194.7	53.4	26.1	44.5	177.1	80.3
Health	213.6	66.2	176.2	87.9	7.6	38.2	67.6	91.9
Education	278.5	70.0	155.4	78.2	..	..	0.7	55.7
Society and culture	357.8	54.8	98.9	68.6	32.3	72.7	30.1	70.4
Natural and physical sciences	182.2	35.8	42.5	36.4	6.2	38.7	20.8	48.2
Engineering	120.1	8.4	105.0	6.5	835.6	3.8	33.6	19.0
Architecture and building	21.9	24.2	21.4	17.0	291.8	1.3	11.5	6.9
Agriculture and related fields	17.7	23.8	23.5	21.2	33.2	12.0	17.6	23.3
Miscellaneous fields	1.3	17.5	18.6	27.1	209.5	51.9	34.7	33.9
Total(b)	**1 450.9**	**49.4**	**846.5**	**57.8**	**1 483.0**	**13.2**	**398.7**	**65.4**

(a) People aged 15 years and over.
(b) Includes those whose field of study was not stated or inadequately described.

Source: Unpublished data, 1996 Census of Population and Housing.

Proportion of people aged 15 years and over with the most common types of qualifications(a), by State and Territory, 1996

	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Type of qualification	%	%	%	%	%	%	%	%	%
Bachelor degree or higher(b)	*10.9*	*11.4*	*8.6*	*8.6*	*9.9*	*7.9*	*9.6*	*22.6*	*10.4*
Society and culture	2.8	2.8	1.9	2.1	2.2	1.9	2.3	8.3	2.6
Education	1.9	2.3	1.8	1.7	2.0	2.0	2.3	2.7	2.0
Business and administration	1.8	1.9	1.4	1.0	1.6	0.8	1.2	2.6	1.6
Health	1.5	1.6	1.5	1.6	1.5	1.4	1.5	1.7	1.5
Natural and physical sciences	1.3	1.5	1.0	1.1	1.3	1.0	1.2	4.5	1.3
Associate or undergraduate diploma(b)	*6.5*	*6.1*	*5.4*	*5.6*	*6.2*	*5.3*	*5.4*	*7.3*	*6.1*
Business and administration	1.7	1.4	1.0	1.2	1.4	0.8	1.0	1.7	1.4
Health	1.3	1.2	1.2	1.4	1.4	1.4	1.1	1.4	1.3
Skilled vocational qualification(b)	*10.9*	*10.0*	*11.3*	*10.6*	*11.4*	*10.0*	*10.6*	*6.9*	*10.7*
Engineering	6.1	5.6	6.3	6.3	6.6	5.2	6.1	3.1	6.0
Architecture and building	2.1	2.0	2.6	1.6	2.1	2.3	1.9	1.6	2.1
Basic vocational qualifications(b)	*3.3*	*2.5*	*2.3*	*3.1*	*3.2*	*2.7*	*2.8*	*3.8*	*2.9*
Business and administration	1.7	0.9	0.9	1.1	1.4	1.1	1.1	2.0	1.3
All persons with post-school qualifications(c)	44.4	41.7	39.0	38.5	42.1	37.5	42.0	51.2	41.9
	'000	'000	'000	'000	'000	'000	'000	'000	'000
All persons aged 15 years and over	**4 719.5**	**3 486.1**	**2 523.8**	**1 142.3**	**1 320.9**	**360.1**	**127.9**	**232.3**	**13 914.9**

(a) Includes the ten most commonly held qualifications, Australia-wide (see previous table), when classified by broad fields of study and level of attainment.
(b) As a proportion of all persons. Includes those whose field of study was not stated or inadequately described.
(c) Includes those for whom both level of qualification and field of study was not stated or inadequately described.

Source: Unpublished data, 1996 Census of Population and Housing.

and Territories also have different age profiles, affecting the proportions of people with a post-school qualification.

In 1996, the proportion of people aged 15 years and over with a post-school qualification was highest in the Australian Capital Territory (51%). The proportions in New South Wales, Western Australia, the Northern Territory and Victoria ranged between 42% to 44% while those in Queensland, South Australia and Tasmania ranged between 38% and 39%.

The comparatively small, mostly urban population of the Australian Capital Territory, which has a high proportion of people working in the government and education sectors, had the highest proportion of people with a bachelor degree or higher (23%) and with an associate or undergraduate diploma (7%). The proportion with a bachelor degree or higher was generally more than twice the proportion in each of the other States and Territories. People with a degree in society and culture (which includes arts, humanities, social and behavioural sciences and law) were highly represented (8%), as were those with a degree in the natural and physical sciences (4%).

Among the other States and the Northern Territory, the proportions of people with degrees, diplomas and skilled vocational qualifications were not greatly dissimilar. The proportions of their populations with qualifications in the most popular fields of study were also much the same. In the field of business and administration, Tasmania had a lower representation of people with degrees and diplomas, 1.6%, which in the other populations ranged from 2.2% in South Australia and the Northern Territory to 3.5% in New South Wales. However, this was among the larger of the differences.

Endnotes

1 Australian Bureau of Statistics 1998, *Social Indicators 5, Australia* (see p.127), Cat. no. 4101.0, ABS, Canberra.

2 Australian Bureau of Statistics 1998, *Australia in Profile: A Regional Analysis, Census 1996,* Cat. no. 2032.0, ABS, Canberra.

Destinations of school leavers

PARTICIPATION

Over the past decade, school leavers have increasingly favoured going on to tertiary education.

When teenagers leave school, they take one of their first critical steps into the wider world of adult life. The choices they make can have a long-term influence on their future career paths. A school leaver's range of options can include work, university or vocational training and many combinations of work and education. In 1998, 257,800 students left school and moved on to take up one of these options. Of these students, 37% left school early, before having completed Year 12. The most common reason for leaving school given by early school leavers was to take up, or look for, employment, presumably to speed their independence.[1] However, early school leavers would probably find that their options were more limited than those of students who completed Year 12.

In 1998, just under a third (30%) of the students who had left school the previous year had gone on to a higher education institution: 24% had gone on to vocational study at TAFE colleges, while 5% were studying at other educational institutions such as a business college etc. There were 42% of school leavers who were not attending an educational institution (a small proportion of whom would have been accepted into a tertiary institution but had chosen to defer their enrolment by a year).

School leavers

This review is mainly based on data from the ABS Transition from Education to Work Survey carried out in May 1998.

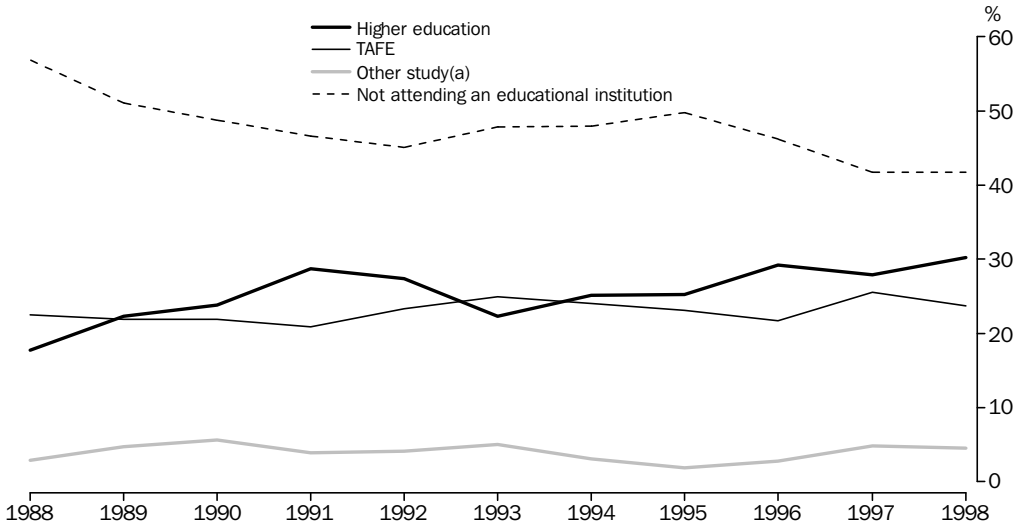
School leavers in this review refer to people aged 15–24 years who attended school in a certain year but were not attending school by May of the following year. School leavers have been divided into the following two groups:

- *Year 12 leavers* are those who last attended Year 12 of school.
- *Early school leavers* are those who last attended Year 10, 11 or an earlier year of school.

Occupations are ranked in the Australian Standard Classification of Occupations (ASCO 2nd Edition) on the basis of skill level, and for this review, have been grouped into two broad skill categories.

- *High skilled* – (Skill Levels 1, 2, and 3) comprising professional, management, associate professional, advanced clerical and trade occupations.
- *Less skilled* – (Skill Levels 4 and 5) comprising intermediate clerical, intermediate production and transport, elementary clerical and labouring occupations.

School leavers by activity after leaving school, 1988–1998



(a) Includes business colleges, industry skills centres and other educational institutions.

Source: Transition from Education to Work, Australia (Cat. no. 6227.0).

School leavers by type of school attended in the previous year

Type of institution attending in May 1998	Year 12 leavers			Early school leavers		
	Government school	Non-government school	Total	Government school	Non-government school	Total
	%	%	%	%	%	%
Higher education	37.6	61.2	46.8	1.9	3.2	2.0
TAFE	20.0	16.8	18.7	29.4	52.8	32.1
Other study(b)	3.2	5.9	4.2	4.4	9.1	4.9
Not attending	39.3	16.1	30.2	64.3	34.9	61.0
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000	'000
Total	**98.7**	**63.3**	**161.9**	**84.9**	**11.0**	**95.9**

(b) Includes business colleges, industry skills centres and other educational institutions.

Source: Unpublished data, Transition from Education to Work, Australia, 1998.

Over the past decade, the destinations of school leavers have shifted towards tertiary education. Although not consistent over the period, overall the proportion of school leavers who chose to continue their studies increased from 43% in 1988 to 58% in 1998. Higher education has increased its share of school leavers from 18% in 1988 to 30% in 1998.

Higher education

In 1998, higher education institutions attracted 77,700 school leavers, 30% of students who had left school the previous year. These students were predominantly studying towards a Bachelor degree and would generally have had to complete their Year 12 studies to attain admission to the institution.

Year 12 school leavers from non-government schools were more likely to attend a higher education institution than those from government schools (61% compared to 38%). Overall, one half of school leavers attending a higher education institution came from non-government schools, even though school leavers from non-government schools represented only 29% of all school leavers. There is no simple explanation for the greater representation of school leavers from non-government schools, though it is probably related to factors such as their parent's level of education and ability to provide financial support.

Among Year 12 leavers, girls (49% of girls) were slightly more likely to be undertaking higher education than boys (45% of boys). This reflects the trend towards females having an increasingly higher participation rate in

School leavers by sex

Type of institution attending in May 1998	Year 12 leavers			Early school leavers			All school leavers		
	Boys	Girls	Total	Boys	Girls	Total	Boys	Girls	Total
	%	%	%	%	%	%	%	%	%
Higher education	44.8	48.6	46.8	2.4	1.4	2.0	26.6	33.9	30.2
TAFE	22.5	15.4	18.7	35.2	27.5	32.1	28.0	19.2	23.7
Other study(b)	3.1	5.2	4.2	2.8	8.1	4.9	3.0	6.1	4.5
Not attending	29.6	30.8	30.2	59.6	63.0	61.0	42.5	40.8	41.7
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000	'000	'000	'000	'000
Total	**75.5**	**86.5**	**161.9**	**56.9**	**39.0**	**95.9**	**132.3**	**125.5**	**257.8**

(b) Includes business colleges, industry skills centres and other educational institutions.

Source: Unpublished data, Transition from Education to Work, Australia, 1998.

higher education than males, a trend that has existed since 1989 (see *Australian Social Trends 1998*, Gender differences in educational achievement, pp. 81–85).

Technical and further education

In 1998, Colleges of Technical and Further Education (TAFE) attracted 61,100 school leavers, 24% of school leavers in 1998. Proportionally, students from government and non-government schools were similarly represented: 24% of school leavers from government schools and 22% of leavers from non-government schools were attending a TAFE institution. However, early school leavers were more likely to attend (32%) than Year 12 school leavers (19%). When looking at both the type of school and the level of schooling, the highest rate of attendance at TAFE occurred among early school leavers. Early school leavers from non-government schools were more likely than those from government schools to progress to a TAFE institution.

Boys were more likely to attend a TAFE institution than girls: 28% of male school leavers compared to 19% of female school leavers. These proportions were higher among early school leavers, with 35% of boys and 27% of girls attending a TAFE institution in 1998.

The labour force

In 1998, about 107,400 school leavers were not attending an educational institution, representing 42% of all school leavers. The majority of these school leavers, 85%, had a job or were looking for work. That is, they participated in the labour force.

The overall unemployment rate among these school leavers who were not undertaking tertiary studies was high (35%) though there were considerable differences among particular groups of school leavers. Early school leavers had the highest rate of unemployment (45%). This was about the same, regardless of the type of school they had attended or whether they were male or female.

Year 12 leavers had an overall unemployment rate of 23%. Those from non-government schools had a lower unemployment rate (12%) than those from government schools (26%). Male Year 12 leavers had a lower rate (19%) than females (27%).

When 1998 figures are compared to those of school leavers in 1992, some distinct changes are evident. Overall, labour force participation rates have decreased from 91% to 85% while unemployment rates have also decreased from 42% overall to 35%. The proportion of school leavers working full-time has decreased from 64% overall to 52%, partly reflecting the general trend towards part-time

School leavers not attending an educational institution in May 1998

	Total		*Proportion employed full-time (of those employed)*		*Unemployment rate*		*Labour force participation rate*	
	1992	*1998*	*1992*	*1998*	*1992*	*1998*	*1992*	*1998*
	'000	'000	%	%	%	%	%	%
Year 12 leaver	*65.0*	*48.9*	*56.7*	*49.9*	*34.7*	*23.3*	*94.5*	*89.0*
Government school	51.8	38.8	54.1	48.5	37.3	26.3	95.0	89.0
Non-government school	13.2	10.2	65.2	54.2	24.4	12.2	92.5	89.0
Boys	36.0	22.3	64.3	59.9	34.4	19.3	95.8	89.6
Girls	29.1	26.6	46.8	40.5	35.1	26.7	92.8	88.6
Early school leaver	*59.3*	*58.4*	*76.4*	*54.0*	*50.0*	*45.3*	*87.3*	*80.8*
Government school	51.2	54.6	76.2	57.0	51.0	45.3	87.0	80.1
Non-government school	8.1	3.8*	77.7*	* *	43.8*	44.9*	89.1	90.9*
Boys	33.3	33.9	80.4	58.8	46.0	45.2	90.8	84.8
Girls	26.0	24.5	69.5	46.5	55.6	45.3	82.8	75.3
Total	**124.4**	**107.4**	**64.4**	**51.7**	**41.7**	**34.7**	**91.0**	**84.6**

Source: Unpublished data, Transition from Education to Work, Australia, 1998.

Occupations of employed school leavers not attending a tertiary education institution, 1998

Skill level(a)/occupation	*Year 12 leavers* %	*Early leavers* %
High skill	*18.4*	9.3*
Skill level 1 and 2		
Managers and administrators; professionals; and associate professionals	3.8*	* *
Skill level 3		
Tradespersons and related workers; advanced clerical and service workers	14.6	7.5*
Less skilled	*81.6*	*90.7*
Skill level 4		
Intermediate clerical, sales and service workers	16.3	7.9*
Intermediate production and transport workers	9.0*	9.8*
Skill level 5		
Elementary clerical, sales and service workers	35.7	36.6
Labourers and related workers	20.6	36.4
Total	**100.0**	**100.0**

(a) Australian Standard Classification of Occupations (2nd Edition).

Source: Unpublished data, Transition from Education to Work, Australia, 1998.

employment (see *Australian Social Trends 1999,* Decline of the standard working week, pp. 105–109).

Overall, in 1998, 82% of Year 12 leavers and 91% of early school leavers who were employed, but not attending an educational institution, were in less skilled occupations. About 36% of both Year 12 leavers and early leavers who were employed, were in the elementary clerical, sales or service workers category (in skill level 5). A further 36% of early leavers were employed in the labourer and related worker category (also in skill level 5). This latter category also accounted for 21% of Year 12 leavers. Year 12 leavers' representation in the high skill occupations was 18%.

Neither studying nor in the labour force

Among school leavers not attending an educational institution in 1998, 16,600 young people were not working or looking for work. That is, they were not participating in the labour force. In 1998, these school leavers represented 6% of all school leavers, or 15% of school leavers not attending an educational institution. These school leavers were predominantly early school leavers (68%), from government schools (91%) and slightly more likely to be female (55%).

Endnotes

1 Australian Bureau of Statistics, *Survey of Education and Training Experience 1997*, Cat. no. 6278.0, ABS, Canberra.

Educating and training Australia's workers

EDUCATION AND WORK

In 1997, workers in more highly skilled occupations, such as professionals, were more likely to have undertaken study or training courses (95%), than workers in less skilled occupations, such as labourers and related workers (69%).

Gaining a qualification for a predetermined career is not a guarantee of lifelong employment. To keep pace with a changing work environment (see *Australian Social Trends 1997*, Changing industries, changing jobs, pp. 93–98), and to help in both getting and keeping a job, many workers study for an educational qualification or participate in training at various times throughout their working lives. This training is often informal while on-the-job, but also includes more formal training, both in and outside of the workplace. Some workers choose to gain an initial or extra educational qualification through studying at a TAFE or business college, or at a university; while others begin their studies after being retrenched or having decided on a career change (see *Australian Social Trends 1997*, Education and employment, pp. 84–87).

It is in the interests of employers, too, to have skilled workers. Many employers assist their staff to develop their skills by arranging training within the workplace or supporting employees to gain qualifications at an educational institution.

The 1997 Survey of Education and Training showed that 4 million wage and salary earners held a post-school qualification (54% of all wage and salary earners) – almost 2.1 million held a higher education qualification (28% of all wage and salary earners), and a further 1.8 million (24%) held a skilled or basic vocational qualification. Women were more likely than men to have a higher education qualification (32% compared to 24%), and less likely to have a vocational qualification (19% and 29%).

Wage and salary earners: level of educational attainment and enrolment, selected years

	With post-school qualifications			
	Higher education(a)	*Vocational qualification(b)*	*All qualifications(c)*	***Total***
	%	%	%	**'000**
1989	n.a.	n.a.	47.3	**6 704.7**
1993	24.2	22.8	47.8	**7 078.7**
1997	*27.8*	*24.4*	53.9	**7 419.6**
Males	23.8	29.0	54.5	**3 943.7**
Females	32.3	19.2	53.1	**3 475.9**
	Enrolled for post-school qualifications			
1997	9.9	3.8	14.2	**7 419.6**

(a) Comprises higher degree, postgraduate diploma, bachelor degree, undergraduate diploma or associate diploma.
(b) Skilled or basic.
(c) Includes persons whose level of post-school qualification was not stated or inadequately described.

Source: Education and Training Experience, Australia, 1997 (Cat. no. 6278.0); and unpublished data, 1997 Survey of Education and Training.

Education, training and employment

The main source of data is the ABS Survey of Education and Training, a household survey conducted during the period March to May 1997. Some time series data are also provided from the 1993 and 1989 surveys of education and training.

Wage and salary earners (more commonly referred to as 'workers' in this review) are persons aged 15–64 years who had worked as wage and salary earners in the 12 months prior to the surveys (March to May 1997, April to May 1993, or March to July 1989). Persons aged 15–20 years and still at secondary school are excluded in this review.

Post-school education is defined as a course of study through an educational institution, since leaving school, for which an award is conferred upon completion.

Training courses are activities undertaken to obtain, maintain, or improve work-related skills, conducted at a designated time, in a structured format. On-the-job training, and study for an educational qualification, are excluded.

On-the-job training refers to activities undertaken to improve job skills, such as:
- asking questions of co-workers or colleagues;
- self teaching;
- being shown how to do the job; and
- watching others work.

A skilled vocational qualification requires two to four years' study and is for work in a higher skilled trade or craft. *A basic vocational qualification* requires one semester to one year's study for those wanting to work at the operative level in various fields (see Education – definitions and references pp. 80–81).

Recent education trends

The proportion of wage and salary earners who had a post-school qualification increased between 1989 and 1997 from 47% to 54%. Since 1993, the increase has been more substantial for those with a higher education qualification (from 24% to 28%, than for those with vocational qualifications (from 23% to

24%). The trend towards higher education qualifications looks set to continue with more enrolments in higher education courses than in vocational courses. In 1997, there were just over one million workers enrolled for a post-school qualification. Over two thirds of these were enrolled for a higher education qualification, and just over one quarter for a vocational qualification – similar proportions as those for all students.[1] Some of these were full-time workers undertaking part-time study, such as apprentices or mature-age university students, and others were full-time students with a part-time job, such as young people studying at university.

The likelihood of workers undertaking studies, whether for a first or subsequent qualification, varied according to their occupation, partly because some occupations have requirements for formal qualifications while others do not. In general, those in more highly skilled occupations, for example professionals, were more likely to be involved in study or training courses, and to have received employer support, than those in less skilled occupations, such as labourers and related workers.

One in six workers (16%) had studied for a post-school qualification in 1996 – more commonly professionals (21%) and elementary clerical, sales and service workers (19%). Of those who had studied, 61% of the elementary clerical, sales and service workers had studied for a bachelor degree or higher. This suggests that many of them were full-time university students working part-time in lower skilled jobs until they had completed their studies.

Recent training

In addition to any formal qualifications they might have, many workers receive training while employed. This may be in-house or external training courses, or on-the-job training – the most common type. In 1997, 74% of workers had received on-the-job training during the previous 12 months – similar to the proportions in 1989 (72%), but lower than in 1993 (82%). Those in more highly skilled occupations, such as professionals, were most likely to have received on-the-job training (90%), and those in less skilled occupations, such as intermediate production and transport workers, the least likely (58%).

Participation in external training courses (courses taken while not working or with other attendees working for a different employer) was less common, with one in five workers receiving this type of training in

Wage and salary earners: study or training undertaken by occupation and selected years

	Studied for a post-school qualification in previous year(a)	*Training(a)(b)*			*Total who did any study or training(c)*	*Total*
		On-the-job	*In-house*	*External*		
	%	%	%	%	%	'000
Occupation in 1997						
Managers and administrators	12.0	84.2	44.0	35.8	91.9	350.6
Professionals	20.9	89.6	52.2	35.7	95.4	1 343.1
Associate professionals	17.1	80.9	44.6	24.5	89.2	695.5
Tradespersons and related workers	18.0	70.9	25.5	16.4	80.0	912.9
Advanced clerical and service workers	14.4	77.2	31.9	19.6	84.1	289.3
Intermediate clerical, sales and service workers	15.5	75.1	35.8	17.9	84.8	1 488.8
Intermediate production and transport workers	7.8	58.2	24.2	10.8	68.9	727.8
Elementary clerical, sales and service workers	18.8	71.3	26.5	15.1	81.6	778.3
Labourers and related workers	9.1	58.6	15.8	10.9	69.1	833.4
Total 1997	**15.6**	**74.4**	**34.2**	**20.7**	**83.2**	**7 419.6**
Total 1993	**18.6**	**81.8**	**31.3**	**11.8**	**85.8**	**7 078.7**
Total 1989	**16.8**	**71.8**	**34.9**	**9.8**	**79.0**	**6 704.7**

(a) In the 12 months prior to the relevant survey.
(b) On-the-job training undertaken, or in-house or external training courses completed.
(c) People may undertake more than one study or training course, therefore components may not add to total.

Source: Education and Training Experience, Australia, 1997 (Cat. no. 6278.0); and unpublished data, 1997 Survey of Education and Training.

Wage and salary earners enrolled for post-school education(a): source of financial support, 1997

	Study status			*Level of qualification*					
	Full-time	*Part-time*	*External*	*Higher degree and postgrad-uate diploma*	*Bachelor degree*	*Associate or undergraduate diploma*	*Skilled vocational*	*Basic vocational*	*Total(c)*
Source of support(b)	%	%	%	%	%	%	%	%	%
Employer	5.6	35.0	32.5	35.7	12.6	17.0	63.0	25.4	23.7
Other(d)	*67.1*	*13.8*	*14.6*	*23.2*	*48.7*	*27.7*	*21.9*	*26.8*	*33.5*
Family members	39.3	5.8	4.5	6.6	31.0	13.9	12.4	8.8	17.9
Government	32.2	5.9	6.2	12.1	20.5	13.5	7.9	16.0	15.6
Did not receive support	29.1	55.6	57.3	48.3	40.0	56.8	51.9	52.5	46.2
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000	'000	'000	'000	'000	'000
Total	**387.3**	**468.4**	**199.0**	**151.9**	**396.3**	**186.4**	**121.9**	**161.6**	**1 054.7**
	%	%	%	%	%	%	%	%	%
Per cent aged 15–24 years	78.4	39.8	19.9	16.1	62.1	45.0	78.8	39.7	50.2

(a) Where more than one post-school qualification was enrolled for, details were collected about the most recent.
(b) People could report more than one type of financial support, therefore components may not add to total.
(c) Includes persons whose level of post-school qualification enrolled for was not stated or inadequately described.
(d) Comprises support from government, family members, union or professional organisations, other and not known.

Source: Unpublished data, 1997 Survey of Education and Training.

the previous 12 months (21%). However, this represented a strong increase in external training course participation since 1989 when the participation rate was 10%. It may partly reflect the trend towards outsourcing and contracting of many of the functions previously provided in-house. Levels of participation in in-house training courses were nevertheless similar in 1997 (34%) to 1989 (35%).

Support for education and training

People enrolled to obtain a post-school qualification may support themselves during their studies, but often obtain additional funding to pay for their education and living expenses. Of all workers enrolled in a post-school program of education in 1997, 24% received financial support from an employer, 18% from family and 16% from government (through payments such as Austudy or the Youth Training Allowance).

Full-time study for a post-school qualification is more commonly undertaken by younger workers (78% were aged 15–24 years in 1997), who usually support themselves with a combination of part-time work, and/or government and family assistance. Full-time students were generally more likely to receive support from family and from the government than part-time students. In 1997, 32% of workers studying full-time for a post-school qualification obtained support from the government and 39% from family members. On the other hand, students studying part-time, many of whom will have worked for some time, were more likely to have received support from employers (35%).

Training for a skilled vocational qualification generally occurs while a student is employed in the field in which the qualification is being attained (often as apprentices or trainees). As a result, workers enrolled in these courses were much more likely to have received employer support (63%) than those enrolled for a bachelor degree (13%). Similarly, people undertaking post-graduate studies usually do so in order to progress further in their chosen career. These courses are generally undertaken by older workers (84% were aged 25 years or more), who were more likely to have received support from their employer (36%) than from other sources.

The 1997 Survey of Education and Training also found that those enrolled for a post-school qualification who received financial support from their employer were most likely to have received support in the form of fee payments (62%) or paid study leave (50%).

Workers can also improve their skills through undertaking training courses that are related to their employment. Employers are more likely to provide support for courses where the relevance to the skills their staff need are

Wage and salary earners: indicators of education and training experience and intentions, 1997

Selected population groups	With post-school qualifications %	Undertaken some study or training(a) %	Had employer financial support for external training %	Enrolled for post-school qual. but not completed(b) %	Intends to enrol for post-school qual.(c) %	Total '000
Males	54.5	82.9	11.8	8.9	16.1	3 943.7
Females	53.1	83.5	12.6	10.2	16.7	3 475.9
Indigenous	34.6	84.0	9.1*	15.0	21.9	71.1
With post-school qualifications	100.0	87.8	16.6	9.6	19.5	3 997.5
Without post-school qualifications	..	77.8	7.1	9.4	12.7	3 422.0
English not first language(d)	55.5	70.9	8.0	8.2	15.1	851.0
Persons with a disability	52.0	80.2	11.7	9.7	16.8	1 332.5
Persons aged 15–24 years	37.7	93.7	8.0	18.2	26.1	1 545.1
Persons aged 25–34 years	58.6	85.8	13.1	10.4	19.0	2 076.8
Persons aged 35–44 years	59.8	82.5	15.1	6.9	15.1	1 857.8
Persons aged 45–64 years	56.0	72.7	11.7	4.1	7.1	1 939.8
All wage and salary earners	**53.9**	**83.2**	**12.2**	**9.5**	**16.4**	**7 419.6**

(a) In the 12 months prior to the 1997 survey.
(b) In the last five years.
(c) In the next three years.
(d) For persons not born in Australia.

Source: *Education and Training Experience, Australia, 1997* (Cat. no. 6278.0); and unpublished data, 1997 Survey of Education and Training.

more obvious. Of the 1.5 million workers who undertook external training courses in the 12 months prior to the 1997 Survey, 59% received employer financial support (that is, 12% of all workers).

Access to education and training

In general, actual or intended involvement in study for an educational qualification or in work-related training differs little between men and women, but decreases with increasing age. In 1997, 94% of workers aged 15–24 years had undertaken some study or training in the 12 months prior to the survey compared to 73% of those aged 45 years and over. In contrast, the proportion of workers who received employer financial support for external training courses increased with age, up to the 35–44 age group.

Apart from the differences by age, certain groups of people, such as Indigenous Australians or those with a disability, can experience special difficulties in gaining access to education or training opportunities.

Indigenous Australians commonly have had lower levels of participation in post-compulsory education than the rest of the community (see *Australian Social Trends 1996,* The education of Indigenous people, pp. 75–78), and in 1997 this was reflected in the lower proportions of Indigenous workers with a post-school qualification (35%) compared to all workers (54%). Indigenous workers, however, were just as likely as all workers to have undertaken some training or study in the 12 months prior to the 1997 Survey (84% and 83% respectively). They were also more likely to be intending to enrol for a post-school qualification in the three years following the survey (22%) than all workers (16%). These results are, in part, affected by the younger age structure of Indigenous workers, with younger workers being more likely than older workers to participate in study or training courses.

Workers without post-school qualifications undertook less study or training courses than those with post-school qualifications (78% versus 88%), and received less employer support for external training courses (7% and 17% respectively). They were also less likely to intend to enrol than those who already held a post-school qualification (13% compared to 20%).

Overseas-born workers whose first language was not English were just as likely to have a post-school qualification as all workers (55% and 54% respectively). For workers who immigrated as adults, this reflects both the immigration selection process which, in part, favours those with post-school educational qualifications, and also their older age profile compared to the Australian-born population, giving them more opportunity to have completed a qualification. Overseas-born

workers (whose first language was not English), however, did not participate in in-house or external training courses (22% and 14% respectively) to the same extent as the general population of workers (34% and 21%). In association with this lower participation in training courses, a lower proportion of overseas-born workers (8%) received employer support for training than all workers (12%). It is not clear whether the lower employer support for training courses is a cause or a consequence of the lower level of participation.

Having a disability did not seem to affect the level of training or education participation of workers, possibly because those who were able to find employment had lower levels of disability than those who were not able to get a job (see *Australian Social Trends 1997*, Employment of people with a handicap, pp. 104–108).

Endnotes

1 Australian Bureau of Statistics 1998, *Education and Training Experience, Australia 1997*, Cat. no. 6278.0, ABS, Canberra.

Work

Work — national summary

LABOUR FORCE	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total labour force	'000	7 867	8 083	8 346	r8 491	8 518	8 574	8 696	r8 886	9 066	r9 173	9 261
Females – (of total labour force)	%	40.3	40.8	41.4	41.7	41.9	41.9	42.3	42.7	r43.0	43.1	43.2
Participation rate	%	62.2	62.6	63.5	63.6	63.0	62.6	62.8	63.3	63.7	63.5	63.1
Male participation rate	%	75.3	75.2	75.5	75.3	74.4	73.9	73.6	73.8	r73.8	73.4	73.0
Female participation rate	%	49.4	50.4	51.9	52.3	51.9	51.7	52.2	53.2	53.8	53.9	53.6
Females in the labour force with children aged 0–4 (of all females with children aged 0–4)	%	43.0	44.0	46.3	44.5	46.6	45.3	46.1	49.3	47.4	47.7	48.2
Standardised participation rate	%	62.3	62.7	63.6	63.7	63.1	62.8	63.0	63.6	64.0	63.9	63.7
Participation rate of persons aged 15–19 years	%	59.6	59.9	60.9	58.6	55.7	55.1	55.8	58.8	59.2	59.0	57.7
Participation rate of persons aged 20–24 years	%	83.6	83.7	83.9	84.0	82.6	82.1	82.1	82.8	83.0	82.5	82.0
Median age of male labour force	years	35.5	35.6	35.8	36.1	36.3	36.5	36.7	36.9	37.1	37.2	37.5
Median age of female labour force	years	33.0	33.4	33.7	34.2	34.6	34.9	35.1	35.3	35.7	36.1	36.2

EMPLOYED PEOPLE	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total employed	'000	7 256	7 549	7 832	7 782	7 637	7 634	7 781	8 093	r8 301	r8 381	8 496
Employment/population ratio	ratio	57.4	58.5	59.6	58.3	56.5	55.8	56.2	57.7	58.3	58.0	57.9
Part-time work												
Part-time workers (of total employed)	%	19.8	20.1	20.9	21.7	22.9	23.5	23.8	24.4	24.6	r25.2	25.6
Male part-time workers (of total male employed)	%	7.1	7.2	8.0	8.5	9.7	10.2	10.4	10.9	11.0	11.7	12.0
Female part-time workers (of total female employed)	%	38.7	38.9	39.5	40.2	41.1	41.7	42.0	42.5	42.5	42.9	43.3
Female part-time workers (of total part-time employed)	%	78.3	78.6	77.6	77.2	75.6	75.1	75.0	74.5	74.6	73.7	73.4
Average hours worked per week by part-time workers	hours	15.2	15.3	15.2	15.3	15.4	15.4	15.5	15.7	15.6	15.8	16.0
Part-time workers who prefer more hours (of all part-time employed)	%	18.7	17.6	18.0	21.7	26.4	29.2	28.3	26.1	26.1	26.2	25.8
Part-time workers who worked 15 hours or less per week (of all part-time employed)	%	54.3	53.6	54.1	53.9	53.3	53.4	52.8	51.8	52.1	51.1	50.8
Average hours worked per week by full-time workers	hours	39.7	39.7	39.9	r40.0	40.6	r40.4	40.7	r41.0	r40.6	r41.1	41.3
Full-time workers working more than 49 hours per week (of all full-time employed)	%	19.7	20.1	20.4	20.7	22.1	22.4	23.7	24.3	23.7	24.4	24.9
Average weekly hours of paid overtime per employee	hours	1.4	1.5	1.3	1.1	1.1	1.2	1.3	1.2	1.1	1.1	1.0
Casually employed (of total employed)	%	18.9	20.0	19.4	20.3	22.3	22.7	23.7	24.0	26.1	25.7	26.9
Job mobile in previous year	%	r18.1	19.7	r18.3	r14.8	r12.8	n.a	r14.5	n.a	r15.8	n.a	14.3
Employers and own account workers (of total employed)	%	14.9	14.6	14.2	14.6	15.0	15.2	15.2	14.6	14.6	13.9	14.3
Industry												
Employed in service industries (of total employed)	%	67.7	67.7	68.7	69.5	70.9	70.6	70.9	71.4	r72.2	r72.4	72.6
Employed in manufacturing industries (of total employed)	%	16.0	15.9	15.3	14.7	14.2	14.2	14.0	13.8	13.4	13.5	13.2
Sector												
Private sector employees (of all employees)	%	72.0	73.0	73.3	72.5	72.6	73.5	75.1	76.0	77.0	78.4	78.8
Employed in small business (of all private sector employed)	%	n.a	n.a	n.a	n.a	50.5	51.2	52.7	51.3	50.7	50.2	50.8

Reference periods: All data are annual averages for the year ending 30 June except: average weekly hours of paid overtime (year ending 31 December); Casual employment and job mobility (February); private sector employment (June) and labour force participation of females with children (June).

Work — national summary continued

EMPLOYED PEOPLE continued	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Occupation												
Employed in highest skill (ASCO Skill Level 1) occupations(a)	%	23.3	22.9	23.7	24.4	24.9	25.1	24.9	24.4	24.2	25.2	25.2
Employed in lowest skill (ASCO Skill Level 5) occupations(a)	%	19.0	19.4	19.3	18.9	19.1	19.1	19.3	19.7	20.4	20.3	20.1
Females – of all employed in highest skill (ASCO Skill Level 1) occupations(a)	%	35.5	35.6	37.0	37.8	38.4	39.1	38.0	39.2	41.2	41.9	41.0

INDUSTRIAL RELATIONS	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Trade union membership	%	41.6	n.a.	40.5	n.a.	39.6	37.6	35.0	32.7	31.1	30.3	28.1
Median age of trade union members	years	35	n.a.	36	n.a.	37	37	37	38	38	38	39
Working days lost due to industrial disputes (per 1,000 employees)	days	269	190	207	248	147	100	76	79	131	74	72

UNEMPLOYMENT	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Total unemployed	'000	610.5	534.6	513.7	709.0	r881.6	940.5	r915.4	r793.7	r764.3	r792.4	764.2
Long-term unemployed	%	27.7	27.2	22.7	21.1	29.0	35.8	36.6	34.4	29.5	29.2	31.6
Unemployment rate	%	7.8	6.6	6.2	8.4	10.4	11.0	10.5	8.9	r8.4	r8.6	8.3
Male unemployment rate	%	7.3	6.2	5.8	8.4	10.8	11.7	10.9	9.1	8.8	8.8	8.5
Female unemployment rate	%	8.4	7.3	6.7	8.2	9.7	10.0	10.0	8.7	8.0	8.4	8.0
Full-time job seekers:												
Persons aged 15–19 years (of all persons aged 15–19)	%	7.9	6.3	5.8	7.7	9.1	9.0	8.6	7.4	7.2	7.0	6.5
Persons aged 20–24 years (of all persons aged 20–24)	%	8.2	6.7	6.3	9.1	11.4	11.8	10.9	8.8	8.6	9.0	8.7
Median duration of unemployment – males	weeks	24	23	18	19	29	34	35	31	26	25	28
Median duration of unemployment – females	weeks	14	12	11	14	21	25	24	21	18	18	20
Unemployment rate – capital cities	%	7.1	5.9	5.6	8.1	10.2	10.8	10.3	8.8	8.2	8.2	7.6
Unemployment rate – balance of States and Territories	%	8.8	7.8	7.1	8.7	10.6	11.2	11.0	9.2	8.9	9.4	9.4

NOT IN THE LABOUR FORCE	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Marginally attached	'000	721.7	708.4	752.5	819.3	846.4	907.8	773.3	862.8	879.6	890.5	922.6
Discouraged jobseekers	'000	83.8	76.1	100.9	138.2	145.6	147.4	106.5	111.9	118.9	118.4	110.9

TRANSITION TO RETIREMENT	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Participation rate of males aged 55–59 years	%	75.1	74.0	75.0	75.2	72.9	72.5	72.6	73.6	73.0	73.2	72.5
Participation rate of females aged 55–59 years	%	31.5	32.4	32.3	35.7	35.7	36.4	38.0	38.7	41.3	42.3	42.3
Participation rate of males aged 60–64 years	%	47.4	49.1	49.9	50.7	50.2	48.5	49.1	47.7	46.6	45.4	45.8
Participation rate of females aged 60–64 years	%	12.9	14.9	15.1	15.9	14.9	14.4	15.8	16.0	17.5	18.3	19.1
Persons retired from full-time work (of all persons aged 50–64 years)	%	n.a	46.4	n.a	n.a	46.4	n.a	46.1	n.a	n.a	45.0	n.a.

(a) ASCO second edition was introduced in August 1996. Data prior to this date are concorded with ASCO second edition at the major group level.

Reference periods: All data are annual averages for the year ending 30 June except: working days lost due to industrial disputes (year ending 31 December); occupation and trade union membership (August); not in the labour force data (September) and retirement data (October/November).

Work — State summary

LABOUR FORCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Total labour force	'000	1997–98	3 060	2 327	1 737	719	938	218	94	166	9 261
Females – (of total labour force)	%	1997–98	42.9	43.5	43.4	43.2	42.3	42.4	42.9	47.3	43.2
Participation rate	%	1997–98	61.5	63.2	65.0	60.8	66.2	59.1	70.3	71.4	63.1
Male participation rate	%	1997–98	71.6	73.1	74.3	70.6	76.5	69.7	76.7	78.1	73.0
Female participation rate	%	1997–98	51.8	53.8	55.8	51.4	56.0	49.0	63.3	65.1	53.6
Females in the labour force with children aged 0–4 years (of all females with children aged 0–4)	%	1998	48.5	46.5	51.7	47.9	44.3	44.9	36.7	62.8	48.2
Standardised participation rate	%	1997–98	61.6	63.3	65.0	60.9	66.1	59.2	70.0	71.5	63.7
Participation rate of persons aged 15–19 years	%	1997–98	53.9	56.4	63.0	55.8	64.7	56.9	54.3	59.4	57.7
Participation rate of persons aged 20–24 years	%	1997–98	80.4	83.6	82.8	83.2	81.7	79.3	75.1	83.7	82.0
Median age of male labour force	years	1997–98	37.7	37.4	37.2	37.7	37.4	37.9	36.0	37.1	37.5
Median age of female labour force	years	1997–98	36.3	36.0	36.1	37.1	36.2	36.9	35.0	36.9	36.2

EMPLOYED PEOPLE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Total employed	'000	1997–98	2 826	2 129	1 582	649	872	194	90	154	8 496
Employment/population ratio	ratio	1997–98	56.8	57.9	59.2	54.8	61.6	52.6	66.8	66.0	57.9
Part-time work											
Part-time workers (of total employed)	%	1997–98	23.8	26.1	26.4	28.5	26.3	29.3	20.2	24.6	25.6
Male part-time workers (of total male employed)	%	1997–98	11.0	12.5	12.6	13.3	11.5	13.6	11.1	13.9	12.0
Female part-time workers (of total females employed)	%	1997–98	40.7	43.8	44.2	48.3	46.5	50.2	32.1	36.4	43.3
Female part-time workers (of total part-time employed)	%	1997–98	73.6	73.0	73.1	73.6	74.8	73.6	68.7	70.4	73.4
Average hours worked per week by part-time workers	hours	1997–98	16.1	15.6	16.3	16.5	15.4	15.9	17.3	15.7	16.0
Part-time workers who prefer more hours (of all part-time employed)	%	1997–98	23.9	25.4	28.4	29.0	24.2	29.9	20.9	27.7	25.8
Part-time workers who worked 15 hours or less per week (of all part-time employed)	%	1997–98	49.1	52.7	50.3	49.0	54.2	50.1	41.0	52.2	50.8
Average hours worked per week by full-time workers	hours	1997–98	41.2	41.3	41.8	41.3	41.5	40.0	41.2	39.7	41.3
Full-time workers working more than 49 hours per week (of all full-time employed)	%	1997–98	22.9	25.7	24.4	20.7	26.4	26.1	19.4	25.9	24.9
Average weekly hours of paid overtime per employee	hours	1998	1.0	1.1	1.0	0.8	1.1	0.7	1.4	0.5	1.0
Employers and own account workers (of total employed)	%	1997–98	13.9	12.9	16.1	16.1	15.7	15.9	8.1	9.4	14.3
Industry											
Employed in service industries (of total employed)	%	1997–98	73.1	72.1	73.2	70.1	72.0	72.9	79.9	90.0	72.6
Employed in manufacturing industries (of total employed)	%	1997–98	13.6	10.6	11.0	15.6	10.2	12.0	3.8	3.0	13.2
Sector											
Private sector employees (of all employees)	%	1998	79.9	82.1	76.7	76.6	79.4	73.5	67.9	49.9	78.8
Employed in small business (of all private sector employed)	%	1998	49.2	49.1	54.8	52.4	51.1	54.0	47.1	58.5	50.8

(a) Estimates for Northern Territory refer to mainly urban areas only.

Reference periods: All data are annual averages for the year ending 30 June except: average weekly hours of paid overtime (year ending 31 December); private sector employment (June) and labour force participation of females with children (June).

Work — State summary continued

EMPLOYED PEOPLE continued	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Occupation											
Employed in highest skill (ASCO Skill Level 1) occupations(b)	%	1998	26.7	26.3	22.8	23.7	23.2	21.2	23.8	32.4	25.2
Employed in lowest skill (ASCO Skill Level 5) occupations(b)	%	1998	19.4	19.7	20.9	21.8	21.1	22.9	20.7	18.0	20.1
Females—of all employed in highest skill (ASCO Skill Level 1) occupations(b)	%	1998	40.7	40.7	42.5	40.6	39.5	42.0	47.7	44.4	41.0

INDUSTRIAL RELATIONS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Trade union membership	%	1998	29.4	27.6	28.2	30.9	21.8	34.7	24.2	28.4	28.1
Median age of trade union members	years	1998	39	38	38	39	40	38	40	41	39
Working days lost due to industrial disputes (per 1,000 employees)	days	1998	77	108	38	30	83	19	8	36	72

UNEMPLOYMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT (a)	ACT	Aust.
Total unemployed	'000	1997–98	233.2	197.6	155.5	70.8	66.0	23.9	4.7	12.5	764.2
Long-term unemployed	%	1997–98	33.8	32.7	27.8	38.7	22.1	39.7	*14.0	24.6	31.6
Unemployment rate	%	1997–98	7.6	8.5	8.9	9.8	7.0	11.0	5.0	7.5	8.3
Male unemployment rate	%	1997–98	7.8	8.5	9.2	10.3	7.1	11.9	5.4	8.1	8.5
Female unemployment rate	%	1997–98	7.3	8.4	8.6	9.2	6.9	9.7	4.4	6.9	8.0
Full-time job seekers:											
Persons aged 15–19 years (of all persons aged 15–19)	%	1997–98	6.0	6.1	7.3	7.9	6.3	9.4	*3.3	6.2	6.5
Persons aged 20–24 years (of all persons aged 20–24)	%	1997–98	7.7	9.0	9.6	10.6	8.0	12.0	*4.0	8.4	8.7
Median duration of unemployment – males	weeks	1997–98	31	30	24	35	18	39	**	23	28
Median duration of unemployment – females	weeks	1997–98	20	21	17	27	13	25	**	14	20
Unemployment rate – capital cities	%	1997–98	6.3	8.2	8.2	10.0	7.2	9.6	5.0	7.5	7.6
Unemployment rate – balance of State	%	1997–98	10.2	9.3	9.6	9.3	6.5	11.0	n.a	n.a	9.4

NOT IN THE LABOUR FORCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT (a)	ACT	Aust.
Marginally attached	'000	1998	294.1	221.7	185.7	77.9	96.1	27.6	4.3	15.3	922.6
Discouraged jobseekers	'000	1998	38.1	26.8	20.1	10.4	11.1	2.8	*0.5	*1.0	110.9

TRANSITION TO RETIREMENT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT (a)	ACT	Aust.
Participation rate of males aged 55–59 years	%	1997–98	70.5	75.2	73.2	68.9	77.8	63.3	67.7	71.7	72.5
Participation rate of females aged 55–59 years	%	1997–98	40.8	40.1	45.2	40.3	48.2	36.1	51.7	60.7	42.3
Participation rate of males aged 60–64 years	%	1997–98	43.6	46.5	47.9	42.4	51.8	38.1	*54.7	53.0	45.8
Participation rate of females aged 60–64 years	%	1997–98	20.2	17.5	18.8	17.0	21.2	14.7	22.6	34.7	19.1
Persons retired from full-time work (of all persons aged 50–64)	%	1997	44.0	47.2	44.1	47.6	44.3	48.5	20.6	36.4	45.0

(a) Estimates for Northern Territory refer to mainly urban areas only.
(b) ASCO second edition was introduced in August 1996. Data prior to this date are concorded with ASCO second edition at the major group level.

Reference periods: All data are annual averages for the year ending 30 June except: working days lost due to industrial disputes (year ending 31 December); occupation and trade union membership (August); not in the labour force data (September) and retirement data (October/November).

Work — definitions and references

Average hours worked per week by full-time workers — average hours worked, including overtime, by full-time workers during the survey reference week. The hours are those actually worked and are not necessarily the hours paid for.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Average weekly hours paid overtime per employee — total overtime hours paid for divided by the total number of employees (including those who were not paid for any overtime). Overtime is time worked in excess of award, standard or agreed hours of work for which payment is received.
Reference: *Job Vacancies and Overtime, Australia* (Cat. no. 6354.0).

Casually employed — employees who were not entitled to either paid holiday leave or sick leave in their main job.
Reference: *Weekly Earnings of Employees, Australia* (Cat. no. 6310.0).

Discouraged jobseekers — people who were marginally attached to the labour force, wanted to work and who were available to start work within four weeks but whose main reason for not actively seeking work was that they believed they would not find a job for any of the following reasons:
- considered too old or too young by employers;
- difficulties with language or ethnic background;
- lacked necessary schooling, training, skills or experience;
- no jobs in their locality or line of work; or
- they considered that there were no jobs at all available.

Reference: *Persons Not in the Labour Force, Australia* (Cat. no. 6220.0).

Employed — persons aged 15 and over who, during the reference week, worked for one hour or more for pay, profit, commission, payment in kind, or worked without pay in a family business, or who had a job but were not at work.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Employees — an employee is a person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee by their employer while working on a commission basis, tips, piece rates or payment in kind, or a person who operates his or her own incorporated enterprise with or without hiring employees.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Employer — an employer is a person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires one or more employees.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Employment/population ratio — the number of employed persons in a group expressed as a proportion of the civilian population in the same group.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Full-time job seekers — for any group, unemployed persons seeking full-time work, expressed as a proportion of the civilian population in the same group.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Full-time workers — employed persons who usually worked 35 hours a week or more and others who, although usually working less than 35 hours a week, worked 35 hours or more during the reference week.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Industrial dispute — a withdrawal from work by a group of employees, or a refusal by an employer or a number of employers to permit some or all of their employees to work, made in order to enforce or resist a demand, or to express a grievance.
Reference: *Industrial Disputes, Australia* (Cat. no. 6322.0).

Job mobile — the proportion of people aged 15–69 who had worked at some time during the previous year who were job mobile, that is, they changed their job (employer/business or locality) within the previous year.
Reference: *Labour Mobility, Australia* (Cat. no. 6209.0).

Labour force — for any group, persons who were employed or unemployed, as defined.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Long-term unemployed — people unemployed for 52 weeks or longer.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Manufacturing industries — the Manufacturing division of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (Cat. no. 1292.0).
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Marginally attached — persons aged 15–69 years who were not in the labour force, wanted to work and: were actively looking for work but were not available to start; or were not actively looking for work, but were available to start work.
Reference: *Persons Not in the Labour Force, Australia* (Cat. no. 6220.0).

Median age — the age at which half the population is older and half is younger.

Median age at retirement — the median divides the population of persons who have retired from full-time work in two. Half of the population retired from full-time work at an age younger than the median, with the other half retiring at an older age.
Reference: *Retirement and Retirement Intentions, Australia* (Cat. no. 6238.0)

Median duration of unemployment — the period of unemployment at which half of the unemployed had been unemployed for more weeks and half had been unemployed for fewer weeks.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Work — definitions and references continued

Occupation — a collection of jobs which are sufficiently similar in their main tasks to be grouped together for the purposes of classification. The Australian Standard Classification of Occupations (ASCO) Second Edition, which is used for the classification of occupation, applies skill level and skill specialisation as major criteria.
Skill level is measured by: formal education and training, and previous experience usually required for entry into an occupation. ASCO Second Edition assigns each of the nine major groups in the classification to one of five ranked skill levels.
Skill Level 1 comprises the major groups, managers and administrators, and professionals; Skill Level 2 — associate professionals; Skill Level 3 — tradespersons and related workers and advanced clerical and service workers; Skill Level 4 — intermediate production and transport workers; and Skill Level 5 — elementary clerical, sales and service workers and labourers and related workers.
Reference: *Australian Standard Classification of Occupations, Second edition* (Cat. no. 1220.0).

Own account worker — a person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires no employees. (this category was formally entitled self-employed.)
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Participation rate — for any group, the labour force expressed as a percentage of the civilian population in the same group.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Part-time workers — employed persons who usually worked less than 35 hours a week and who did so during the reference week.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Part-time workers who prefer more hours — part-time employed who indicated they would prefer to work more hours.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Private sector — the public sector includes all employees of local government authorities and government departments, agencies and authorities created by, or reporting to, the Commonwealth Parliament and State and Territory Parliaments. All other employees are classified as private sector.
Reference: *Job Vacancies and Overtime, Australia* (Cat. no. 6354.0).

Retired persons — persons aged 45 years and over, who had a full-time job at some time and who had ceased full-time labour force activity (i.e. were not working full-time, were not looking for and did not intend to work full-time at any time in the future). Unpaid voluntary work was not considered full-time work.
Reference: *Retirement and Retirement Intentions, Australia* (Cat. no. 6238.0).

Service industries — the combination of the following divisions of the *Australian and New Zealand Standard Industrial Classification (ANZSIC)* (Cat. no. 1292.0): wholesale trade; retail trade; accommodation, cafes and restaurants; transport and storage; communication services; finance and insurance; property and business services; government administration and defence; education; health and community services; cultural and recreational services; and personal and other services.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Small business — businesses with fewer than 20 employees in all industries except manufacturing where they have fewer than 100 employees, and agriculture where they have an estimated value of agricultural operations between $22,500 and $400,000.
Reference: *Small Business, Australia* (Cat. no. 1321.0).

Standardised participation rate — age-specific labour force participation rates expressed as a percentage of the standard civilian population, to remove the effect of age and sex composition of the population. The standard population used is the 1991 Census population.

Trade union membership — employees with membership of an organisation (or employee or professional association), the principal activities of which include the negotiation of rates of pay and conditions of employment for its members.
Reference: *Trade Union Members, Australia* (Cat. no. 6325.0).

Unemployed — persons aged 15 and over who were not employed during the reference week, but who had actively looked for work and were available to start work.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Unemployment rate — the number unemployed expressed as a proportion of the labour force. Separate rates are calculated for sub-groups of the population.
Reference: *Labour Force, Australia* (Cat. no. 6203.0).

Working days lost due to industrial disputes — total working days lost by employees due to industrial disputes during the year.
Reference: *Industrial Disputes, Australia* (Cat. no. 6322.0).

Decline of the standard working week

PAID WORK

The proportion of employed people working 35–44 hours a week fell from 42% to 36% between 1988 and 1998. At the same time, the proportions who worked longer hours and shorter hours both increased.

In August 1998, of the 8.5 million people who were employed, 37% worked less than 35 hours per week and 17% worked for less than 16 hours per week. The proportion of those working between 35 and 44 hours a week (36%) was similar to those who worked less than 35 hours, while 27% worked more than 44 hours per week. There were 773,700 workers (9% of employed people) who worked 60 or more hours per week.

The large disparities in hours worked among employed people mark a shift away from the norm of a full-time job of about 35–44 hours (and most commonly 40 hours) observed several decades ago, and away from industry standards for shorter hours of full-time work set in the 1980s (see *Australian Social Trends 1995*, The working week, pp. 91–93). Moreover, this is a trend that has continued over the last decade. Between 1988 and 1998, both the proportion of people working part-time hours and the proportion working at least 45 hours per week increased. As a result, the proportion working 35–44 hours fell from 42% to 36%.

These changes have prompted expressions of concern for workers, their families and social cohesion. There are fears in some sectors of the community that the workforce is polarising into underemployed, low income part-timers wanting to work more hours, and overworked full-timers suffering ill health, fatigue, and deteriorating quality of working and family life, who want to work fewer hours.[1]

Hours worked and related concepts

The main source of data for this review is from the ABS Labour Force Survey conducted monthly since February 1978.

Hours worked is measured in the survey as the number of hours actually worked by an employed person in all of his/her jobs in the survey reference week. Hours actually worked may not necessarily correspond to those usually worked, due to paid and unpaid overtime, flextime, rostered days off, public holidays, and time spent not working because of bad weather or industrial disputes. In August 1998, 4.8% of employed people had not worked at least one hour during the previous week. The survey also identifies whether people usually work full-time (35 or more hours per week) or part-time, but not the number of hours usually worked.

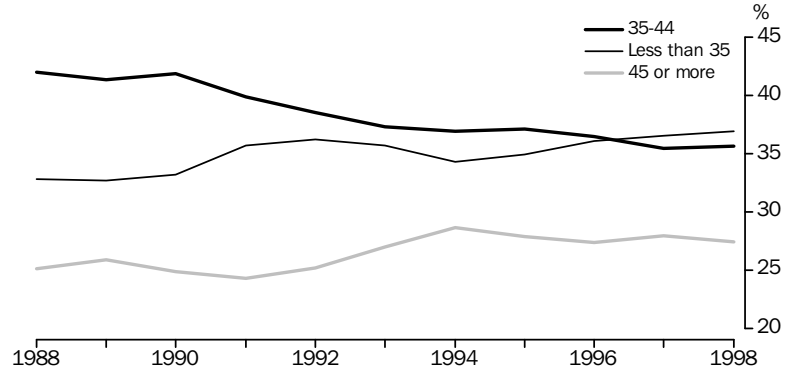
An *employee* is a person who works for a public or private employer and receives remuneration in wages, salary, a retainer fee by their employer while working on a commission basis, tips, piece-rates or payment in kind, or a person who operates his or her own incorporated enterprise with or without hiring employees.

An *employer* is a person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires at least one employee.

An *own account worker* is a person who operates his or her own unincorporated economic enterprise or engages independently in a profession or trade, and hires no employees.

Changes in hours worked have occurred for many reasons, which differ by industry, occupation, and geographic area. Some, for example, reflect the increased entry of women into the labour force and the growth of employment in service industries; both have contributed to the increase in part-time employment (see *Australian Social Trends 1994*, Trends in part-time work, pp. 103–108 and *Australian Social Trends 1997*, Changing industries, changing jobs, pp. 93–98). However, as reflected in government policies, there has also been a general desire to enhance flexibility in working arrangements to suit the interests of employers concerned with maintaining their competitiveness, and to enable individual aspirations for diverse working arrangements to be realised.

Hours worked, August 1988 to August 1998



Source: Unpublished data, Labour Force Surveys, August 1988 to August 1998.

Employed persons: hours worked, August 1988 and August 1998

	Distribution of weekly hours worked in all jobs, August 1998				*Percentage point change in distribution, 1988–1998*		
Sex and age group (years)	*Less than 35 hours* %	*35–44 hours* %	*45 hours or more* %	*Total persons* '000	*Less than 35 hours* no.	*35–44 hours* no.	*45 hours or more* no.
Men(a)	*24.4*	*37.9*	*37.7*	*4 809.4*	*3.4*	*–0.5*	*3.1*
15–24	42.5	38.9	18.6	799.0	12.3	–10.3	–2.0
25–44	19.2	39.4	41.4	2 444.8	1.7	–4.0	2.4
45–64	21.8	35.5	42.7	1 478.7	1.6	–8.2	6.7
Women(a)	*53.0*	*32.8*	*14.2*	*3 727.8*	*2.8*	*–5.9*	*3.1*
15–24	58.7	33.1	8.2	737.7	16.5	–16.0	–0.5
25–44	49.9	34.4	15.7	1 888.2	–2.6	–1.2	3.8
45–64	54.0	30.1	15.8	1 064.0	0.1	–3.8	3.7
Total(a)	**36.9**	**35.6**	**27.4**	**8 537.2**	**4.1**	**–6.4**	**2.3**

(a) Includes persons 65 years or older.

Source: Unpublished data, Labour Force Surveys, August 1988 and August 1998.

Labour market reforms such as the Australian Industrial Relations Commission's October 1991 National Wage Case Decision, and the federal governments' *Industrial Relations Reform Act (1993)* and *Workplace Relations Act 1996*, have supported diversification of employment conditions. These reforms have promoted the decentralisation of decisions on pay and working conditions (including hours of work) to agreements between employers and employees in the workplace.

Changes for men and women

Patterns of change have differed for men and women in different age groups. The overall shift in proportions working long hours between 1988 and 1998 was about the same for both men and women (3.1 percentage points). However, the increased proportions working longer hours were largely restricted to those aged between 25 and 64. The distributional shift was most pronounced for men aged 45–64 (among whom the proportion working 45 hours or more increased by 6.7 percentage points).

Both young men and women (aged 15–24) were considerably more likely to work part-time than they were ten years earlier. This shift reflects increased rates of underemployment among these relatively less experienced workers. Between August 1988 and August 1998, the proportion of young workers employed part-time and preferring to work more hours rose from 5% to 11%. The shift is also likely to be partly due to rising levels of participation in education in this age group (see *Australian Social Trends 1999*, Education — national summary table, pp. 76–77).

Modest movements towards both long-hour employment (2.4 percentage points) and part-time work (1.7 percentage points) accounted for the 4.0 percentage point shift away from the usual full-time working week for men aged 25–44 years. For women in this age group, there was a shift away from part-time hours (2.6 percentage points) and usual full-time hours (1.2 percentage points) towards long full-time hours (3.8 percentage points). These divergent trends may, in part, be attributable to gender role change in couple families containing one or more dependent children as employed fathers become more likely, and employed mothers less likely, to work part-time to fulfil family responsibilities such as child care. Part-time employment among partnered and employed fathers with at least one dependent child at home increased from 3% to 6% between August 1988 and August 1998. Over the same period, part-time employment among comparable mothers decreased from 59% to 56%.

Despite these trends, in 1998, employed men aged 25–44 (41%) were marginally less likely than older employed men (43%), and considerably more likely than younger employed men (19%) and women of any age group, to be working long hours in paid work.

Hours worked(a) by status in employment and occupation in main job, August 1988 and August 1998

	Distribution of weekly hours worked in August 1998				*Percentage point change in distribution of weekly hours worked between 1988 and 1998*		
	Less than 35 hours	*35–44 hours*	*45 hours or more*	*Total persons*	*Less than 35 hours*	*35–44 hours*	*45 hours or more*
	%	%	%	'000	no.	no.	no.
Status in employment(b)							
Employee	36.8	38.3	25.0	7 300.7	4.1	–7.9	3.8
Employer	22.4	18.7	58.8	349.6	–1.0	0.4	0.6
Own-account worker	40.6	21.4	38.0	819.2	6.0	–1.5	–4.5
Occupation							
Managers and administrators	19.2	22.2	58.6	625.2	0.3	–1.4	1.1
Professionals	30.4	36.1	33.5	1 527.5	0.2	–3.5	3.3
Associate professionals	23.2	32.1	44.6	881.3	–3.6	–6.6	10.2
Tradespersons and related workers	23.5	45.1	31.4	1 150.2	1.2	–4.7	3.5
Advanced clerical and service workers	51.1	37.5	11.4	397.7	9.3	–10.9	1.6
Intermediate clerical, sales and service workers	47.9	38.9	13.2	1 451.1	6.5	–7.6	1.0
Intermediate production and transport workers	28.9	38.6	32.5	783.0	5.2	–10.6	5.4
Elementary clerical, sales and service workers	62.8	26.5	10.7	860.9	12.2	–10.0	–2.1
Labourers and related workers	49.7	35.6	14.7	860.3	4.7	–4.1	–0.6
Total	**36.9**	**35.6**	**27.4**	**8 537.2**	**4.1**	**–6.4**	**2.3**

(a) By employed persons in all jobs.
(b) Excludes contributing family worker.

Source: Unpublished data, Labour Force Surveys, August 1988 and August 1998.

The increased proportion of men and women working part-time may have contributed to the increased likelihood for workers to have more than one job. In August 1997, 6.3% of employed women and 4.4% of employed men had more than one job. The respective proportions ten years earlier were 4.1% and 3.4%.[2]

Status in employment and occupation

The growth in long-hour employment has been confined largely to people who were employees in their main job (an increase of 3.8 percentage points). The proportion of own-account workers working at least 45 hours a week declined between 1988 and 1998. Despite this trend, own-account workers were still more likely than employees to be working at least 45 hours a week (38% of own-account workers compared with 25% of employees). Employers, and more generally those whose occupations were managers and administrators, were even more likely to be working such hours (59% in 1998). Of all managers and administrators, 26% worked at least 60 hours a week. The distribution of weekly hours worked by employers, and managers and administrators, changed little over the decade.

Other occupation groups displayed more marked movements away from a standard hours working week to part-time or long-hour employment, with sharper movements evident among less skilled occupations. More highly skilled non-managerial occupations tended to be shifting towards long-hour employment while less skilled occupations were generally more likely to be providing part-time employment in 1998 than in 1988.

The exceptions to this trend were advanced clerical and service workers, and intermediate production and transport workers. Although there was a small increase in the proportion of advanced clerical and service workers working long hours between 1988 and 1998 (1.6 percentage points increase), there was a much larger increase in the proportion working part-time (9.3 percentage points increase, from 42% to 51% of workers over the same time period).

Industries with greatest proportional shift to very short or very long hours of employment, 1988 to 1998

	Percentage point increase from 1988 to 1998	*Proportion of employed people in 1998*
	no.	%
Industries shifting to very short hours(a)		Working very short hours
Cultural and recreational services	4.9	27.7
Retail trade	3.9	29.8
Construction	2.3	14.0
Property and business services	2.1	16.6
Education	2.0	16.6
All industries	**1.8**	**17.2**
Industries shifting to very long hours(b)		Working very long hours
Mining	13.4	23.9
Electricity, gas and water supply	7.5*	9.0
Communication services	5.0*	6.8
Transport and storage	4.1	14.1
Construction	3.0	11.5
Personal and other services	2.6	7.7
Government administration and defence	2.0	3.8
All industries	**0.8**	**9.1**

(a) Less than 16 hours per week, on average, for all jobs held by employees in the industry.
(b) 60 or more hours per week, on average, for all jobs held by employees in the industry.

Source: Unpublished data, Labour Force Surveys, August 1988 and August 1998.

Intermediate production and transport workers were considerably less likely to be working 35–44 hour weeks in 1998 (39%) than a decade earlier (49%). Yet there were similar rises in the proportions of this occupation group working part-time hours and long hours (just over 5 percentage points each).

Industry

Changes in the distribution of weekly hours worked in the past ten years have varied considerably for different industries. These trends are highlighted when focussing on shifts in the proportion of employed people working very short and very long hours (i.e. less than 16 hours and at least 60 hours per week, respectively).

Between 1988 and 1998, two service industries, cultural and recreational services (4.9 percentage points) and retail trade (3.9 percentage points) exhibited the most pronounced movement towards employing

International comparison

Australia has a higher proportion of people working long-hour jobs than many other OECD countries. While the trend to working long hours has also occurred in a number of other countries, as shown below, this trend has not been uniform. Employment in long-hour jobs has also been falling in some countries.

Most OECD countries have legislated maximum weekly working hours of between 48 and 60 hours. Australia, like Canada, Japan, New Zealand, the United Kingdom and the United States, has no legal maximum. Employers are able to offer employees heavy workloads and employees are free to accept such offers.

The OECD Economic Outlook report, from which these data have been obtained, also reveals that like Australia, the trend to short-hour employment has been occurring in many other countries.

Working time reforms in a number of contintental European countries (e.g. France and Germany) have, over recent years, sought to encourage work-sharing arrangements. These reforms have been oriented to realising working time reductions for employees working long hours.[3]

Employed people working at least 45 hours a week, 1985 and 1994, selected countries

	Men		*Women*	
	1985	*1994*	*1985*	*1994*
	%	%	%	%
Australia	**30.2**	**38.1**	**9.6**	**13.6**
Belgium	5.0	5.5	1.6	3.0
Canada	20.1	23.1	6.1	7.7
Denmark	8.6	15.0	2.1	5.6
France	12.1	15.0	4.7	6.1
Germany	10.0	8.3	4.3	3.0
Greece	17.3	20.2	8.6	13.2
Italy	11.5	13.6	4.5	5.7
Japan(a)	50.1	36.7	22.7	15.8
Netherlands	13.0	1.8	2.4	0.4
Portugal(b)	59.2	26.2	41.6	12.5
Spain	11.2	11.6	11.0	5.9
Sweden(b)	15.3	17.1	4.5	5.5
United Kingdom	36.2	41.5	6.9	10.9
United States of America(a)	24.7	27.0	8.8	11.1

(a) More than 48 hours a week.
(b) 1987 and 1994.

Source: OECD, 1998, *Employment Outlook*.

people for very short hours. These industries employ relatively high proportions of women and of part-time workers. They are also industries experiencing strong growth in employment (see *Australian Social Trends 1997,* Changing industries, changing jobs, pp. 93–98).

In contrast, two production industries, mining (13.4 percentage points) and electricity, gas and water supply (7.5 percentage points) have experienced the largest proportional shift to very long hour employment. These industries continue to be dominated by male full-time workers. They are also industries in which employment has been in decline. Employment in mining declined by 9% between 1988 and 1998 and in electricity, gas and water supply by 39%. It may be that the need to cut costs in an environment of increased competition, and the associated employment decline, has contributed to the increase in hours worked among employees. Extending working hours for fewer numbers of staff might, in many instances, be less costly than the overheads associated with recruiting, training, equipping and retrenching staff engaged to work more usual hours.

Working after hours

The growing diversity of working arrangements, described above, suggests that working 'unsocial hours' (in the evening or on weekends) has also been increasing. Information from ABS time use surveys conducted in 1992 and 1997 indicate that this has occurred, although the magnitude of change over these five years has not been large. For example, the proportion of people working between 6pm and 6am increased from 35% to 37%. A slight increase in the proportion of people working on weekends also occurred.

Between August 1993 and August 1997, the proportion of employees able to work extra hours to be able to take time off increased from 34% to 38%.[4] This more widespread access to flexible working hours may mean that a greater proportion of employees paid to work approximately 40 hours a week are able to work less than 35 hours in one week and more than 44 the next according to workload and personal preference. Wider access to more flexible working hours may have already had some impact on the number of people working 35–44 hours in any given week, and may contribute to further reduced likelihood of employed persons consistently working between 35 and 44 hours per week in the future.

People working in the evening, at night and on the weekend, 1992 and 1997

	1992	*1997*
Time of day and day of week	%	%
Outside daytime hours (6pm–6am)	*35.1*	*36.7*
Evening (6pm–10pm)	29.4	30.0
Night (10pm–6am)	16.1	17.4
Weekend	13.6	14.1
Weekday daytime (6am–6pm)	84.7	83.6
Persons reporting employment	**100.0**	**100.0**

Source: Unpublished data, 1992 and 1997 Time Use Surveys.

Endnotes

1 Australian Centre for Industrial Relations Research and Training (ACCIRT) November 1998, *Work/Time/Life: Reclaiming the working time agenda (An issues paper for the Australian union movement)*, ACCIRT, Sydney.

2 Australian Bureau of Statistics 1998, *Multiple Jobholding, Australia,* August 1997, Cat. no. 6216.0, ABS, Canberra.

3 Organisation for Economic Co-operation and Development June 1998, 'Working hours: latest trends and policy initiatives' in *Employment Outlook*, pp. 153–188, OECD, Paris.

4 Australian Bureau of Statistics 1998, *Working Arrangements, Australia,* August 1997, Cat. no. 6342.0, ABS, Canberra.

Men and women wanting work

UNDER-UTILISED LABOUR

In September 1998, among people not fully employed there were more women than men wanting work – 1.2 million women compared to 909,000 men. However, among those wanting work, a lower proportion of women were part of the labour force (50% of women compared to 71% of men).

Paid work provides many benefits: including financial independence, extra family income, opportunities for expanding social networks, developing skills, enhancing personal status and contributing to the community. Circumstances such as ill health can prevent people from having a job, and not all people of working age need paid employment for financial reasons. However, one of the more pressing social issues, particularly affecting those who do not have other means to support themselves, is that there are large numbers of people whose needs and interests in obtaining work are not satisfied.

Unemployment provides a measure of people at risk of being in financial or social distress. However, while serving to identify those in greatest need of support, it does not provide a complete picture of the extent to which people may want jobs. For example, there are many people with part-time jobs who want to work longer hours. There are also many people, such as students and mothers with young children, who want a paid job to suit their circumstances but who are not actively looking for work. Taking this broader perspective, this review provides a profile of men and women of working age (those aged 15–64 years) with clearly expressed interests in finding work. It also provides a broader view of the extent of under-utilised labour in Australia than that obtained from counting unemployed people alone.

People wanting work

Through its program of monthly labour force and supplementary surveys, the ABS collects a range of information about the labour market activity and work aspirations of people aged 15 years and over. From these sources, this review identifies three groups of people of working age (defined as those aged 15–64 years), excluding those already fully employed (defined below), with clearly expressed interests in wanting work; namely the underemployed, the unemployed and those marginally attached to the labour force.

Fully employed – people who work in full-time jobs (35 hours or more per week) and those in part-time jobs in which they did not want to work longer hours.

Underemployed – people who usually work less than 35 hours per week who want to work more hours.

Unemployed – those who were not employed during the survey reference week, but who had actively looked for work in the last four weeks and were available to start work.

Marginally attached to the labour force – people not in the labour force who wanted to work and were available to start work but were not actively looking for work, or were actively looking for work but unable to start work within four weeks.

Persons in the *labour force*, the economically active population, are those who are either employed or unemployed.

Employment profile of people aged 15–64 years, September 1998

	Men		*Women*		*Total*	
	'000	%	'000	%	'000	%
In the labour force						
Employed(a)	4 834.9	76.8	3 765.2	60.4	8 600.2	68.7
Fully employed	4 600.1	73.1	3 454.0	55.4	8 054.1	64.3
Underemployed	200.6	3.2	300.5	4.8	501.1	4.0
Unemployed	444.6	7.1	319.3	5.1	763.9	6.1
Not in the labour force						
Marginally attached	263.8	4.2	629.7	10.1	893.5	7.1
Not available and not actively looking for work(b)	749.1	11.9	1 516.3	24.3	2 265.4	18.1
Total(c)	**6 292.5**	**100.0**	**6 230.5**	**100.0**	**12 522.9**	**100.0**

(a) Includes people temporarily stood down from work.
(b) Includes persons permanently unable to work.
(c) Includes a small number of people not in the labour force for whom attachment to the labour force was not determined.

Source: Unpublished data, Labour Force Survey, September 1998; and Survey of Persons Not in the Labour Force, September 1998.

Numbers of people who want work

Most men of working age have paid jobs and most are fully employed (either in full-time jobs or in part-time jobs in which they do not want to work longer hours). In September 1998, 77% of all men aged 15–64 were employed – 73% were fully employed. Among women, 60% were employed and 55% were fully employed.

Three groups of people with stated interests in obtaining paid work can be identified – the unemployed, those marginally attached to the labour force and the underemployed. Of these groups, the unemployed and the underemployed are regarded as being part of the labour force; that is, they are among the economically active population.

In September 1998, there were 763,900 people aged 15–64 years who were unemployed, 6% of all people aged 15–64. (This proportion is not to be confused with the official unemployment rate, which measures the number of unemployed people aged 15 years and over against the economically active population – 8.0% (seasonally adjusted) in September 1998.) Of all unemployed people, 58% were men, and men were more likely than women to be unemployed (7% and 5% respectively).[1] People aged 15–24 years, were more likely to be unemployed than those in older age groups (12% of men and 10% of women aged 15–24 were unemployed compared to 5% and 3% of those aged 45–64 years).

The other major group of people wanting work (893,500, in September 1998, of whom 70% were women) were not economically active, but classified as being marginally attached to the labour force. These people are not recognised as being unemployed because they are either not actively looking for work but would accept a job if the right one came along (93%) or, were actively looking for work but not available to commence work within four weeks (the remaining 7%). Overall, many people marginally attached to the labour force did not have short-term intentions of actively looking for work. The September 1998 Survey of Persons Not in the Labour Force showed that 25% of all people who were marginally attached to the labour force (while ready to start a job if the right one came along) did not intend to look for work within 12 months – a further 21% were not sure if they would or not.

The third group of people identified as wanting work, the underemployed, are among those in part-time jobs. In September 1998, there were 501,100 people (60% were women) in part-time jobs who wanted to work longer hours. Those who were underemployed represented 23% of all people in part-time jobs and 4% of all people aged 15–64.

Taking the three groups together, there were more women than men wanting work – 1.2 million women compared to 909,000 men. However, reflecting traditional differences in the roles of men and women, a lower proportion of women (50% compared to 71% of men) in these groups were part of the economically active population. Women were also more likely than men to be neither available to work nor looking for work (24% compared to 12% of men).

Differences by age

The extent to which men and women not fully employed want work and actively seek it is affected by their life circumstances, as their needs for income, giving care to other family

Proportion of people in different age groups wanting work, September 1998

	15–24 years		*25–44 years*		*45–64 years*	
	Men	*Women*	*Men*	*Women*	*Men*	*Women*
	%	%	%	%	%	%
Unemployed	11.8	9.5	6.2	4.8	5.2	2.8
Underemployed	6.4	7.5	2.5	4.5	2.0	3.6
Marginally attached(a)	9.7	10.8	2.0	12.1	3.6	6.8
Total wanting work	**27.9**	**27.8**	**10.8**	**21.4**	**10.7**	**13.2**
	'000	'000	'000	'000	'000	'000
Total persons in age group	**1 356.3**	**1 302.1**	**2 857.9**	**2 888.4**	**2 078.3**	**2 039.9**

(a) Excludes a small number of people for whom marginal attachment to the labour force was not determined.

Source: Labour Force Survey (microfiche), *Persons Not in the Labour Force,* September 1998 (Cat. no. 6220.0)

Persons aged 15–64 wanting work, reported difficulties in finding /looking for work, 1998

	Main difficulty in finding work				*Main reason for not looking for work*		
	Unemployed(a)		*Underemployed(b)*		*Marginally attached(c)*		
Selected main difficulty/reason	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*	*Discouraged Jobseekers(d)*
	%	%	%	%	%	%	(yes or no)
Lacked necessary skills/education/work experience	20.0	26.1	14.3	15.1	1.1*	3.6	yes
Considered too young or too old by employers	16.2	15.5	10.1	9.6	3.7	3.5	yes
Difficulties with language or ethnic background	1.4	3.7	2.4*	0.8*	1.3*	1.2*	yes
No vacancies in line of work/at all	22.5	15.5	40.3	33.4	5.0	3.5	yes
Too many applicants	13.8	13.7	10.0	9.0	..	..	..
Travel/transport problems	7.3	4.5	4.0	3.4	..	..	..
Own ill health/disability	7.7	3.2	3.8*	0.9*	18.5	8.0	no
Child care, other family responsibilities	0.4*	3.8	0.7*	3.0	7.0	47.1	no
Attending educational institution	..	..	..		41.6	15.1	no
	'000	'000	'000	'000	'000	'000	
Total persons	**417.8**	**277.6**	**130.2**	**159.3**	**236.1**	**598.7**	

(a) Persons who were actively looking for work, at July 1998.
(b) Persons in part-time jobs who were actively looking for extra hours, at September 1998.
(c) Persons who wanted to work and were available to start work within four weeks but were not actively looking for work, at September 1998.
(d) This column identifies those among the marginally attached who, from their main reason for not looking for work are classified as being discouraged jobseekers.

Source: Unpublished data, Survey of Job Search Experience of Unemployed Persons, July 1998; Survey of Underemployed Workers, September 1998 and Survey of Persons Not in the Labour Force, September 1998.

members, and personal fulfilment change. A broad view of such differences can be seen among people in different age groups.

In general, the likelihood of men and women wanting work tends to decline with increasing age. In September 1998, 28% of men and 28% of women aged 15–24 wanted work. Among men and women aged 45–64 years, on the other hand, these proportions declined to 11% and 13% respectively.

For both men and women, the proportions who were unemployed and underemployed decreased with age. However, the extent to which men and women were marginally attached to the labour force diverged among the group of people most likely to have younger children – those aged 25–44 years. Only 2% of men aged 25–44 were marginally attached to the labour force compared with 12% of women.

The mix of reasons given for not looking for work by women marginally attached to the labour force – among those who would start a job if one was available – highlights that a major consideration for many women relates their child care and family responsibilities. Of the 598,700 women aged 15–64 wanting work but not actively looking for it, 47% gave this as their main reason for not looking for work. The relatively high proportion of young people who were marginally attached to the labour force corresponds with many of them undertaking full-time studies. This observation is supported by the fact that many people ready to start a job stated that the main reason they were not actively looking for work was because they were attending an educational institution (98,300 men and 90,300 women).

Barriers to finding work among the unemployed and underemployed

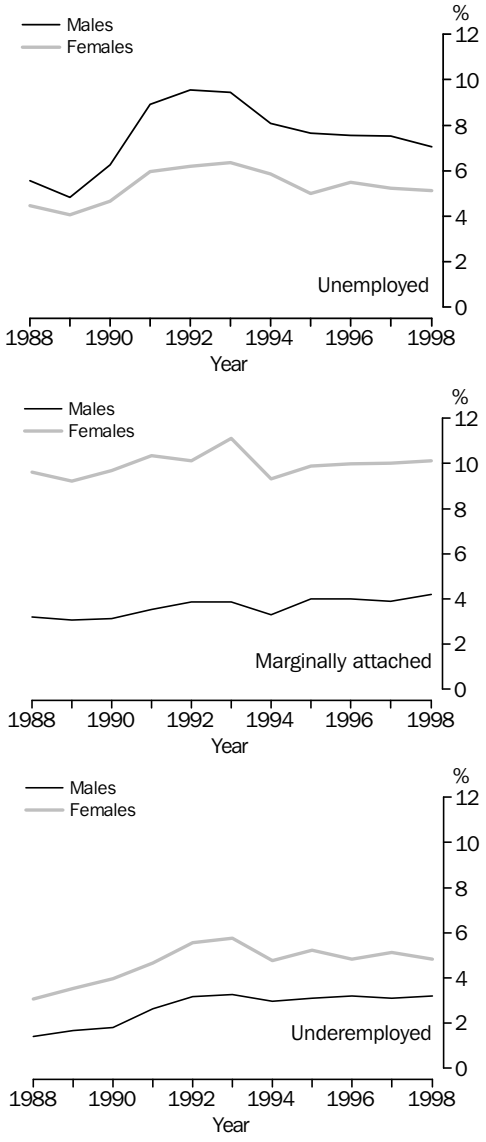
For people in the labour force wanting work (the unemployed and under-employed), the limited supply of jobs is a key reason for not being able to find work. However, the reasons people wanting work give as their main difficulty in getting a job differ according to their individual circumstances. Barriers to finding paid work can include factors related to personal capabilities, ill health, and to various forms of discrimination.

Of those unemployed, men were more likely to attribute their difficulty to the state of the job market – no vacancies in their line of work or no vacancies at all (23% compared to 16%) – whereas women were more likely to attribute their difficulty to their own lack of skills (26% compared to 20%). Both men and women were equally likely to see the level of

competition as their main difficulty in finding a job – too many applicants for the available jobs (both 14%).

Underemployed men and women were less likely than unemployed people to report personal capabilities as their main reason for not finding work. However, this could be expected, as these people were already in employment.

Proportions of men and women aged 15–64 wanting work, 1988 to 1998



Source: Labour Force Surveys (microfiche) and *Persons Not in the Labour Force,* September 1988 (Cat. no. 6220.0).

Discouraged jobseekers

Some of the people marginally attached to the labour force (70,600 women and 26,400 men) did not actively look for work, because they believed they would not find a job. Men who were discouraged jobseekers (a greater proportion of whom were aged 55–64 years – 51% compared to 30% of women) were more likely to be discouraged because of perceived job shortages or because they felt they would be discriminated against because of their age.

Responses to changing economic conditions

Changes in the proportions of people unemployed (or, as more commonly described, changes in unemployment rates) and in the numbers of discouraged jobseekers (for both measures see *Australian Social Trends 1999*, Work — national summary table pp. 98–99), provide sensitive indicators of the health of the economy.

As graphically illustrated by the changes that occurred during the last economic recession, during the early 1990s, unemployment levels among men were particularly sensitive to changing economic conditions. In contrast, the changes in the proportions of people who were marginally attached to the labour force and underemployed (the groups in which women predominate) were comparatively small.

Nevertheless, as indicated by the greater upward shift in the proportions of women classified as being marginally attached to the labour force during the recession, it appears that women who want work have a greater tendency than men to move out of the labour force during periods when the over-supply of labour is greatest. The different movements in proportions of men and women identified as being unemployed and marginally attached to the labour force during the last recession may, in part, reflect decisions within couple families as to who should take the most active steps in seeking to provide for the family.

Endnotes

1 Australian Bureau of Statistics 1999, *Labour Force Australia,* April 1999, Cat. no. 6203.0, ABS, Canberra.

Older jobseekers

UNDER-UTILISED LABOUR

Older jobseekers are less successful in obtaining work than young jobseekers, are more likely to drop out of the labour market and less likely to find a job as a result of a training course. Jobs they do find are more likely to be part-time or casual, and low-paid.

The ongoing decline in employment in goods production industries such as mining and manufacturing (down from 17% of Australia's workforce in November 1988 to 14% in November 1998) (see *Australian Social Trends 1997*, Changing industries, changing jobs, pp. 93–98 for further information), combined with a lack of transferable skills, has resulted in many older persons who worked in these industries being displaced from the workforce. As a result, people from these industries are over-represented among older jobseekers. For example, although only 14% of employed people in November 1998 were employed in manufacturing or mining, 22% of older jobseekers had been working in these industries prior to September 1994.

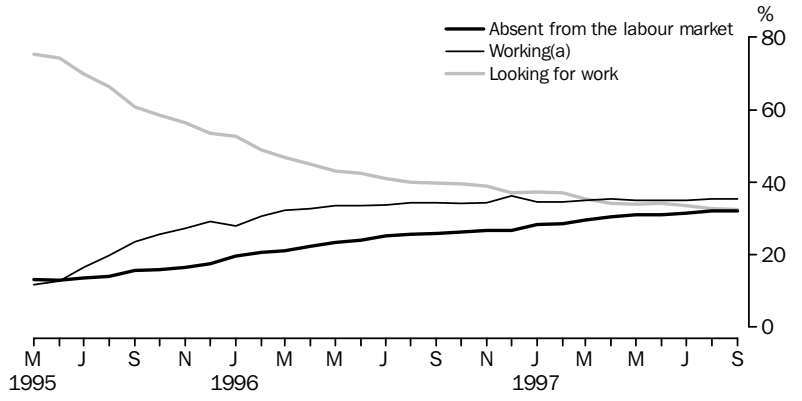
There have been changes, too, in the sorts of jobs that are offered – there is greater demand for workers in high skill occupations, and less for those requiring lower skills. 61% of older jobseekers had been employed in less skilled occupations compared with only 45% of the same age group from the general population.

Although their overall unemployment rate is relatively low (5%, compared to 15% for people aged less than 25 at March 1999), older people engaged in job search activities experience less success in obtaining work than younger jobseekers, possibly because of factors such as outdated skills, relatively low levels of education, competition with younger jobseekers, discrimination and less flexibility to change location. They are more likely to drop out of the labour market and less likely to find a job as a result of a training course.

Labour market activities

In May 1995, there were 875,100 jobseekers in Australia. The labour market activities of this group were monitored from that date, up to September 1997. Of these people, 168,000 (19%) were aged between 45 and 59.

Labour market experience of the panel of older jobseekers



(a) Includes jobseekers who were working and looking for work at the same time.

Source: Unpublished data, Survey of Employment and Unemployment Patterns.

The Survey of Employment and Unemployment Patterns (SEUP)

SEUP was a longitudinal survey. That is, information was collected from the same individuals (called the panel) over three years. The SEUP panel, who were selected in May 1995, provided a range of social and demographic information, including their employment history before September 1994 and their level of education. Subsequent interviews, in October 1995, 1996 and 1997, collected information about their labour market activities since September 1994, and their labour force status at September 1997.

Jobseekers, the main component of the SEUP panel, were persons aged 15–59 years who, at May 1995, were either unemployed, underemployed (working less than 10 hours per week and looking for a job with more hours), or not in the labour force (but likely to enter it in the near future).

*Older jobseeker*s were jobseekers aged 45–59 years. In this article, comparisons are drawn between older jobseekers and a number of other groups of people:

- *Other jobseeker*s were jobseekers aged 15–44;
- *Young jobseeker*s were jobseekers aged 15–24; and
- *The general population* were all persons aged 15–59 interviewed in SEUP.

Occupations

In this article, occupations are classified by skill level according to the Australian Standard Classification of Occupations (ASCO), second edition, and are sometimes grouped as follows:

- *High skilled* – comprising managers and administrators; professionals; associate professionals; tradespersons and related workers; and advanced clerical and service workers.
- *Less skilled* – comprising intermediate clerical, sales and service workers; intermediate production and transport workers; elementary clerical, sales and service workers; and labourers and related workers.

Jobseekers: labour market outcomes, September 1997

	Labour market outcome					
	Stable work	*Unstable work*	*No longer working*	*Had not worked*	*Total*	*Total*
Age (years)	%	%	%	%	'000	%
15–24	33.7	23.1	28.0	15.3	306.2	100.0
25–44	34.2	20.6	25.7	19.5	401.3	100.0
45–59	*22.2*	*13.2*	*21.5*	*43.1*	167.6	*100.0*
45–54	26.7	16.3	23.0	34.0	118.3	100.0
55–59	11.6	5.7	17.8	65.0	49.2	100.0
Total jobseekers	**31.7**	**20.0**	**25.7**	**22.5**	**875.1**	**100.0**

Source: Unpublished data, Survey of Employment and Unemployment Patterns.

Labour market outcomes

Based on their labour market activities between May 1995 and September 1997 (the reference period for this article), jobseekers were classified into one of the following labour market outcomes at September 1997:

- *stable work* in which their current job had lasted for six months or more and they were not concurrently looking for work; or
- *unstable work* where their current job had lasted less than six months or they were concurrently looking for work; or
- *no longer working* but had found some work during the reference period; or
- *not worked* where they had not found any work during the reference period.

Between May 1995 and September 1997, the proportion of these older jobseekers who were looking for work fell steadily from 74% to 32%. Movements either into work or out of the labour market altogether contributed almost equally to this decline in job search activity.

Over this same period, there was an increase in the proportion of older jobseekers who were working, from 13% to 35%. However, most of this increase was concentrated in a relatively short period between May 1995 and March 1996. This initial surge in employment can be attributed to more employable older jobseekers securing work after a relatively short period of job search. These successful jobseekers tended to then remain in employment. For example, 74% of those jobseekers who were working in March 1996 were also working 18 months later. Jobseekers in this group were more likely to have a post-school qualification (50%) than other jobseekers (40%).

Those older jobseekers who did not have early success finding work continued to have difficulties in this regard. For example, of jobseekers who were looking for work at March 1996, only 22% were working at September 1997. They were more likely to be absent from the labour market (26%) or looking for work (52%).

The proportion of older jobseekers who were absent from the labour market rose steadily from 13% to 32% between May 1995 and September 1997. These jobseekers stated that the main reasons for their absence included illness (38%), age discrimination (10%), and returning to studies (7%).

Between May 1995 and September 1997, 43% of older jobseekers had had no work at all. This was more than double the proportion for other jobseekers (18%). At the end of the survey, only 22% of older jobseekers were in stable work, and a further 13% were in unstable work. The remaining 21% of older jobseekers had obtained some work over the reference period, but were not currently working.

Jobseekers aged 55–59 were particularly unsuccessful in obtaining employment. Between May 1995 and September 1997, 65% of these jobseekers had obtained no work at all. At September 1997, only 17% of these jobseekers were working.

Characteristics and outcomes

The composition of the older jobseeker group is quite different from the equivalent age group in the general population, and their labour market experiences varied according to their characteristics. Older jobseekers were more likely to be male, born overseas, living alone, and divorced or separated. The association between unemployment and relationship breakups is not clear – it is not possible to tell whether a relationship breakup has contributed to unemployment, was a result of it, or was of no relevance to it.

Men were over-represented among older jobseekers compared with older men in the general population (58% and 50%, respectively). Labour market outcomes of older jobseekers were similar for men and women. For example, 21% of men had found stable work at the end of the period compared to 24% of women.

There were fewer older jobseekers born in Australia (56%) than might be expected from their representation in the general population aged 45–59 (65%). In addition, success in obtaining a job at some time over the reference period was greater for older jobseekers born in Australia (60%), and those

Older jobseekers: selected characteristics and outcomes, September 1997

	Older jobseekers						*General population aged 45–59*	
	Labour market outcome							
	Stable work	*Unstable work*	*No longer working*	*Had not worked*	*Total number of older jobseekers*	*Proportion of all older jobseekers(a)*	*Total number*	*Proportion(a)*
Characteristics	%	%	%	%	'000	%	'000	%
Males	21.3	13.7	22.0	43.1	97.5	58.1	1 496.6	50.4
Females	23.5	12.5	20.8	43.1	70.1	41.9	1 471.2	49.6
Born in Australia	23.1	14.6	21.9	40.4	93.9	56.0	1 927.8	65.0
Born in main English-speaking countries	24.1	15.9	25.4	34.5	27.2	16.2	420.7	14.2
Born in other countries	19.4	8.7	18.3	53.6	46.6	27.8	619.2	20.9
Married/de facto(b)	22.5	13.1	19.7	44.8	113.1	67.5	2 358.1	79.5
Divorced/separated(b)	24.3	15.1	22.0	38.7	35.0	20.9	349.8	11.8
Living alone(b)	17.9	15.4*	22.6	44.0	26.5	15.8	284.4	9.6
Without post-school qualifications	18.3	11.1	18.3	52.3	96.0	57.3	1 480.8	49.9
With post-school qualifications	*27.5*	*16.0*	*25.7*	*30.7*	*71.6*	*42.7*	*1 487.0*	*50.1*
Qualified since 1990	23.3*	21.7*	26.9*	28.1*	12.1	7.2	200.6	6.8
Qualified before 1990	28.4	14.9	25.4	31.3	59.5	35.5	1 286.4	43.3

(a) Proportion in each group.
(b) Social marital status at September 1995.

Source: Unpublished data, Survey of Employment and Unemployment Patterns.

born in main English-speaking countries (65%), than for those born in other countries (46%).

Older jobseekers were less likely to be in a married or de facto relationship (67%) and more likely to be divorced or separated (21%) than the general population aged 45–59 years (79% and 12%, respectively). Among older jobseekers there were only minor differences in labour market outcomes between those who were divorced or separated and those who were in a married or de facto relationship.

There were 16% of older jobseekers who lived alone, compared with 10% of the general population aged 45–59. A reduced motivation to secure work, caused by fewer family pressures and a lower level of family support might explain why these jobseekers appeared to have had worse labour market experiences and outcomes. For example, 18% of those who lived alone were in stable work compared to 23% of other older jobseekers.

Among older jobseekers, very few (7%) had obtained their highest qualification since 1990. Recent qualifications may be perceived as being of more value to prospective employers than older qualifications. Among older jobseekers, however, those with more recent qualifications did not appear to fare much better than those with older qualifications. Of those older jobseekers who had obtained their qualification since 1990, 45% were working at September 1997, compared with 43% of jobseekers who had obtained their qualification before 1990.

Nevertheless, having qualifications can still assist older jobseekers in obtaining work — 69% of those who had post-school qualifications had worked between May 1995 and September 1997, and 28% were in stable employment at September 1997. In comparison, of those without qualifications, 48% had worked between May 1995 and September 1997, and only 18% were in stable employment at September 1997.

Previous occupations

Older jobseekers came from a wide range of occupation backgrounds. However, by comparing their occupational profiles with those of the general population in the equivalent age group, it can be seen that older jobseekers were more likely to be drawn from less skilled occupations, such as labouring (19% of jobs compared to 10%), and intermediate production and transport

Jobs held by the panel of older jobseekers compared to other population groups

	Jobs held prior to September 1994(a)			*Jobs held by older jobseekers at September 1997*
	Older jobseekers	*Older persons*	*Young jobseekers*	
Occupation	%	%	%	%
Managers and administrators	3.2	8.0	0.2	3.1
Professionals	9.0	11.9	2.8	8.6
Associate professionals	10.5	12.9	3.4	10.6
Tradespersons and related workers	13.5	17.2	12.5	13.6
Advanced clerical and service workers	2.8	4.9	0.9	3.4
Intermediate clerical, sales and service workers	16.2	16.3	14.3	18.3
Intermediate production and transport workers	15.4	9.9	7.9	12.7
Elementary clerical, sales and service workers	10.4	8.9	30.4	10.4
Labourers and related workers	19.0	10.0	27.6	19.3
Total	**100.0**	**100.0**	**100.0**	**100.0**

(a) Excludes those who were not working prior to the survey.

Source: Unpublished data, Survey of Employment and Unemployment Patterns.

(15% of jobs compared to 10%), and less likely to be from high-skill ones such as management (3% of jobs compared to 8%).

Even so, older jobseekers tended to come from more highly skilled occupations than young jobseekers. A large proportion of the jobs previously held by young jobseekers were either elementary clerical (30%) or labouring (28%).

Job search

Being considered too old by potential employers was given as the main difficulty in finding work for 47% of older jobseekers' episodes of looking for work, while a lack of vacancies was given for only 20% of their job-search episodes.

Established mortgages and social networks, school-aged children and working partners all contribute to making people aged 45–59 less geographically mobile. In only 23% of their job search episodes did older jobseekers say they would be prepared to move to obtain a job. The equivalent figure for other jobseekers was 43%.

Older jobseekers were more likely to have received unemployment benefits over the survey period than other jobseekers — 51% compared to 46% — and tended to be on benefits for longer (an average of 68% of the survey period compared to 60% for other jobseekers).

Training

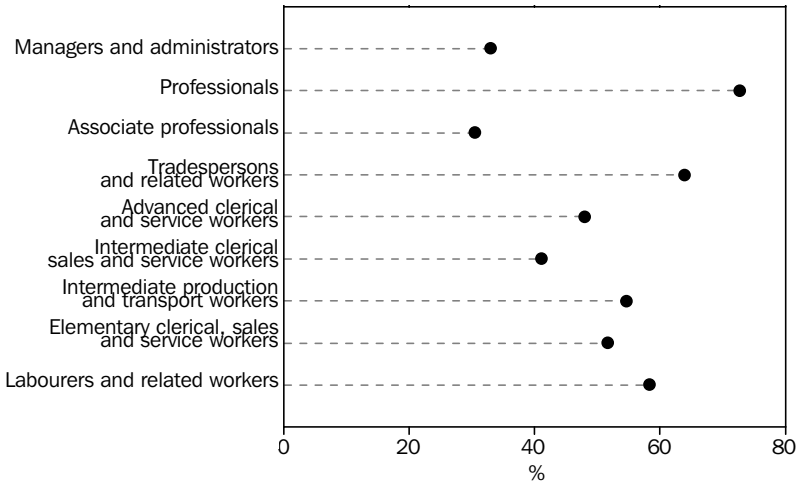
In the SEUP, information was collected on external training. External training consists mainly of short courses, not conducted by employers, taken to improve job skills. It excludes courses of more than one semester in duration and that lead to an educational qualification. Between May 1995 and September 1997, 19% of older jobseekers had participated in at least one external training course to help them get a job. This participation rate was comparable with that of other jobseekers (20%).

Although they had similar participation rates, older jobseekers had less success than other jobseekers in obtaining a job as a result of this training. Only 11% of older jobseekers who did external training indicated that the course helped them get a job, compared with 19% of other jobseekers.

Nature of work found

As well as being less successful in finding jobs, job outcomes for older jobseekers were also generally less favourable in terms of occupation, income and job security. When compared with jobs held during the survey period by the general population in the equivalent age group, older jobseekers who found work between May 1995 and September 1997 were more likely to have been employed on a casual basis. Some 71%

Proportion of jobs found by older jobseekers which lasted less than six months(a)



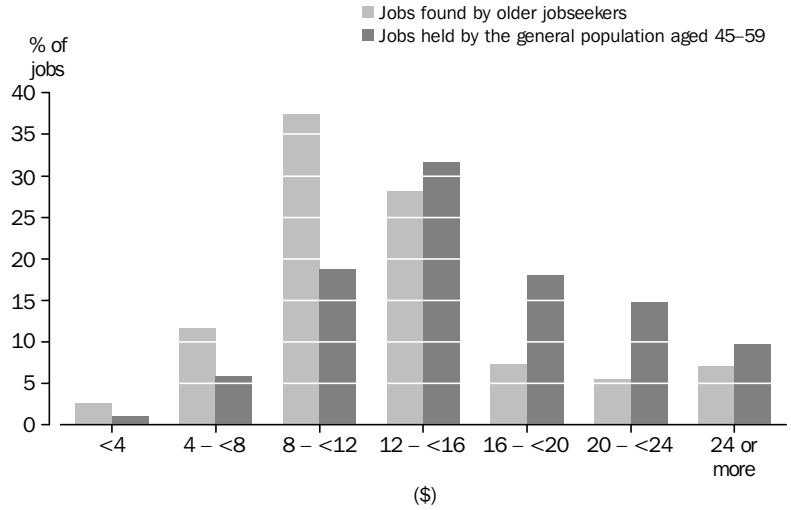
(a) Excludes jobs lasting less than 6 months and continuing at September 1997.

Source: Unpublished data, Survey of Employment and Unemployment Patterns.

of jobs found by these jobseekers were casual compared with 34% for older workers in the general population.

During the survey period, the jobs found by older male jobseekers were also less likely to be full-time (61%) than those held by men from the general population aged 45–59 (80%). Among women, the difference was smaller – 35% compared with 36%.

Hourly earnings from wage and salary jobs



Source: Unpublished data, Survey of Employment and Unemployment Patterns.

Older jobseekers with children

Children in families in which one or both parents do not have paid employment are likely to be at greater risk of socio-economic disadvantage than children in other families (see *Australian Social Trends 1999*, Lower income working families, pp. 134–137).

In September 1997, there were 39,500 older jobseekers who were married or de facto with dependent children, comprising 13,500 women and 26,000 men. Close to half (46%, or 18,300 in total) of older jobseekers with dependent children did not find any work at all between May 1995 and September 1997.

Moreover, jobs which were found by older jobseekers were likely to be short term. Over half (54%) of the jobs found by older jobseekers lasted less than six months.

However, this varied according to their occupation. For example, those jobs found in management or associate professional occupations were likely to last longer than six months, although these were in the minority. Many more found jobs as labourers or tradespersons, and these were likely to last less than six months. Those jobs found in professional occupations (probably contract work in professional fields) were also likely to last less than six months.

Older jobseekers did not always find work in the same occupations they were in previously. Of those older jobseekers who were working at the end of the survey period, almost half (45%) who had previously held high-skill jobs were working in less skilled jobs. In contrast, less than a quarter (23%) of those from less skilled jobs had made the transition to high-skill jobs.

Consistent with their less skilled occupational background, hourly wage and salary earnings for older jobseekers was, on average, about a third lower ($13.25 gross) than for workers aged 45–59 from the general population ($17.23 gross). Over half (52%) of jobs found by older jobseekers paid less than $12 an hour, compared with only a quarter (26%) of jobs held by older people in the general population.

How couples share domestic work

UNPAID WORK

In 1997, married women spent an average of 1hr:47mins per day more on domestic work than men. This difference, however, was smaller (1hr:16 mins) for couples who spent similar time on paid work.

Even though social and economic changes since the late 1960s have had substantial effects on the traditional roles of men as bread winners and women as home makers, the time men spent on domestic work in 1997 was still markedly less than women. Married women spent an average of 1 hour and 47 minutes per day more on domestic work, as a main activity, than their husbands. Women were also more likely than men to undertake some domestic work on an average day (97% of women compared with 81% of men).

However, men were more likely than their partners to be employed, or if both were employed, to work longer hours (see *Australian Social Trends 1997*, Families at work, pp. 30–33). As a result, women often had more time for domestic work than men. In order to counter the effects of different employment patterns, time spent on domestic work can be compared for those couples in which both parties worked similar hours (that is, couples in which the difference in hours worked was less than 5 hours per week, which is at most 1 hour per average working weekday).

In such families, there was less difference in the time spent by each partner on domestic work than among couples in general. However, women still averaged 1 hour and 16 minutes more than their partners (3hrs:46mins compared with 2hrs:30mins).

Measuring time use

Information on time spent on different activities is taken from the 1997 Time Use Survey. Time use data was compiled from a household questionnaire and a 48-hour diary of time use, completed by respondents aged 15 years and over. For each five-minute time slot in the diary, people could record up to two concurrent activities. In this review, the amount of time given to domestic work as a main activity (the first activity people recorded) is examined for men and women in couple relationships (married or de facto).

Domestic work refers to unpaid work about the house, excluding most child care and shopping. The types of domestic activities have been classified into broad groups as follows:

- *Food preparation and clean up* includes cooking and serving meals, and washing dishes;
- *Laundry and clothes care* includes washing, ironing, mending and making clothes;
- *General housework* includes cleaning the bathroom/toilet, vacuuming, dusting and tidying;
- *Grounds and animal care* includes gardening, pool care and feeding and tending to animals;
- *Home maintenance* includes repairs or improvements to the home, equipment, and motor vehicles and chopping wood; and
- *Household management* includes paperwork, bills, budgeting, organising, packing, selling household assets and disposing of rubbish.

Partners in couple families: average daily reported involvement in domestic work, 1997

	Partners who had similar hours of paid work				*All couples*			
	Time spent per day		*Participation(a)*		*Time spent per day*		*Participation(a)*	
	Men	*Women*	*Men*	*Women*	*Men*	*Women*	*Men*	*Women*
Type of domestic work	hrs:mins	hrs:mins	%	%	hrs:mins	hrs:mins	%	%
Food preparation and clean up	0:38	1:37	69.0	92.1	0:29	1:29	61.7	92.2
Laundry and clothes care	0:05	0:39	12.0	56.1	0:04	0:42	11.2	62.8
General housework	0:11	0:48	27.2	72.0	0:08	0:45	21.1	72.2
Grounds and animal care	0:49	0:23	51.2	39.7	0:32	0:22	38.1	40.4
Home maintenance	0:29	0:05	26.7	6.5	0:23	0:05	21.5	8.0
Household management	0:10	0:10	29.3	28.8	0:09	0:11	26.1	35.9
Total(b)	**2:30**	**3:46**	**88.1**	**96.9**	**1:52**	**3:39**	**81.4**	**97.2**

(a) Percentage of population who reported taking part in a particular activity per day.
(b) Total includes other miscellaneous domestic work.

Source: Unpublished data, Time Use Survey, 1997.

Who does what?

As well as differences in the amount of time spent by men and women in couple families on domestic work, there was also a high degree of segregation in the specific types of domestic work they undertook.

In 1997, among couples with similar hours of paid employment, women spent an average of 1hr:37mins per day on food preparation and clean up, almost 1 hour more than their partners. They also spent 34 minutes more than their partners on laundry tasks (39 minutes compared with 5 minutes spent by men), and 37 minutes more on general housework (48 minutes compared with 11 minutes). Men, on the other hand, spent more time on grounds and animal care (49 minutes compared with 23 minutes for women), and general home maintenance (29 minutes compared with 5 minutes). Partners spent equal time on household management tasks such as paying bills and household budgeting (10 minutes per day).

Differences in time spent on various domestic activities was also reflected in the extent to which partners participated in these activities. For example, in 1997 on an average day, 56% of women did laundry-related tasks compared with 12% of men, and, 72% of women compared with 27% of men participated in general housework. Men were more likely to undertake home maintenance activities (27% compared with 7% of women), and grounds and animal care (51% compared with 40%).

Life stage

The time people spent on domestic work generally increased with age.[1] This might, in part, have been associated with the increased likelihood that older people own their homes and gardens, and have more possessions (e.g. furnishings, household equipment) – all requiring care and maintenance. However, it might also have been that older people prefer certain types of domestic work (such as cooking and gardening) to activities that younger people might do in their free time.

The increasing time spent on domestic work with age was evident among couples in which both partners had similar hours of paid employment. In 1997, women in couple families with a male partner aged between 15 and 29 years spent 2hrs:9mins per day on domestic work, while those with a male partner aged over 60 spent nearly twice this time (4hrs:12mins). While consistently lower for the corresponding age groups, the time spent by men on domestic work also increased with age. Men aged over 60 spent over twice as much time (2hrs:56mins per day) on domestic work as men aged between 15 and 29 (1hr:14mins).

Differences between men and women in time spent on various types of domestic tasks were more evident among older couples than among younger couples. With increasing age, women did more of the housework such as cooking and cleaning, while men gave increasing amounts of time to general maintenance and other activities. In fact, older men spent only 10 minutes more time on housework activities than younger men while the time women spent on housework increased substantially with age.

Couples in which both partners had similar hours of paid work: average time per day spent by each partner on domestic work, 1997

	Housework(a)		*Other domestic work(b)*		*Total(c)*		*Proportion with dependent children(d)*	*Proportion employed full-time*
	Males	*Females*	*Males*	*Females*	*Males*	*Females*		
Age of male partner (years)	hrs:mins	hrs:mins	hrs:mins	hrs:mins	hrs:mins	hrs:mins	%	%
15–29	0:48	1:56	0:25	0:12	1:14	2:09	20.7	80.8
30–39	0:58	2:30	0:54	0:31	1:57	3:12	68.9	52.3
40–49	0:42	2:27	1:01	0:35	1:52	3:05	50.1	67.5
50–59	0:49	3:02	1:40	0:50	2:34	3:53	11.2	33.8
60 and over	0:58	3:29	1:49	0:41	2:56	4:12	1.2	2.1

(a) Includes food preparation and clean up, laundry and clothes care, and general housework.
(b) Includes grounds and animal care, home maintenance, and household management.
(c) Total includes other miscellaneous domestic work.
(d) Children aged 0–14 at home.

Source: Unpublished data, Time Use Survey, 1997.

Couples in which both partners had similar hours of paid work: average time per day spent by each partner(a) on domestic work, 1997

	Housework(b)		*Other domestic work(c)*		*Total*(d)		*Proportion employed full-time*
	Males	*Females*	*Males*	*Females*	*Males*	*Females*	
Family type	hrs:mins	hrs:mins	hrs:mins	hrs:mins	hrs:mins	hrs:mins	%
Couples with children(e)	0:56	2:54	1:06	0:33	2:11	3:36	53.7
Couple only families	0:44	1:50	0:50	0:30	1:37	2:22	67.7

(a) Couples where the male reference person was aged 30–49.
(b) Includes food preparation and clean up, laundry and clothes care, and general housework.
(c) Includes grounds and animal care, home maintenance, and household management.
(d) Total includes other miscellaneous domestic work.
(e) Children aged 0–14.

Source: Unpublished data, Time Use Survey, 1997.

Whether a couple had dependent children or not also had an effect on how much domestic work was done on an average day. Of couples aged between 30 and 49 years in which both partners had similar hours of paid work, those with children (aged 0–14) spent more time on domestic work than couple-only families. Moreover, mothers spent more time than women without children on housework such as cooking and cleaning (2hrs:54mins compared with 1hr:50mins), while fathers spent slightly more time than men without children on domestic work such as home maintenance tasks and grounds and animal care.

In particular, of women in couple families, mothers spent over one hour more on housework than women without dependent children. The time men spent on housework changed by only 12 minutes, whether they had children or not. Similarly, the time mothers spent on other domestic work changed little, whether they had children or not.

The increased time spent on domestic work by couples with dependent children, compared with couple only families, is related to the need to provide for more people (e.g. more people to cook for and clean up after). In addition, of couples who work similar hours in paid work, couple-only families are more likely to work longer hours than couples with children. In 1997, 68% of these couple-only families had both partners working full-time compared to 54% of couples with children.

Endnotes

1 Australian Bureau of Statistics 1997, *Time Use Survey, Australia*, Cat. no. 4153.0, ABS, Canberra.

Income and expenditure

Income — national summary

INCOME DISTRIBUTION	Units	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997
GDP per capita (1989–90 prices)	$'000	20.3	21.0	21.5	21.9	21.5	21.4	21.9	22.6	23.4	24.0	24.4
Household disposable income per capita	$'000	10.4	11.3	12.5	13.7	14.2	14.6	15.0	15.5	16.5	17.4	18.1
Personal income tax as a proportion of taxable income	%	24.8	23.8	24.1	23.1	22.4	21.9	22.2	22.0	22.1	22.7	23.3
Share of equivalent income going to top quintile (of all income units)	%	n.a.	n.a.	n.a.	37.7	n.a.	n.a.	n.a.	n.a.	37.8	37.6	37.4
Share of equivalent income going to bottom quintile (of all income units)	%	n.a.	n.a.	n.a.	7.6	n.a.	n.a.	n.a.	n.a.	7.2	7.3	7.6
Gini coefficient (of all income units)	no.	n.a.	n.a.	n.a.	0.42	n.a.	n.a.	n.a.	n.a.	0.44	0.44	0.44
Median gross weekly income of couple with dependants income units	$	n.a.	n.a.	n.a.	755	n.a.	n.a.	n.a.	n.a.	842	849	882
Median gross weekly income of one-parent income units	$	n.a.	n.a.	n.a.	279	n.a.	n.a.	n.a.	n.a.	349	352	349

SOURCES OF INCOME	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Wages and salaries as main source of income (of all income units)	%	n.a.	n.a.	58.3	n.a.	n.a.	n.a.	n.a.	56.8	55.5	54.8	n.a.
Wages, salaries and supplements as a proportion of GDP(I)	%	49.0	48.3	49.3	50.2	50.1	49.6	49.1	49.0	49.0	50.1	49.9
Main income source from government payments (of all income units)	%	n.a.	n.a.	26.7	n.a.	n.a.	n.a.	n.a.	28.8	29.0	30.0	n.a.
Main income source from government payments (of couples with dependants income units)	%	n.a.	n.a.	8.4	n.a.	n.a.	n.a.	n.a.	11.4	11.0	11.6	n.a.
Main income source from government payments (of one parent income units)	%	n.a.	n.a.	61.3	n.a.	n.a.	n.a.	n.a.	59.4	58.7	64.8	n.a.
Mean total weekly earnings of all employees	$	411	441	475	494	510	526	533	551	574	n.a.	610
Mean total weekly earnings of full-time adult employees	$	497	538	571	597	616	641	658	690	724	n.a.	782
Mean weekly ordinary time earnings of full-time non-managerial adult employees	$	433	466	495	521	541	558	578	608	634	n.a.	692
Female/male ratio of mean total full-time adult weekly earnings	no.	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	n.a.	0.8

INCOME SUPPORT	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Aged on age pension	%	61.5	60.2	59.2	59.3	61.0	62.8	64.3	63.0	62.7	64.4	65.4
Age pensioners	'000	1 329	1 334	1 340	1 376	1 446	1 516	1 582	1 579	1 603	1 680	1 683
Male age pensioners	'000	405	403	404	418	448	481	514	545	570	598	614
Female age pensioners	'000	924	931	936	957	998	1 034	1 068	1 034	1 033	1 082	1 069
Labour market allowance	'000	478.0	389.8	419.8	676.7	851.8	913.8	878.3	822.6	846.6	829.9	809.6
Disability support pensioners	'000	296.9	307.8	306.7	334.2	378.6	406.6	436.2	464.4	499.2	527.5	553.3
Single-parent payment	'000	238.7	239.5	248.9	265.7	287.2	298.4	313.4	324.9	342.3	358.9	372.3
Full weekly benefit received by a couple with two children	$	243	262	288	310	326	339	347	355	370	391	403
GDP(I) spent on income support	%	5.8	5.4	5.4	6.3	7.2	7.5	7.7	7.4	7.3	7.4	7.1

EXPENDITURE	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Consumer price index (Base year 1989–90 = 100.0)	no.	86.3	92.6	100.0	105.3	107.3	108.4	110.4	113.9	118.7	120.3	120.3
Private final consumption expenditure per capita (1989–90 prices)	$'000	12.1	12.5	12.8	12.7	12.9	13.2	13.4	13.9	14.3	14.7	15.2

Reference periods: Data for income distribution, sources of income (except mean weekly earnings data which are at May), and expenditure are for the year ending 30 June. Income support data (except full benefit received and GDP spent which are for the year ending 30 June) are at June.

Income — State summary

INCOME DISTRIBUTION	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Gross State product per capita (market price)	$'000	1996–97	29.2	29.2	24.8	24.6	30.6	22.2	29.4	35.2	28.1
Household disposable income per capita	$'000	1996–97	19.2	18.7	16.4	16.8	17.3	15.3	18.4	23.2	18.1
Share of equivalent income going to top quintile (of all income units)	%	1996–97	37.7	37.2	37.7	35.8	38.0	35.8	n.a.	37.1	37.4
Share of equivalent income going to bottom quintile (of all income units)	%	1996–97	7.7	7.7	7.4	8.5	6.8	8.6	n.a.	6.8	7.6
Gini coefficient (of all income units)	no.	1996–97	0.45	0.42	0.44	0.42	0.46	0.40	n.a.	0.44	0.44
Median gross weekly income of couple with dependants income units	$	1996–97	881	861	877	855	960	831	n.a.	1157	882
Median gross weekly income of one-parent income units	$	1996–97	342	318	370	332	382	*415	n.a.	*374	349

SOURCES OF INCOME	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Wages and salaries as main source of income (of all income units)	%	1996–97	55.1	55.9	53.9	48.2	55.9	52.5	n.a.	63.0	54.8
Main income source from government payments (of all income units)	%	1996–97	30.8	28.4	30.6	37.0	26.2	35.4	n.a.	19.5	30.0
Main income source from government payments (of couple with dependants income units)	%	1996–97	12.5	11.2	13.0	*11.8	*6.9	*12.4	n.a.	* *	11.6
Main income source from government payments (of one parent income units)	%	1996–97	67.4	68.2	62.1	70.9	56.0	*50.8	n.a.	*51.0	64.8
Mean total weekly earnings of all employees	$	1998	642	560	588	568	586	554	643	734	610
Mean total weekly earnings of full-time adult employees	$	1998	817	767	757	729	781	712	782	874	782
Mean weekly ordinary time earnings of full-time non-managerial adult employees	$	1998	710	684	674	668	695	653	693	745	692
Female/male ratio of mean total full-time adult weekly earnings	no.	1998	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8

INCOME SUPPORT	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Aged on age pension	%	1998	62.9	65.0	63.3	68.1	62.7	64.6	66.2	49.6	65.4
Age pensioners(a)	'000	1998	572.2	431.0	278.9	161.4	136.6	45.1	5.1	13.7	1 682.6
Male age pensioners	'000	1998	204.8	154.9	102.7	58.3	48.8	16.0	2.0	4.6	613.6
Female age pensioners	'000	1998	367.3	276.1	176.2	103.1	87.8	29.1	3.0	9.2	1 069.0
Labour market allowance	'000	1998	250.1	190.9	165.9	68.9	64.1	27.5	12.7	10.1	790.3
Disability support pensioners(a)	'000	1998	188.0	129.5	99.8	51.9	46.0	19.6	4.3	5.1	553.3
Single-parent payment(a)	'000	1998	123.9	82.1	77.3	30.9	37.0	11.0	5.0	5.1	372.3

(a) Components do not add to total because total for Australia includes pensions paid to people living overseas.

Reference periods: Data for income distribution, sources of income (except mean weekly earnings data which are at May) are for the year ending 30 June. Income support data are at June, except labour market allowance recipients which are at May.

Income — definitions and references

Adult employees — employees aged 21 or over, and those under 21 who are paid at the full adult rate.
Reference: *Employee Earnings and Hours, Australia* (Cat. no. 6306.0).

Age pension recipients — people receiving full or partial Age pension excluding associated Wife's or Carer's pension. The qualifying age for Age pension eligibility for men is 65. Between 1 July 1995 and 2012, the qualifying age for women is gradually being raised from 60 to 65 years. At 30 June 1998 the qualifying age for women was 61 years.
Reference: Commonwealth Department of Family and Community Services, *Commonwealth Department of Family and Community Services Customers: a statistical overview*.

Aged — population meeting age criteria for the Age pension, comprising men 65 and over and women 61 and over from 1998; men 65 and over and women 60 and over prior to 1998.
Reference: *Population by Age and Sex, Australian States and Territories* (Cat. no. 3201.0).

Consumer price index — a measure of change over time in the retail price of a constant basket of goods and services which is representative of consumption patterns of employee households in metropolitan areas.
Reference: *The Australian Consumer Price Index: Concepts, Sources and Methods* (Cat. no. 6461.0).

Disability support pensioners — persons receiving a pension on the basis of an assessed physical, intellectual or psychiatric impairment and on their continuing inability to work or be retrained to work 30 hours or more per week within the next two years.
Reference: Commonwealth Department of Family and Community Services, *Commonwealth Department of Family and Community Services Customers: a statistical overview*.

Disposable income — gross income less personal income tax (including the Medicare levy).
Reference: *Income Distribution, Australia* (Cat. no. 6523.0).

Employees — all wage and salary earners who received pay for any part of the reference period.
Reference: *Employee Earnings and Hours, Australia* (Cat. no. 6306.0).

Equivalent income — disposable income adjusted, using simplified Henderson equivalence scales, to allow comparison between different types of income units. The scales reflect assumptions about how different characteristics e.g. size and composition, relate to the amount of income different types of income units need to achieve an equivalent standard of living.
Reference: *Income Distribution, Australia* (Cat. no. 6523.0).

Female/male ratio of mean total full-time adult earnings
Reference: *Employee Earnings and Hours, Australia* (Cat. no. 6306.0).

Full weekly benefit income received by a couple with two children — the maximum weekly social security benefit (including family allowances) available to an adult couple, with one child aged under 5 years and one child aged between 5 and 13 years. Excludes any rent assistance which may be available.
Reference: Commonwealth Department of Family and Community Services, unpublished data.

Full-time employees — employees who usually work 35 hours or more a week, or the agreed hours of a full-time employee.
Reference: *Employee Earnings and Hours, Australia* (Cat. no. 6306.0).

GDP (gross domestic product) — an aggregate measure of the value of economic production in a year. The series used are the average (GDP(A)) based on 1989–90 prices and the income-based measure, (GDP(I)) calculated using current prices. All GDP figures refer to GDP(A) except where GDP(I) is specified.
Reference: *Australian National Accounts: National Income, Expenditure and Product* (Cat. no. 5204.0).

GDP(I) spent on income support — special appropriations under the Social Security Act 1991 for income support as a proportion of GDP(I).
Reference: Department of Social Security, *Annual Report*.

Gini coefficient — an index for measuring inequality of income distribution. The index, always between 0 and 1, is low for populations with relatively equal income distributions and high for populations with relatively unequal income distributions.
Reference: *Income Distribution, Australia* (Cat. no. 6523.0).

Gross income — cash receipts, that are of a regular and recurring nature, before tax or any other deductions are made.
Reference: *Income Distribution, Australia* (Cat. no. 6523.0).

Gross State product — a similar measure to GDP but based on State income estimates.
Reference: *Australian National Accounts: State Accounts* (Cat. no. 5220.0).

Household disposable income per capita — where household disposable income, as measured in the Australian National Accounts, is household income less income tax and other direct taxes, fees, fines etc. charged by the government, consumer debt interest and transfers overseas. The population used is the mean resident population for the financial year.
Reference: *Australian National Accounts: National Income, Expenditure and Product* (Cat. no. 5204.0); *Australian National Accounts: State Accounts* (Cat. no. 5220.0).

Income unit — one person, or group of related persons within a household, whose command over income is assumed to be shared. Income sharing is considered to take place between married (registered or de facto) couples, and between parents and dependent children.
Reference: *Income Distribution, Australia* (Cat. no. 6523.0).

Income — definitions and references continued

Labour market allowance recipients — the number of recipients of Unemployment benefit prior to 1991; Job Search allowance, Newstart allowance and Youth Training allowance from 1991 to 1996; Newstart allowance and Youth Training allowance from 1997.
Reference: Commonwealth Department of Family and Community Services, *Commonwealth Department of Family and Community Services Customers: a statistical overview*.

Main income source from government payments — government pensions or allowances form the largest component of usual income.
Reference: *Income Distribution, Australia* (Cat. no. 6523.0).

Managerial employees — managerial, executive and senior professional employees who are in charge of a significant number of employees or have significant responsibilities in the conduct or operations of the organisation and who may not receive payment for overtime.
Reference: *Employee Earnings and Hours, Australia* (Cat. no. 6306.0).

Mean total weekly earnings — average total weekly earnings of employees including ordinary time earnings plus overtime earnings.
Reference: *Employee Earnings and Hours, Australia* (Cat. no. 6306.0).

Mean weekly ordinary time earnings of full-time non-managerial adult employees
Reference: *Employee Earnings and Hours, Australia* (Cat. no. 6306.0).

Median weekly income — the level of weekly income at which half the income units have higher incomes and half have lower incomes.
Reference: *Income Distribution, Australia* (Cat. no. 6523.0).

Ordinary time — employee's agreed hours of work including annual leave, paid sick leave and long service leave.
Reference: *Employee Earnings and Hours, Australia* (Cat. no. 6306.0).

Single-parent payment recipients — lone parents receiving the Parenting payment. In 1989, the Supporting Parent benefit and Class A Widow pensions were combined to form the Sole Parent pension. Figures prior to 1989 include these two pensions. In March 1998 Parenting payment was introduced and the Sole Parent pension became known as Parenting payment (single).
Reference: Commonwealth Department of Family and Community Services, *Commonwealth Department of Family and Community Services Customers: a statistical overview*.

Personal income tax as a proportion of taxable income — net income tax levied on individuals (including the Medicare levy minus rebates and other credits) expressed as a percentage of taxable income (i.e. gross income or profits minus allowable tax deductions).
Reference: Australian Taxation Office, *Taxation Statistics*; *Government Finance Statistics, Australia: Concepts, Sources and Methods* (Cat. no. 5514.0).

Private final consumption expenditure per capita — expenditure on goods and services by persons and private non-profit institutions serving households. Includes personal expenditure on motor vehicles and other durable goods and the imputed rent of owner-occupied dwellings. Excludes the purchase and maintenance of dwellings by persons and capital expenditure by unincorporated businesses and non-profit institutions. Private final consumption expenditure per capita data are expressed in Australian dollars at constant 1989–90 prices and are based on the mean resident population of each year.
Reference: *Australian National Accounts: National Income, Expenditure and Product* (Cat. no. 5204.0).

Share of gross/equivalent income going to top/bottom quintile — share of gross/equivalent income received by the 20% of income units with the highest/lowest incomes.
Reference: *Income Distribution, Australia* (Cat. no. 6523.0).

Wages and salaries as a main source of income — wages and salaries form the largest component of usual income.
Reference: *Income Distribution, Australia* (Cat. no. 6523.0).

Wages, salaries and supplements as a proportion of GDP(I) — includes wages, salaries and employer contributions to superannuation, lump sum workers compensation, termination and redundancy payments.
Reference: *Australian National Accounts: National Income, Expenditure and Product* (Cat. no. 5204.0).

Income sharing and income distribution

INCOME DISTRIBUTION

Contributed by: Gerry Redmond, Social Policy Research Centre, The University of New South Wales

The choice of sharing unit has some impact on the degree of measured inequality. Generally, estimates of inequality decrease as the scope of the sharing unit is expanded.

Cash income is widely used as a measure of living standards. This is because income is used to meet day-to-day living expenses, and provides the basis for increasing wealth and purchasing more substantial goods and services (such as household furnishings, cars, and holiday trips). Although income is mostly obtained by individuals, it is often used to support others, particularly family members with whom the individual lives. The understanding that income is shared underpins studies of how resources are distributed in the community and assists with identifying groups of people who may be in need of income support (see *Australian Social Trends 1998*, Poverty: different assumptions, different profiles, pp. 125–129).

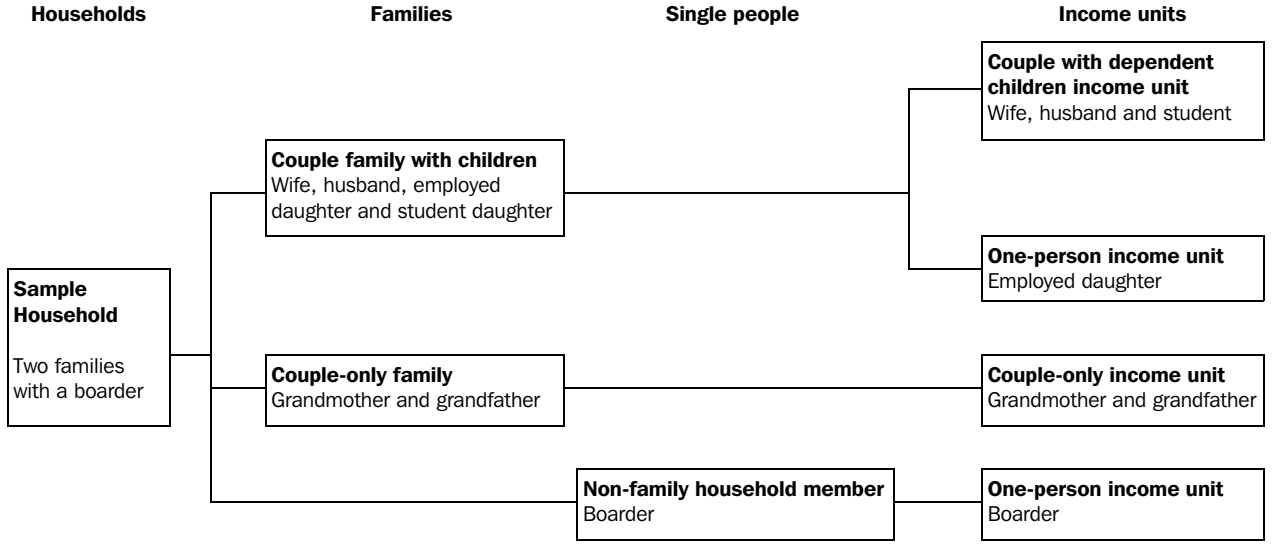
However, there is some debate among income policy analysts as to the best choice of unit that should be used. This review illustrates possible choices of sharing units and how these choices affect measurements of the distribution of income within the population overall and within the growing number of family households maintaining children who have completed their education.

Selecting a sharing unit

The choice of sharing unit for the provision of social security benefits and, more generally, for the analysis of income distribution is made on the basis of assumptions about sharing. Issues associated with sharing assumptions and the choice of sharing units can be illustrated by describing a hypothetical household in which there are a variety of relationships. The example involves a seven-member household comprising a married couple, their employed daughter, her friend who is a boarder in the house, another daughter who is aged 20 and a full-time student, and the husband's parents (or daughters' grandparents).

It could be assumed that the entire household is a sharing unit – that is, all household members pool their incomes. This may be true to the extent that they all avail themselves of the same household facilities and domestic appliances, and may also share other expenses. However, it is arguable that other goods and services enjoyed by individuals (e.g. spending on personal items such as clothing, or the use of a car) will be purchased according to family incomes. Accordingly, it could be assumed that individuals in the family unit comprising the couple and their two daughters are likely to share things among themselves, but not so much with the individuals in the family unit comprising the grandparents. In this case the family unit (defined narrowly) may be seen as the most appropriate sharing unit.

An example of a household with different sharing unit types



Source: Based on a diagram presented in *A Provisional Framework for Household Income, Consumption, Saving and Wealth, 1995* (Cat. no. 6549.0).

There are four income units in the household, as shown in the diagram. Here, the family unit consisting of the couple with two daughters is split into two income units, the first containing the couple and the student daughter, who is a dependent child of the couple, and the other containing the employed daughter, who is a non-dependent child. It is certainly possible to argue that the employed daughter may have a higher standard of living than the student daughter to the extent that she may have more income which she spends on herself, or may enjoy more holidays or entertainment, and so on.

Many analysts argue that the income unit, which comprises parent(s) and dependent children only, is the most appropriate sharing unit in the study of living standards, for two reasons: first, it seems safest to assume that the closer the relationship between household members the more likely it is that income will be shared[1,2], and second, the income unit is recognised by government agencies as a unit of sharing. That is, in assessing entitlement to some income tax reliefs and to social security benefits (such as unemployment benefits), the government assumes that income is shared within the income unit.

Each of the sharing units discussed above has some validity, although it is possible to devise other sharing units. For example, it could be argued that in the case of the household discussed above, the couple and their children may share resources to a considerably greater extent with the couple's parents than with the boarder. At the other extreme, some research has shown that sharing between couples, or between couples and their dependent children, cannot be automatically assumed to take place.[3]

In practice, the choice of sharing unit is governed by the concerns of *policy* (how the unit is defined for social security or tax purposes), *convenience* (according to information available in the survey data) and *convention* (in line with how other analysts define the sharing unit).

Income distribution among households, families and income units

One commonly used measure of income inequality is the share of total income received by people in different income quintile groups. If there were no inequality, then the people in each quintile group would each receive 20% of total income. To facilitate comparisons in this analysis (both within and between types of sharing unit), incomes within any sharing unit type are measured at the per capita level.

In Australia in 1995–96, people in the bottom quintile of the income distribution received 5.3% of all incomes if sharing among individuals within income units is assumed. Those in the second lowest quintile received 10.2%, while those in the top quintile

Sharing units

A sharing unit is defined as a group of people who live together in a household who share resources so that they all have the same standard of living. The following standard ABS concepts are used in this review to illustrate different sharing unit types.

A *household* is a person living alone or a group of related or unrelated people who usually reside and eat together.

Family units contain two or more people related by blood, marriage (registered or de facto), adoption, step or fostering, who live in the same household. A family unit cannot contain more than one couple relationship or a couple relationship plus a lone parent/child relationship. Some households will, therefore, contain more than one family.

Income units (sharing units used for disseminating ABS income statistics) are based on partner and specific parent/child relationships. Partners (married or defacto) are assumed to be interdependent, and children aged under 15 years plus older full-time students (defined as dependent children) are assumed to be dependent on parents. Non-dependent children, and others not having any of the above relationships within a household, are recognised as single-person income units.

Dependent children are those aged less than 15 years, or 15–24 and both studying full-time and living with parent(s) and who do not have a spouse or offspring of their own living with them.

Non-dependent children are those living with parent(s) who do not have their own spouse or offspring and are aged 25 or more or are aged 15–24 and are not studying full-time.

Measuring income

Income is gross income (that is, income before taxes are deducted). *Per capita income* is the total income of the sharing unit divided by the number of people (adults and children) in the sharing unit.

Income quintiles are formed by ranking all sharing units in ascending order by level of per capita income, and then dividing them into five groups, each containing 20% of all people in the population.

Income received by people(a) in different per capita quintiles of income distribution in 1995–96 by sharing unit type

	Share of total income			*Average per capita income*		
	Income units	*Families and single people(b)*	*Households*	*Income units*	*Families and single people(b)*	*Households*
Income quintile	%	%	%	$	$	$
Lowest 20%	5.3	5.9	6.0	81	89	91
Second	10.2	10.6	10.9	155	161	163
Third	14.8	15.5	15.6	224	234	237
Fourth	23.6	23.3	23.3	355	354	353
Highest 20%	46.1	44.7	44.3	703	678	671
Total	**100.0**	**100.0**	**100.0**	**303**	**303**	**303**

(a) Per capita income of all people, including children and adults.
(b) Includes persons living alone, individuals in group households and non-family members living with families which are all treated as separate sharing units.

Source: Unpublished data, Survey of Income and Housing Costs, 1995–96.

received 46.1% of total income. While the distributions are similar if sharing among individuals within families, or among individuals within households is assumed, estimates of inequality decrease as the scope of the sharing unit is expanded. Thus, income shares were higher for people in the bottom three quintiles of the income distribution if sharing within households, rather than income units, is assumed. Income shares were correspondingly lower for people in the top two quintiles if sharing is assumed to take place within households.

The lower level of income inequality when larger sharing units are assumed can also be seen by comparing average per capita incomes of people in the lowest and highest quintiles using different sharing assumptions. When comparing income unit incomes, the average per capita income of those in the highest income quintile ($703) was 8.7 times higher than those in the bottom quintile ($81). In contrast, when using households as the sharing unit, the differences were smaller ($91 compared to $671) – with the top quintile being only 7.4 times higher than the bottom.

Changes in living arrangements

Monitoring the circumstances of people with low incomes in particular life situations (school leavers, one-parent families, older people who have retired) and how they live, whether on their own or with others, is important from a social policy perspective because it provides information on how support might best be targeted.

More generally, changes in living arrangements over time may indicate changes in the way people share their resources. For example, if the proportion of people living in multi-income unit households (like the one given in the earlier example) was increasing, choosing income units to identify people in relative poverty might be less relevant, simply because the opportunity for people to share resources with family or household members will have increased. If, on the other hand, the proportion of people living in single-income

Distribution of people by living arrangements, 1981–82 and 1995–96

	1981–82			*1995–96*		
	Households with:			*Households with:*		
	One income unit	*Two or more income units*	*Total households*	*One income unit*	*Two or more income units*	*Total households*
Household type	%	%	%	%	%	%
Single family households	62.4	22.0	84.4	61.6	21.6	83.2
Other households	7.5	8.1	15.6	9.3	7.6	16.8
Total	**69.9**	**30.1**	**100.0**	**70.8**	**29.2**	**100.0**

Source: Unpublished data. Income and Housing Survey, 1981–82; Survey of Income and Housing Costs, 1995–96.

unit households increased, the opportunities for sharing resources will have decreased. Differences in the sharing assumptions would clearly be less relevant if more people were to live in households with only one income unit, since for these people income unit, family, and household are the same.

Information from income surveys conducted in 1981–82 and 1995–96 indicates that there has been little change through the 1980s and 1990s in the distribution of people living in different household types when classified according to different types of sharing unit. In both years, about seven in ten people lived in single-income unit households, mostly as single-family income units. Therefore, the proportion of people living in households with more than one income unit, for whom various assumptions might be made about sharing, was roughly the same in both years (about three in ten). Some of these people lived in group households or households with more than one family. However, in both years, most of the people in multi-income unit households lived in single-family households (typically families with non-dependent children). People in single-family households with more than two income units comprised 22% of the population in both 1981–82 and 1995–96. Taken together, this information suggests that the choice of sharing unit will have had little effect when measuring changes in income distribution over the last decade (the relative number of different types of sharing units remained much the same).

There have, nevertheless, been changes in living arrangements not so apparent from the sharing unit types commonly used for analysis. For example, it is known that more older children, including those aged 25 years and over, are living in the family home in the 1990s (for changes in proportions of older children living with their parents see *Australian Social Trends 1999,* Family — national summary table, p. 28), which suggests that there has been an increase in the proportion of people living in single-family multi-income unit households. However, as shown, the overall proportion of multi- income unit families has remained stable.

The anomaly relates to the fact that children aged 15–24 years are increasingly likely to be classified as dependants (that is, belonging to a family income unit) rather than non-dependent children (or single-income units) because children of this age have been staying in full-time education longer. In 1995–96, 50% of 15–24 year olds living with their parents were classified as dependants, compared with 39% in 1981–82.

Comparisons over time

The comparisons provided in this review are based on information obtained from the Income and Housing Survey, 1981–82, and the 1995–96 Survey of Income and Housing Costs. Comparisons between the two surveys have been enabled by adjusting for various differences in the available data. These adjustments included: standardising the definition of dependants; excluding the income of dependent children from the income of the respective sharing unit types; setting negative incomes to zero; and making comparisons on the basis of current gross income, rather than other measures of income available from the respective sources. Although after-tax income comparison would be desirable, data limitations from these sources prevent that.

Effect of sharing assumption within single family households

The changing circumstances of youth, and their financial dependency on parents, has been a matter of social policy review.[4] It is in this context that is useful to examine how different sharing assumptions have affected per capita incomes of families with non-dependent children (those not considered to be sharing income) over the 1980s and 1990s.

Average income of people in single family households with non-dependants by sharing assumption, 1981–82 and 1995–96

	1981–82			*1995–96*		
	Per capita income of each unit – no sharing between units	*Per capita income of household members after sharing*	*Per cent Difference*	*Per capita income of each unit – no sharing between units*	*Per capita income of household members after sharing*	*Per cent Difference*
Income unit type	$ per week	$ per week	%	$ per week	$ per week	%
Primary income unit(a)	161	170	+5.6	343	341	–0.6
Non-dependants	185	170	–8.1	341	341	0.0

(a) Comprises income units containing the parent(s) of the non-dependant(s).

Source: Unpublished data.Income and Housing Survey, 1981–82; Survey of Income and Housing Costs, 1995–96.

For this purpose, income units in these households are divided into two groups: income units containing the parent(s) (defined as primary income units); and those made up of non-dependent children.

In 1981–82, if sharing only among income units is assumed, the average weekly per capita income of people (parents and dependants) living in primary income units was $161, and the average income of non-dependent income units was $185. If equal sharing among all people in these households is assumed, the average per capita income was $170. Therefore, the per capita incomes of non-dependants made a positive contribution to the per capita incomes of the family.

Between 1981–82 and 1995–96, primary family income unit per capita incomes rose from $161 per week to $343 per week. In other words, they more than doubled (up by a factor of 2.1). Aside from the general inflationary increase in incomes, this increase will, in part, be associated with factors such as the increased participation of older women in the workforce. In contrast, the income of non-dependants did not increase to the same extent (rising from $185 to $341, up by a factor of 1.8). This trend reflects the relative decline of young people's earnings in relation to adult earnings (see also *Australian Social Trends 1997,* Youth income, pp. 121–124). As a result, the per capita incomes of non-dependants did not increase family per capita incomes. In contrast to 1981–82, the average contribution of non-dependent per capita incomes to household per capita incomes in 1995–96 was largely neutral. The findings indicate that the choice of sharing unit has less effect on per capita incomes in the mid 1990s than the early 1980s.

Thus, it appears that a relative decline in the incomes of young people has coincided with an increasing likelihood that they will remain longer in the family home. This factor, combined with increasing incomes among the parents of young adults, suggests that the nature of sharing within families may be changing. In the analysis of income distribution in Australia, it is important to consider the likely impact of these changes, and to constantly reassess assumptions about sharing within households, families and income units.

Endnotes

1 Australian Bureau of Statistics 1995, *A Provisional Framework of Household Income, Consumption, Saving and Wealth*, Cat. no. 6549.0, ABS, Canberra.

2 Saunders P. 1994, *Welfare and Inequality: National and International Perspectives of the Australian Welfare State*, Cambridge University Press.

3 Edwards M. 1982, 'Financial arrangements made by Husbands and Wives: Findings of a Survey', *Australian and New Zealand Journal of Sociology*, vol. 18, no. 3, pp. 320–338.

4 Schneider J. 1999, 'The Increasing Financial Dependency of Young People on their Parents', *Discussion paper No. 96, Social Policy Research Centre*, University of New South Wales.

Lower income working families

INCOME DISTRIBUTION

Lower income working families are typically families with one earner and young children. Many of them are also families with less skilled workers.

Families with relatively low living standards are of concern to government and non-government organisations that aim to minimise the effects of relative poverty on the wellbeing of families. Low income is commonly associated with people who do not have jobs and who are consequently largely dependent on pensions and benefits provided by the social security system. However, there are also working families with low income whose resources are supplemented by government and welfare organisations. Identifying the types of families with relatively low living standards (measured using income) and their employment characteristics provides insights into those families in greatest need of support.

One commonly used method to identify families likely to have relatively low living standards is to examine those with relatively low incomes. By ranking families according to their equivalent income (see box) and selecting those at the bottom of the distribution, the circumstances of those with limited economic resources can be compared with those who are better off. In this review, those in the lowest two quintiles (40%) of the equivalent income distribution are compared with those at the higher end of the distribution.

In 1996–97, 30% of all families (excluding those with business interests) received a government pension or benefit as their largest single source of income. Most (86%) of these families had an equivalent income which placed them in the lowest two quintiles (40%)

Families(a) in equivalent income quintiles, by principal source of income, 1996–97

	Lower income		*Medium to high income*			*Total*
	First	*Second*	*Third*	*Fourth*	*Fifth*	
Principal source of income	'000	'000	'000	'000	'000	'000
Wages and salary	138.4	331.4	562.8	710.8	729.4	2 472.8
Government pensions and allowances	581.7	426.3	143.6	24.2	* *	1 176.5
Investments(b)	52.3	29.8	83.9	54.8	59.9	280.8
Total	**772.5**	**787.5**	**790.3**	**789.7**	**790.1**	**3 930.0**

(a) Excludes all families with business interests.
(b) Includes income from superannuation.

Source: Unpublished data, Survey of Income and Housing Costs, 1996–97.

Identifying lower income families

This analysis is based on income data collected by the ABS in the Survey of Income and Housing Costs, 1996–97.

Families (actually family income units) are defined as a group of related persons within a household whose command over income is assumed to be shared. Income sharing is assumed to take place between married (registered or de facto) couples, and between parents and dependent children.

Because stated business income does not necessarily reflect living standards, family income units including a partner who has business interests have been excluded.

Dependent children are those aged less than 15 years, or 15–24 and both studying full-time and living with parent(s) and who do not have a spouse or offspring of their own living with them.

W*orking families* have been defined as those whose principal source of income came from wages and salaries (excluding families with business interests). *Lower income working families* are those whose income fell in the two bottom equivalent income quintiles (lowest 40%) for all families. *Medium to high income working families* are those whose income fell in the top three equivalent income quintiles for all families.

Principal source of income is that source from which most income is received. This can represent less than 50% of income.

Principal earner in a couple is the partner who earned the most income from wages and salary.

Equivalent income

Lower income families have been identified on the basis of their equivalent income rather than actual income. Equivalent income adjusts actual income on the basis of the income unit's characteristics, such as size and composition, to allow the standard of living of different family types to be compared. For example, this adjusts for the difference that would exist in the standard of living between a couple with children and a couple without children who both receive the same combined income. Henderson Equivalence Scales have been used (for further information see *Australian Social Trends 1998,* Poverty: different assumptions, different profiles, pp. 125–129).

Family type profile of working families, 1996–97

	Lower income				*Medium to high income*			
Family type	*Number of Families* '000	*Average family size* persons	*Average weekly gross income(a)* $	*Proportion with one earner* %	*Number of Families* '000	*Average family size* persons	*Average weekly gross income(a)* $	*Proportion with one earner* %
Couple only	*83.4*	*2.0*	*398*	*87.8*	*866.2*	*2.0*	*1 189*	*28.1*
Reference person aged under 45	26.9	2.0	437	86.7	359.0	2.0	1 296	11.7
Reference person aged 45 or over	56.5	2.0	380	88.4	507.2	2.0	1 113	39.8
Couple with dependants	*362.6*	*4.3*	*617*	*78.0*	*1 021.9*	*3.9*	*1 276*	*29.9*
Youngest child aged 0–4 years	219.5	4.4	621	82.7	374.7	3.9	1 178	45.9
Youngest child aged 5–9 years	79.6	4.5	629	76.5	238.0	4.1	1 272	27.2
Youngest child aged 10–24 years	63.5	3.9	591	63.5	409.1	3.6	1 369	16.8
One-parent families	*23.9*	*2.9*	*459*	*100.0*	*114.9*	*2.4*	*714*	*100.0*
Total working families	**469.8**	**3.8**	**570**	**80.9**	**2 002.9**	**3.0**	**1 206**	**33.2**

(a) Average income before adjusting for different family size and composition.

Source: Unpublished data, Survey of Income and Housing Costs, 1996–97.

of the income distribution of all families. However, also among those in the lowest two quintiles of the equivalent income distribution were 470,000 working families (families whose principal source of income was from wages and salaries). These families represented 12% of all families (excluding those with business interests) and 30% of those in the lowest two quintiles of the income distribution of all families.

Mainly one-earner families with young children

The level of earnings from paid work can be related to a person's age and work experience, as well as a range of other factors. Within families, involvement in paid work (especially for mothers) can also be limited by the need to care for young children. Because limited work experience and early child rearing often coincide, their combined impact on the family's income can be substantial. In 1996–97, just over half (52%) of lower income working families had only one employed partner and a youngest child aged under 10 years.

As well as having a younger age profile, families with low equivalent income were larger than those with medium to high income (an average of 3.8 people compared to 3.0 people). This reflects the fact that larger families tended not to have the higher income needed to support the same standard of living as smaller families.

Altogether, just over three quarters (77%) of lower income working families were couple families with dependent children – in 61% of these families the youngest child was under 5 years old. In contrast, couple families with dependent children represented 51% of medium to high income working families – in 37% of these families the youngest child was under 5 years old.

Involvement of both partners in paid work is becoming the social norm (see *Australian Social Trends 1997*, Families and work, pp. 30–33). Overall, 78% of lower income working families with dependent children had only one partner working, compared to 30% of medium to high income working families with dependent children. Lower income working families whose youngest dependent child was under 5 years old were least likely to have two earners (17%), while those families in which the youngest dependent child was aged 10–24 years were most likely to have two earners (36%).

Couple-only working families were generally less likely to have lower equivalent incomes. Couple-only families comprised 18% of lower income working families compared to 43% of medium to high income working families. Once again, those couple-only working families with lower income, predominantly had only one earner (88%) whereas among families that were in the medium to high income group, two earner families predominated (72%).

Distribution of employment arrangements in working families, 1996-97

	Lower income			*Medium to high income*		
	Couple only	*Couple with children*	*One-parent family*	*Couple only*	*Couple with children*	*One-parent family*
Working arrangements	%	%	%	%	%	%
One earner	*87.8*	*78.0*	*100.0*	*28.1*	*29.9*	*100.0*
Full-time	68.1	69.3	62.4	25.7	28.8	70.5
Part-time	19.8*	8.7	37.6	2.4	1.2	29.5
Two earners(a)	*12.2**	*22.0*	..	*71.9*	*70.1*	..
Both full-time	5.8*	4.9*	..	48.7	30.4	..
Total	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**

(a) Includes those families in which one or both partners worked part-time.

Source: Unpublished data, Survey of Income and Housing Costs, 1996–97.

Among couple-only working families, those with lower incomes tended to be older than those with medium to high incomes. Of those with lower incomes, 68% were couples in which the reference person was aged 45 years or older, while among medium to high income earners, the proportion was 59%.

Lone parents who were working and had lower equivalent incomes were slightly more likely to be working part-time (38%) than lone parents who had medium to high equivalent incomes (30%). They also tended to have more children (an average of 1.9 compared with 1.4).

Occupation, by skill level(a), of principal earner in working families, 1996-97

	Lower income	*Medium to high income*
Skill level (occupation groups)	%	%
Skill level 1: (Managers and administrators, professionals)	13.9	32.8
Skill level 2: (Associate professionals)	10.1	14.9
Skill level 3: (Tradespersons & related workers, advanced clerical and service workers)	26.7	19.2
Skill level 4: (Intermediate clerical, sales & service workers intermediate production and transport workers)	28.5	22.8
Skill level 5: (Elementary clerical, sales and service workers, labourers & related workers)	20.9	10.4
Total	**100.0**	**100.0**

(a) Skill level as classified in the Australian Standard Classification of Occupations (ASCO) 2nd edition.

Source: Unpublished data, Survey of Income and Housing Costs, 1996–97.

What jobs do they do?

People working in high-skill jobs generally earn more income than those in less-skilled jobs. As might be expected, principal earners in lower income working families were more likely to be working in less-skilled jobs than those in higher income working families.

Nearly half (49%) of principal earners in lower income working families had occupations that are classified in the lowest two skill occupation groups (skill levels 4 and 5). These occupations comprise intermediate and elementary clerical, sales or service workers; intermediate production and transport workers; and labourers and related workers. Only a small proportion (14%) of principal earners in lower income working families had occupations that were in the highest skill level (level 1, which comprises managers, administrators and professionals).

In comparison, a third (33%) of principal earners in medium to high income working families had occupations in the lowest two skill levels. A further third (33%) of principal earners in medium to high income working families had occupations in the highest skill level.

Sources of income other than wages and salaries

Most working families had sources of income other than wages and salaries. Among lower income working families, 77% received some income from government allowances, compared to 39% of medium to high income working families.

The majority (90%) of lower income working families with dependent children received income support through the social security

Government income support for lower income working families, 1996–97

		Receiving income support			
	Proportion receiving income support	Average weekly gross income	Share of income from support(a)	Average weekly gross income of those not receiving support	Total
Family type	%	$	%	$	'000
Couple only	*17.9**	*372**	*28.0**	*404*	*83.4*
Reference person aged under 45	25.2*	384*	31.0*	455	26.9
Reference person aged 45 or over	14.4*	362*	25.4*	383	56.5
Couple with dependants	*90.5*	*625*	*13.3*	*547*	*362.6*
With one dependant	84.3	506	9.9	492*	80.2
With two dependants	91.0	600	11.0	562*	153.2
With three or more dependants	93.6	719	16.8	607*	129.2
One-parent families	*73.5**	*475**	*17.9**	*415**	*23.9*
Total lower income working families	**76.7**	**607**	**13.8**	**450**	**469.8**

(a) Proportion of gross income received as government pensions and allowances.

Source: Unpublished data, Survey of Income and Housing Costs, 1996–97.

system. The most common types of income support received were family assistance payments and the Parenting Payment. Larger families were more likely to receive support than smaller families. Among families with one dependent child, 84% received government income support which represented an average of 10% of their income. Among families with three or more dependent children, 94% received government income support which represented an average of 17% of their income.

Although a smaller proportion of lower income working couples without dependants received government income support (18%), the contribution it made, on average, to their income was greater (28%).

In 1996–97, 74% of working lone-parent families received income support from family assistance through the social security system. In addition, 23% of working lone-parent families received income from a sole-parent pension.

A small proportion of low-income working families with dependent children were not receiving government income support at the time of the Survey. For these families, their average gross weekly income was lower than that for families receiving support. This could be because of recent changes in the financial or family circumstances of some families in either group. For example, some of the families not receiving income support may recently have had their first child, or may not yet have applied for government support after a recent drop in their income. In some families the children may have been outside the eligibility age range.

Income support for working families with dependent children

The Department of Family and Community Services (formerly Social Security) administers a range of schemes which, subject to income and assets tests, provide financial support to individuals and families.[1] The 1996–97 Income and Housing Costs Survey found that family assistance payments and the Parenting Payment were those most commonly received by working families.

Family assistance payments comprise a number of payments made to help with the costs of bringing up children. These include Family Payment, Family Tax Payment, and Maternity Allowance. Most families are entitled to Family Payment at the minimum rate. However, those with low incomes and those receiving other social security pensions and benefits receive a rate greater than the minimum.

Parenting payment gives an independent source of income to the partner who is not in paid work, or only getting a low income and mainly cares for the children. It provides increased choice for parents in balancing work and family responsibilities.

Endnotes

1 Department of Social Security 1996, *DSS Customers: a Statistical Overview*, DSS, Canberra.

Economic resources of older Australians

INCOME DISTRIBUTION

The comparatively low average income of older Australians reflects their widespread reliance on government pensions for most of their income.

As with other members of the community, the economic wellbeing of older persons depends mainly on their regular income, and how well this covers their living expenses. Most people aged 65 and over are dependent on government income support payments, such as the age or service pension, or sources other than wages or salaries for most of their income.

The 1996–97 Survey of Income and Housing Costs provided information about the financial circumstances (levels and sources of income) of people living in private dwellings. Among the 2.3 million people (excluding children) who formed income units in which the reference person was aged 65 years or older, 1.4 million were living with a spouse (in 691,600 couple units) and 0.9 million were living alone.

Level of income

In 1996–97, the average gross weekly income was $242 for older one-person income units and $481 for older couple income units. This was considerably lower than for most other population groups, mainly reflecting their low labour force participation. For example, in 1996–97, the average weekly income of all couple units was $890 and of all one-person units, $391.

The income distribution of older one-person units was very concentrated, with 60% having income in the range of $150–$224 per week.

Measuring income resources

This article uses data from the 1996–97 Survey of Income and Housing Costs which collected data on the sources and levels of cash income received by Australian households. The Survey did not collect information about people living in nursing homes, hospitals, hostels and institutions.

Income unit is one person, or a group of related persons within a household, whose command over income is assumed to be shared. Income sharing is considered to take place between partners in a couple relationship, and between parents and their dependants. In this review, the very small number of one-parent units have been included with one-person units.

Older income units are those where the reference person is aged 65 years or more.

Net income is gross cash income after income taxes and the Medicare levy have been deducted.

Housing costs comprise housing loan payments (principal and interest), council and other rates, and rent payments.

This concentration is associated with the large proportion of older one-person income units who were dependent on the age or service pension.

The distribution of income among older couples covered a wider range than among older one-person units, partly reflecting their slightly more diverse sources of income.

Gross weekly income distribution, 1996–97

	Older income units			
	Couples	*One-person*	*All older income units*	*All income units*
Gross weekly income ($)	%	%	%	%
Less than 150	2.5*	6.0	4.4	7.2
150–224	3.3	60.3	35.0	14.5
225–299	24.4	18.5	21.1	9.5
300–374	27.0	6.7	15.7	8.6
375–449	13.5	1.7*	6.9	7.4
450 and over	29.4	6.9	16.9	52.8
Total	**100.0**	**100.0**	**100.0**	**100.0**
	'000	'000	'000	'000
Total income units	**691.6**	**870.3**	**1 561.9**	**9 083.3**

Source: Unpublished data, Survey of Income and Housing Costs, 1996–97.

Older income units by principal source of cash income, 1996–97

	Couples	*One-person*	*Total*
	%	%	%
Wages and salaries or own business	8.1	1.9*	4.7
Government cash benefits	64.9	81.3	74.1
Superannuation	11.6	6.6	8.8
Interest, rent and dividends	14.6	9.0	11.5
Total	**100.0**	**100.0**	**100.0**
	'000	'000	'000
Total	**691.6**	**870.3**	**1 561.9**

Source: Unpublished data, Survey of Income and Housing Costs, 1996–97.

Nevertheless, compared with all income units, there was still a high level of concentration at the lower end of the income distribution. Just over one half (51%) of older couple units received income in the range of $225–$374 per week.

Sources of income

Most older people are not in paid employment. In 1996–97, only 6% of the population aged 65 and over were employed – 10% of males and 3% of females – and half of these worked part-time.[1]

At that time, the majority (87%) of older income units living in private dwellings received some cash income from government pensions and allowances. This formed the main source of income for 74% of older income units. Older one-person income units were more likely to be receiving cash income from this source than older couples (81% and 65% respectively).

Proportion of older income units whose principal source of income was from government cash benefits, 1996–97

	Couples	*One-person*	*Total*
Age of reference person (years)	%	%	%
65–69	57.6	77.8	66.0
70–74	66.7	78.2	73.0
75–79	69.7	82.6	77.2
80–84	73.7	87.1	83.4
85 and over	78.2	84.0	82.5
Total	**64.9**	**81.3**	**74.1**
	'000	'000	'000
Total	**691.6**	**870.3**	**1 561.9**

Source: Unpublished data, Survey of Income and Housing Costs, 1996–97.

Dependency on government cash benefits increased with age. This was particularly the case for couples, with 58% of 65–69 year old couple units whose principal source of income was from government cash benefits, compared to 78% of couple units aged 85 years and over.

Despite this high dependency on government cash benefits, a considerable number of older income units live on private income. In 1996–97, approximately 8% of older couples were mainly dependent on income from employment in the form of wages and salaries or business income. A further 12% were mainly dependent on superannuation and annuities, and 15% were mainly dependent on property income in the form of interest, rent or dividends. While 7% of older one-person units relied mainly on income from superannuation and 9% from property income, a very small proportion relied on employment income.

Over the coming decades, the effects of the current compulsory superannuation arrangements should increase the proportion of persons of pension age funding their retirement (see *Australian Social Trends 1994*, Retirement Income, pp. 143–146).

Comparison of living standards

The average income of older income units is relatively low compared to those aged under 65. However, with fewer dependants to support, reduced costs associated with going to work, lower income tax and lower housing costs, many of their expenses are also lower.

If gross cash income is used as a proxy for living standards, it is more appropriate to compare average incomes for units of similar size. Using this comparison, the average weekly cash income in 1996–97 for older couples without children present was 52% of that for couples under 65 years without children present. Older one-person units received 57% of the average gross weekly income of one-person units under 65.

However, these differences in gross income between older income units and those under 65 were not as large when net (i.e. after-tax) income is compared. As a result of the small amount of tax paid by many older units, average net income for older couples without children present was 60% of that of couples under 65 years without children present.

Income of older income units relative to that of income units aged under 65(a), 1996–97

	Couples without children	*One-person*
	%	%
Gross income	52.1	56.5
Net (after tax) income	60.4	66.8
Net income after housing costs	67.0	73.0

(a) Average income of older income units as a percentage of average income of younger income units of the same type.

Source: Unpublished data, Survey of Income and Housing Costs, 1996–97.

Older one-person units received an average net income of 67% of that of one-person units aged under 65.

Older income units have high rates of home ownership. Consequently, they generally have much lower housing costs than younger income units, who are often paying considerable sums of money in mortgage repayments, or paying dwelling rents at market rates.

Other older income units with relatively low housing costs are tenants of public housing (9% of older one-person units in 1996–97) and non-standard accommodation such as living with relatives (10%).

To allow for the effects of different levels of housing costs, net income is often compared after housing costs have been deducted. Using this income measure, the position of older income units relative to younger units improves considerably. In 1996–97, the average net income after deducting housing costs for older couples without children present was 67% of that for couples under 65 years without children present. Older one-person units had an average net weekly income after housing costs of 73% of that of one-person units aged under 65.

Older income units by housing tenure, 1996–97

	Couples	*One-person*	*Total*
Housing tenure	%	%	%
Owner			
With mortgage	4.9	2.7	3.7
Without mortgage	84.1	66.9	74.5
Renter			
Public	2.5*	9.0	6.2
Other	4.6	11.5	8.4
Other tenure	3.9	9.8	7.2
Total	**100.0**	**100.0**	**100.0**
	'000	'000	'000
Total	**691.6**	**870.3**	**1 561.9**

Source: Unpublished data, Survey of Income and Housing Costs, 1996–97.

Assets

The ownership of assets confers advantages on owners, as such assets may be sold or borrowed against to finance an increase in consumption. For most older income units, the major part of their assets are tied up in their homes. The average value of equity of home owners in the older age group was $155,100 in 1995–96 (see *Australian Social Trends, 1998*, Wealth in the family home, pp. 154–156).

Some older income units own other property and financial assets, such as those whose main source of income is from interest, rent or dividends, or from superannuation and annuities. There are little official data available on the value of these types of assets for the Australian population.

Income in kind

Living standards are determined not only by cash income and asset holdings. For some people, the value of in-kind and other indirect benefits can provide for a substantial improvement in economic wellbeing. For example, older persons are more likely to benefit from government expenditure on health services provided at little or no cost to the user, (see *Australian Social Trends, 1996*, Household income redistribution, pp. 117–120).

Many older people also receive substantial levels of non-cash assistance through pensioner concessions, subsidies and rebates provided by the Australian government, State and local governments and government business enterprises. However, quantifying the value of these benefits to income units is difficult because of lack of data.

Endnotes

1 Australian Bureau of Statistics 1998, *Year Book Australia 1998*, Cat. no. 1301.0, ABS, Canberra.

Expenditure on gambling

EXPENDITURE

In 1996–97, expenditure on legalised gambling in Australia was $10 billion. This represented 3% of household disposable income, almost double the proportion (1.6%) spent on gambling in 1972–73.

Gambling in some form has long been a part of the Australian lifestyle. Two-up games have traditionally formed a part of Anzac Day celebrations and the entire country practically stops for a horse race (Melbourne Cup) each year. Estimates of participation in gambling for Brisbane (1994)[1], New South Wales (1995)[2] and Victoria (1996)[3] indicate that 80%–90% of the adult population participated in one or more gambling activities in the reference year.

Gambling is also an expanding economic activity and an important source of taxation revenue for State and Territory governments. However, concern about the social and personal costs associated with 'problem gambling' emerges in public debate whenever a new form of legalised gambling becomes available or when access is extended into more venues, including private homes via telephone, interactive TV and internet facilities. Pressure on governments to weigh the potential social costs of gambling against the economic advantages, and to formulate appropriate policy and programs to deal with these issues, has gained momentum throughout the nineties.[4] In 1998, the Productivity Commission commenced a wide ranging inquiry into the economic and social impacts of Australia's gambling industry (report due in 1999).

Gambling

Gambling is the placement of a wager or bet on the uncertain outcome of a future event.

The statistics on gambling expenditure presented in this article are compiled by the Centre for Regional Economic Analysis (University of Tasmania) on behalf of the Tasmanian Gaming Commission.[5] The taxation data is compiled by the ABS as part of its Government Finance Statistics collection.

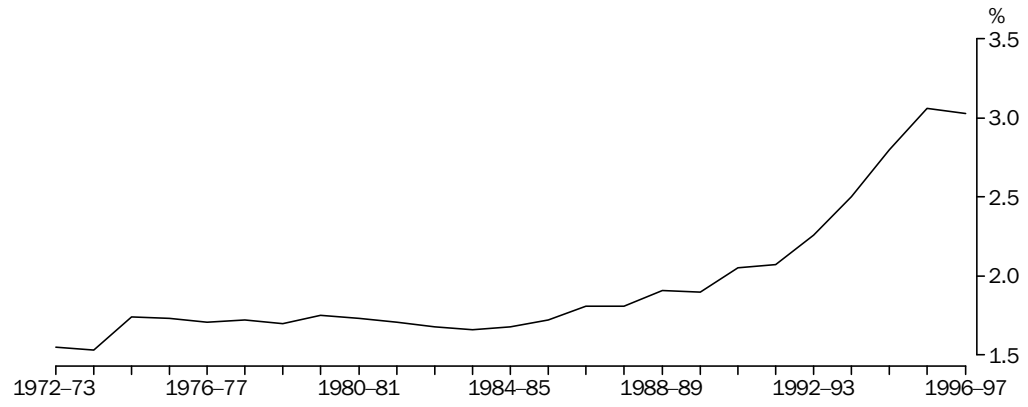
Both sets of statistics relate to the following types of *legalised gambling:*

- *racing* – relates to betting on the outcome of horse and greyhound races and, in recent times, on some other sporting events such as football matches;
- *casino gaming* – includes wagers on table games, gaming machines and keno systems;
- *gaming machines (poker machines)* – in clubs and hotels. Excludes machine gaming in casinos;
- *keno (club keno)* – in clubs and hotels. Excludes keno played in casinos and keno tickets purchased in lottery outlets such as newsagents;
- *lotteries, lotto, pools* – includes a wide range of lotteries and lotto games, instant lotteries (scratchies), keno tickets purchased in lottery outlets and soccer pools; and
- *bingo and minor gaming* – includes bingo, raffles, lucky envelopes and the like.

Recent growth in gambling

In 1996–97, expenditure on gambling was $10 billion. This represented 3% of household disposable income (HDI), almost double the proportion (1.6%) spent on gambling in 1972–73. Most of this increase occurred during the early to mid nineties with the rapid expansion of electronic gaming machines in Victoria (introduced in 1992), Queensland (1992) and South Australia (1994) and the opening of casinos in Canberra (1992), Melbourne (1994), Sydney

Gambling expenditure as a proportion of household disposable income



Source: Tasmanian Gaming Commission, *Australian Gambling Statistics 1972–73 – 1996–97.*

Expenditure on gambling

Expenditure on gambling is the amount wagered less the amount won. Statistics on gambling expenditure in Australia include expenditure by overseas visitors as well as Australian residents. While there is no comprehensive measure of gambling expenditure by overseas visitors to Australia, results of the ABS census of Australian casino businesses[6] indicate that, in 1997–98, overseas rated players (highrollers) alone accounted for around 25% of total expenditure on casino gaming in Australia. Gambling expenditure by Australians while overseas is not within the scope of Australian gambling statistics.

State and Territory gambling statistics include expenditure by overseas and interstate visitors as well as residents of that State or Territory. Gambling statistics for some States and Territories are also affected by accounting arrangements (e.g. expenditure on Tattslotto is credited to Victoria regardless of where tickets are purchased).

Per capita expenditure on gambling is calculated by dividing total expenditure on gambling for the financial year by the resident population (aged 18 years and over) at the commencement of the financial year.

Taxes on gambling

Taxes on gambling are taxes levied on gambling and betting stakes. Taxes may be collected either from entities providing the gambling service, as a licence fee or percentage of their gross income from gambling, or from individual gamblers as a percentage of their stake. Any taxes on individual gains from gambling (collected through the personal income tax system) are excluded.

(1995) and Brisbane (1995). However, the recent rapid growth in gambling expenditure has now begun to level out. In some cases (e.g. Western Australia and the Australian Capital Territory) expenditure on gambling declined between 1995–96 and 1996–97.

Taxation revenue from gambling

Gambling's contribution to combined State and Territory taxation revenue hovered around 9%–10% throughout the 1970s and most of the 1980s. After declining to 8% in the late 1980s, it has since risen to 11% in 1996–97. This recent increase in the proportion of taxation revenue derived from gambling taxes has occurred in most States and Territories and is particularly notable in Queensland, Victoria and South Australia. In these States, gambling taxes currently contribute around 13% of total taxation revenue – more than anywhere else in Australia, and about 50% more than in the late 1980s.

Per capita expenditure on gambling

In 1996–97, expenditure on gambling in Australia was $736, on average, for every Australian resident aged 18 years and over. Since 1972–73, New South Wales has maintained the highest per capita gambling expenditure (reaching $853 in 1996–97). During the same period Victoria's ranking has varied considerably; from second highest in 1972–73, down to the lowest between 1987–88 and 1991–92, and back up to almost equal second in 1996–97 ($805 per capita,

Gambling expenditure and taxes on gambling, 1996–97

	Expenditure on gambling		*Taxes on gambling*	
	Total	*As percentage of household disposable income*	*Total*	*As percentage of total taxation revenue*
	$ million	*%*	*$ million*	*%*
New South Wales	3 958	3.4	1 209	10.2
Victoria	2 757	3.2	1 157	13.0
Queensland	1 561	2.9	547	12.8
South Australia	638	2.5	274	13.0
Western Australia	700	2.3	170	6.4
Tasmania	152	2.0	62	9.8
Northern Territory	100	3.3	28	9.4
Australian Capital Territory	172	2.3	49	8.6
Australia	**10 037**	**3.0**	**3 497(a)**	**11.2(a)**

(a) Combined State and Territory taxes. Excludes taxes levied by the Commonwealth Government or by local governments.

Source: Taxation Revenue, Australia, 1997–98 (Cat. no. 5506.0); Tasmanian Gaming Commission, *Australian Gambling Statistics 1972–73 – 1996–97.*

Per capita expenditure on gambling

	Total(a) gambling expenditure					Type of gambling, 1996–97			
	1972–73	1982–83	1987–88	1996–97		Gaming machines	Casino	Racing	Lotteries, lotto, pools
	rank	rank	rank	rank	$	$	$	$	$
New South Wales	1	1	1	1	853	536	78	145	76
Victoria	2	5	8	3	805	425	169	124	84
Queensland	3	8	7	5	635	207	176	113	96
South Australia	7	6	5	6	572	326	63	84	63
Western Australia	4	7	6	7	540	..	290	107	122
Tasmania	5	4	4	8	436	16	214	70	55
Northern Territory	..	2	2	2	806	123	368	202	112
Australian Capital Territory	6	3	3	4	758	525	79	83	71
Australia	..	..	..	..	**736**	**363**	**144**	**123**	**85**

(a) Includes club keno, bingo and minor gaming.

Source: Tasmanian Gaming Commission, *Australian Gambling Statistics 1972/73 – 1996/97*.

which was only $1 less than the Northern Territory). Since the early 1980s, per capita gambling expenditure in the Northern Territory has been relatively high compared with most other States and Territories, while in South Australia and Western Australia per capita gambling expenditure has remained relatively low.

People spend more on gaming machines (poker machines) than any other form of gambling. In 1996–97, expenditure on gaming machines in clubs and pubs represented almost half of total gambling expenditure or $363 per capita. Expenditure was highest in New South Wales ($536 per capita or 63% of total gambling expenditure) and in the Australian Capital Territory ($525 per capita or 69% of total gambling expenditure). Gaming machines in clubs/pubs accounted for more expenditure than any other type of gambling activity in all parts of Australia except the Northern Territory, Western Australia and Tasmania, where availability of gaming machines in these venues was limited. (In Western Australia, gaming machines were available only at the casino.) These States had the highest per capita expenditure on casino gaming, which may be partly due to the popularity of gaming machines in their casinos. (Results of the ABS census of Australian casino businesses[6] indicate that, Australia-wide, expenditure on gaming machines in casinos amounted to

Gambling participation rates(a), 1996–97

	Lotteries, lotto, pools	Gaming machines	Racing	Casino	Total(b)(c)
	%	%	%	%	%
New South Wales	32.8	11.2	6.4	1.6	45.5
Victoria	31.3	9.7	5.6	2.9	43.9
Queensland	36.6	9.4	5.6	3.9	49.0
South Australia	30.7	11.1	3.9	2.4	44.6
Western Australia	44.7	1.2	4.8	3.2	52.3
Tasmania	31.0	3.8	5.8	6.4	45.6
Northern Territory	34.5	6.4	5.9	8.7	49.7
Australian Capital Territory	27.9	12.4	2.7	1.9	41.6
Australia	**34.0**	**9.4**	**5.6**	**2.7**	**46.3**

(a) Proportion of the population aged 18 years and over who gambled during the previous week.
(b) Includes club keno, bingo and minor gaming.
(c) The sum of the components is larger than the total as some people participated in more than one type of gambling.

Source: Unpublished data, Population Survey Monitor, 1996–97 annual sample.

$556 million ($41 per capita) in 1996–97. This represented 29% of total expenditure on casino gaming and 10% of total expenditure on gaming machines). In general, expenditure on lotteries, lotto, pools etc. was relatively low, averaging $85 per capita or 12% of total gambling expenditure Australia-wide. Western Australia is a notable exception where lotteries, lotto, pools, etc. accounted for 23% of total gambling expenditure in 1996–97, second only to casino gaming.

Recent participation in gambling

ABS surveys of gambling participation show that, in 1996–97, 46% of Australians aged 18 years and over had taken part in one or more forms of gambling during the week before they were interviewed. Lotteries, lotto, pools and the like were by far the most popular form of gambling throughout Australia, even though they accounted for the least expenditure. During 1996–97, 34% of adults had taken part in this form of gambling in the week prior to interview. The highest rates of participation were in Western Australia (45%), Queensland (37%) and the Northern Territory (35%).

Playing gaming machines in clubs/pubs was the second most popular gambling activity (9% participation rate) followed by racing (6%) and casino (3%). This pattern was true for most of Australia. However, casino gaming was the second most popular gambling activity in the Northern Territory (where participation rates were more than triple the national average) and Tasmania (where participation rates were more than double the national average).

Recent participation in gambling

The statistics on recent participation in gambling presented in this article are derived from the ABS Population Survey Monitor. Estimates relate to participation in gambling in the past week by Australian residents aged 18 years and over. The range of gambling activities is similar to that covered by the aggregate expenditure and taxation data.

Gambling participation rate – for any group, the number of persons who participated in one or more gambling activities in the week prior to interview, expressed as a percentage of the population in the same group.

Gambling patterns of men and women

In 1996–97, rates of recent participation in gambling activities increased steadily with age for both men and women – from around 30% among 18–24 year olds, to over 55% among 55–64 year olds. Participation rates then declined for people aged 65 and over, particularly for women. Men were more than twice as likely as women to gamble on racing, particularly in the under 35 and the 65 and over age groups. On the other hand,

Gambling patterns of men and women, 1996–97

	Gambling participation rate by age group (years)						
	18–24	*25–34*	*35–44*	*45–54*	*55–64*	*65 and over*	*Total*
Type of gambling	%	%	%	%	%	%	%
Men							
Lotteries, lotto, pools	11.0	30.5	34.7	40.5	46.0	42.8	33.9
Gaming machines	12.9	9.0	7.0	6.5	8.3	10.2	8.8
Racing	7.6	7.8	8.1	7.6	8.2	8.9	8.0
Casino	4.2	2.8	1.7	2.8	3.1	2.6	2.8
Total gambling(a)(b)	**30.2**	**43.4**	**46.8**	**52.1**	**55.7**	**53.5**	**46.6**
Women							
Lotteries, lotto, pools	16.3	31.3	36.3	37.8	43.3	39.3	34.1
Gaming machines	9.9	7.7	10.1	10.6	11.1	11.0	9.9
Racing	2.0	2.8	4.1	3.9	3.8	3.0	3.3
Casino	5.3	2.0	2.3	2.1	4.1	1.7*	2.7
Total gambling(a)(b)	**30.5**	**42.6**	**47.6**	**50.8**	**55.2**	**49.6**	**45.9**

(a) Includes club keno, bingo and minor gaming.
(b) The sum of the components is larger than the total as some people participated in more than one type of gambling.

Source: Unpublished data, Population Survey Monitor, 1996–97 annual sample.

in the 35 years and over age groups, women were a little more likely than men to have played gaming machines in the previous week. Patterns of recent participation in lotteries, lotto, pools, etc. were fairly similar for men and women although women had slightly higher participation rates in the younger age groups (under 45 years) while men had slightly higher participation rates in the older age groups. Participation rates in casino gambling were also fairly similar for men and women and were highest among 18–24 year olds and 55–64 year olds.

ABS surveys of gambling participation did not collect information about how often people gambled or how much they spent. However, several other studies have found that, on average, men gambled more frequently than women and spent significantly more on gambling than women did.[1,2,3] Recent studies in New South Wales (1995) and Victoria (1996) found that, on average, men spent about twice as much as women on gambling.[2,3]

Endnotes

1 Boreham, P., Dickerson, M., & Harley, B. 1996, 'What are the Social Costs of gambling?: The Case of the Queensland Machine Gaming Industry', *Australian Journal of Social Issues,* vol. 31, no. 4, pp. 425–442.

2 Australian Institute for Gambling Research 1996, *Study 2; An Examination of the Socio-economic Effects of Gambling on Individuals, Families and the Community, Including Research into the Costs of Problem Gambling in New South Wales,* prepared for the Casino Community Benefit Fund Trustees, Sydney.

3 Market solutions (Australia) Pty Ltd 1997, *VCGA Survey of Community Gambling Patterns, Final Report,* prepared for the Victorian Casino and Gaming Authority, Melbourne.

4 Dickerson, M. 1995, *Problem Gambling: Future Directions in Research, Treatment, Prevention and Policy Initiatives,* National Association for Gambling Studies: Sixth Annual Conference, Fremantle.

5 Tasmanian Gaming Commission 1998, *Australian Gambling Statistics 1972–73 – 1996–97,* Hobart.

6 Australian Bureau of Statistics 1998, *Casinos, Australia, 1997–98* (Cat. no. 8683.0), ABS, Canberra.

Housing

Housing — national summary

HOUSING STOCK	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Number of occupied private dwellings	'000	n.a.	n.a.	n.a.	6 173	r6 302	r6 446	r6 579	r6 690	r6 762	r6 956	n.y.a.
Size of new public sector houses	m^2	114	114	110	121	122	130	141	141	150	154	159
Size of new private sector houses	m^2	186	190	189	188	187	189	192	197	205	212	219
Average number of persons per household	no.	2.8	n.a.	2.8	2.8	2.7	n.a.	2.6	2.6	2.6	2.6	n.y.a.
Average number of bedrooms per dwelling	no.	2.9	n.a.	2.9	2.9	n.a.	n.a.	2.9	2.9	2.9	2.9	n.y.a.
Number of public sector dwellings completed	'000	10.7	11.0	12.5	11.5	9.7	11.1	9.9	7.8	6.8	6.0	4.4
Number of private sector dwellings completed	'000	107.7	139.4	147.5	122.9	123.0	145.2	157.3	162.4	129.1	113.0	127.2
Dwelling structure(a)												
Separate houses	%	80.8	n.a.	80.7	n.a.	78.2	n.a.	79.4	79.3	78.6	79.5	n.y.a.
Semi-detached/townhouses	%	n.a.	n.a.	7.1	n.a.	7.0	n.a.	7.9	7.9	8.1	7.9	n.y.a.
Flats or apartments	%	9.0	n.a.	11.5	n.a.	12.5	n.a.	12.5	11.9	12.4	11.9	n.y.a.
Tenure type(b)												
Owner without a mortgage	%	43.0	n.a.	42.4	n.a.	41.6	n.a.	41.8	41.3	41.7	40.9	n.y.a.
Owner with a mortgage	%	29.4	n.a.	29.2	n.a.	27.6	n.a.	28.3	29.8	28.2	28.0	n.y.a.
Public renter	%	5.5	n.a.	5.8	n.a.	5.6	n.a.	6.2	4.9	5.9	5.4	n.y.a.
Private renter	%	17.3	n.a.	17.1	n.a.	18.9	n.a.	19.0	17.8	20.0	21.0	n.y.a.

HOUSING COSTS	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Housing interest rate	%	14.2	15.3	16.9	15.1	11.9	9.9	8.9	10.0	10.3	8.3	6.7
Affordability index	no.	135.1	110.1	100.9	111.7	133.9	152.1	162.8	140.9	141.7	169.0	174.1
Average weekly earnings index	no.	87.2	93.5	100.0	106.6	111.5	113.5	116.9	121.7	127.2	132.1	137.6
Mean weekly public rent	$	47.0	n.a.	58.0	n.a.	66.0	n.a.	62.0	59.0	62.0	64.0	n.y.a.
Mean weekly private rent	$	106.0	n.a.	133.0	n.a.	127.0	n.a.	141.0	138.0	148.0	153.0	n.y.a.
Public rental cost index	no.	85.1	94.5	100.0	105.0	110.0	112.5	115.3	118.5	119.3	122.5	123.8
Private rental cost index	no.	83.7	92.7	100.0	104.7	106.3	106.7	107.1	108.1	112.4	115.8	119.6
Project home price index	no.	77.1	91.4	100.0	102.1	102.1	103.0	105.8	108.1	109.5	109.2	110.3
Established home price index	no.	69.5	92.2	100.0	100.8	104.6	106.0	109.1	112.6	112.7	115.1	122.8
Materials used in house building price index	no.	83.8	92.9	100.0	104.6	104.9	106.9	112.0	115.4	115.7	116.1	118.2
Finance commitments												
Number for construction or purchase of new dwellings	'000	85	95	77	80	94	111	124	103	85	89	97
Value for construction or purchase of new dwellings	$m	4 278	5 263	4 621	5 141	6 464	8 200	10 522	9 500	8 264	9 303	11 287
Number for purchase of established dwellings	'000	287	265	203	214	285	342	420	348	367	393	385
Value for purchase of established dwellings	$m	15 832	17 525	14 339	15 634	22 074	28 578	37 310	32 806	35 414	40 676	43 374
Value for alterations and additions	$m	707	998	905	983	1 359	1 642	2 899	3 477	3 509	3 039	2 779

HOUSING ASSISTANCE	Units	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998
Public sector rental dwelling stock	'000	328	338	352	362	370	377	384	389	393	400	n.y.a
Applicants on housing waiting lists	'000	198	201	195	202	216	232	235	235	236	221	n.y.a
Applicants accommodated	'000	48	49	53	52	49	54	55	53	51	47	n.y.a
Persons receiving private rental assistance	'000	713	651	674	646	868	941	976	931	1 042	1 049	979

(a) Components do not total 100% due to other dwellings (caravans or cabins in a caravan park, houseboats and houses or flats attached to shops) not being included.

(b) Components do not total 100% due to other renters (paying rent to the manager of a caravan park, an employer, a housing cooperative, or a church or community group), as well as other types of tenure (rent free and others), not being included.

Reference periods: Data are for the year ending 30 June except: average number of persons per household and bedrooms per dwelling; dwelling structure; tenure type; and mean weekly rent, which vary according to the timing of the surveys within each year.

Housing — State summary

HOUSING STOCK	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Number of occupied private dwellings	'000	1997	2 340.0	1 713.8	1 261.7	592.9	682.1	187.3	62.5	115.5	6 955.8
Size of new public sector houses	m^2	1998	191	136	176	173	145	178	153	117	159
Size of new private sector houses	m^2	1998	227	214	219	205	228	189	204	205	219
Number of dwellings completed	'000	1998	41.3	29.0	33.4	6.4	16.2	1.9	2.0	1.5	131.7
Dwelling structure(b)											
Separate houses	%	1997	74.6	82.8	82.6	79.3	80.9	85.5	75.2	80.9	79.5
Semi-detached/townhouses	%	1997	8.4	5.6	6.2	11.9	11.6	5.1	* *	11.2	7.9
Flats or apartments	%	1997	16.5	10.9	9.7	8.5	7.4	8.0	18.6	7.9	11.9
Tenure type(c)											
Owner without a mortgage	%	1997	42.3	44.4	38.5	40.5	35.6	42.3	15.3	30.0	40.9
Owner with a mortgage	%	1997	24.7	29.6	27.5	28.4	34.0	27.1	32.3	37.7	28.0
Public renter	%	1997	5.6	3.7	4.0	10.7	4.6	8.0	19.5	11.5	5.4
Private renter	%	1997	23.2	19.1	24.6	15.9	18.5	16.2	18.7	18.0	21.0

HOUSING COSTS	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT(a)	ACT	Aust.
Affordability index(d)	no.	1998	121.9	171.0	179.0	228.6	196.6	232.9	n.a	185.2	174.1
Mean weekly public rent	$	1997	67	61	56	64	63	60	78	85	64
Mean weekly private rent	$	1997	177	144	140	122	125	117	193	167	153
Project home price index(d)	no.	1998	112.2	108.6	112.4	113.1	102.2	123.3	137.3	123.5	110.3
Established home price index(d)	no.	1998	128.5	114.3	138.9	112.1	113.3	125.4	198.9	126.2	122.8
Materials used in house building price index(d)	no.	1998	119.7	117.1	117.1	123.3	115.9	121.0	n.a	n.a	118.2
Finance commitments											
Number for construction or purchase of new dwellings	'000	1998	28.4	26.9	19.3	5.5	14.2	1.3	0.9	1.2	97.5
Value for construction or purchase of new dwellings	$m	1998	3 907	2 951	2 154	497	1 438	102	104	132	11 287
Number for purchase of established dwellings	'000	1998	130.1	92.8	60.0	31.9	50.9	8.4	3.4	7.2	384.7
Value for purchase of established dwellings	$m	1998	18 018	9 637	6 246	2 631	5 045	634	364	797	43 374
Value for alterations and additions	$m	1998	1 174	670	374	140	282	60	25	51	2 779

HOUSING ASSISTANCE	Units	Years	NSW	Vic.	Qld	SA	WA	Tas.	NT	ACT	Aust.
Public sector rental dwelling stock	'000	1997	135.3	69.3	58.3	61.4	36.9	14.2	12.7	12.1	400.3
Applicants on housing waiting lists	'000	1997	89.1	53.4	25.8	32.2	11.1	2.1	3.8	4.0	221.4
Applicants accommodated	'000	1997	10.8	7.7	10.7	6.4	5.5	2.9	1.1	1.8	46.8
Persons receiving private rental assistance	'000	1998	340.3	218.1	236.9	63.9	82.3	22.6	6.0	8.6	978.7

(a) Estimates for dwelling structure, tenure type and mean weekly public and private rent for Northern Territory relate to mainly urban areas only.

(b) Components do not total 100% due to other dwellings (caravans or cabins in a caravan park, houseboats, and houses or flats attached to shops) not being included.

(c) Components do not total 100% due to other renters (paying rent to the manager of a caravan park, an employer, a housing cooperative, or a church or community group), as well as other types of tenure (rent free and others), not being included.

(d) State and Territory data refer to capital cities only.

Reference periods: Data are for the year ending 30 June.

Housing — definitions and references

Affordability index — the ratio of average household income to the average income needed to meet the repayments for an average established dwelling purchased by a first home buyer. A value of 100 indicates that a household with average income would meet the average income requirements to service the average mortgage. An increase in the index represents an improvement in affordability.
Reference: Commonwealth Bank of Australia and the Housing Industry Association, *Housing Report*.

Alterations and additions — all approved structural and non-structural changes to a dwelling of a value of not less than $10,000 which are integral to the functional and structural design of the dwelling, e.g. garages, carports, pergolas, reroofing, recladding etc., but excluding swimming pools, ongoing repairs, landscaping, and maintenance and home improvements not involving building work.
Reference: *Housing Finance for Owner Occupation, Australia* (Cat. no. 5609.0).

Applicants accommodated — the number of public rental applicants accommodated in a year.
Reference: Department of Family and Community Services, *Housing Assistance Act 1996 Annual Report*.

Applicants on housing waiting lists — the number of applicants (households) waiting for public rental accommodation on 30 June.
Reference: Department of Family and Community Services, *Housing Assistance Act 1996 Annual Report*.

Average number of bedrooms per dwelling — the average number of bedrooms in occupied private dwellings.
Reference: Income and Housing Surveys; 1991 Census of Population and Housing; and Surveys of Income and Housing Costs.

Average number of persons per household — the average number of usual residents in occupied private dwellings.
Reference: Income and Housing Surveys; 1991 Census of Population and Housing; 1992 Family Survey; and Surveys of Income and Housing Costs.

Average weekly earnings index — the total weekly ordinary time (before tax) earnings of full-time adult employees divided by the total number of full-time adult employees and expressed as an index, with base year 1989–90=100.
Reference: *Average Weekly Earnings, States and Australia* (Cat. no. 6302.0).

Established house price index — the price of detached residential dwellings on their own block of land, regardless of age (i.e. including new houses sold as a house/land package as well as older houses) expressed as an index, with base year 1989–90=100.
Reference: *House Price Indexes: Eight Capital Cities* (Cat. no. 6416.0).

Finance commitments — firm offers to provide finance for owner-occupation or alterations and additions which have been, or are normally expected to be, accepted. Commitments to provide housing finance to employees and commitments accepted and cancelled in the same month are included. Owner-occupied dwellings being purchased can be either established (completed for more than 12 months or previously occupied) or new (completed for less than 12 months with the borrower being the first occupant).
Reference: *Housing Finance for Owner Occupation, Australia* (Cat. no. 5609.0).

Flats or apartments — occupied private dwellings contained in blocks of flats, units or apartments, which do not have their own private grounds and usually share a common entrance foyer or stairwell. Includes flats attached to houses.
Reference: Income and Housing Surveys; 1992 Family Survey; and Surveys of Income and Housing Costs.

Household — a group of two or more related or unrelated people who usually reside in the same dwelling, who regard themselves as a household and who make common provision for food or other essentials for living; or a person living in a dwelling who makes provision for his or her own food and other essentials for living, without combining with any other person.
Reference: ABS, Household Type Standard.

Housing interest rate — the financial year annual average of the interest rate applicable on the last working day of each month to standard variable rate loans for owner-occupation extended by large bank housing lenders. It is the predominant or representative rate of major banks, although some banks may quote higher or lower rates.
Reference: Reserve Bank of Australia, *Monthly Bulletin*.

Materials used in house building price index — prices of selected materials used in the construction of dwellings expressed as an index, with base year 1989–90=100. Data for national total is a weighted average of six state capital cities.
Reference: *Price Index of Materials Used in House Building, Six State Capital Cities* (Cat. no. 6408.0).

Mean weekly public/private rent — the average weekly rent paid by renters of public/private dwellings.
Reference: Income and Housing Surveys; 1992 Family Survey; and Surveys of Income and Housing Costs.

Occupied private dwellings — the premises occupied by a household. For population estimation purposes, the total number of occupied private dwellings is treated as being equal to the total number of households of the usually resident population.
Reference: *Australian Demographic Statistics* (Cat. no. 3101.0).

Housing — definitions and references continued

Owner with a mortgage — a household where the reference person or partner owes an amount on a mortgage or loan secured against the dwelling. Prior to 1995 known as 'being purchased', and excluded dwellings with mortgages for alteration/addition or other purposes.
Reference: Income and Housing Surveys; 1992 Family Survey; and Surveys of Income and Housing Costs.

Owner without a mortgage — a household where the reference person or partner does not owe any amount on a mortgage or loan secured against the dwelling. Includes persons who have repaid a mortgage or loan but have not formally discharged the associated mortgage. Prior to 1995 known as 'owned', and included dwellings whose only mortgage was for alteration/addition or other purposes.
Reference: Income and Housing Surveys; 1992 Family Survey; and Surveys of Income and Housing Costs.

Persons receiving private rental assistance — persons on low incomes who pay rent or similar payments for private accommodation and receive a rental assistance payment from the government. Rent assistance may be payable to pensioners without children, families receiving above the minimum family payment and people already receiving a government allowance or benefit.
Reference: Unpublished data from Centrelink.

Private/public sector dwellings completed — when building activity has progressed to the stage where the building can fulfil its intended function. The ABS regards buildings as completed when notified as such by the respondents (builders) to the survey.
Reference: *Building Activity, Australia* (Cat. no. 8752.0).

Private renter — a household paying rent to a landlord who is a real estate agent, a parent or other relative not in the same household or another person not in the same household, to reside in the dwelling.
Reference: Income and Housing Surveys; 1992 Family Survey; and Surveys of Income and Housing Costs.

Private rental cost index — the average rent of privately owned dwellings (rented through real estate agents in each capital city) expressed as an index, with base year 1989–90=100.
Reference: *Consumer Price Index* (Cat. no. 6401.0).

Project home price index — the price of dwellings available for construction on a client's block of land expressed as an index, with base year 1989–90=100.
Reference: *House Price Indexes: Eight Capital Cities* (Cat. no. 6416.0).

Public renter — a household paying rent to a State or Territory housing authority or trust to reside in the dwelling.
Reference: Income and Housing Surveys; 1992 Family Survey; and Surveys of Income and Housing Costs.

Public rental cost index — the average rent of government authority dwellings in metropolitan areas expressed as an index, with base year 1989–90=100.
Reference: *Consumer Price Index* (Cat. no. 6401.0).

Public sector dwelling stock — those rental dwellings held by State and Territory housing authorities.
Reference: Department of Family and Community Services, *Housing Assistance Act 1996 Annual Report*.

Semi-detached/row or terrace houses/townhouses — occupied private dwellings with their own private grounds and no dwelling above or below. A key feature is that they are attached in some structural way to one or more dwellings, or separated from a neighbouring dwelling by less than half a metre.
Reference: Income and Housing Surveys; 1992 Family Survey; and Surveys of Income and Housing Costs.

Separate houses — occupied private dwellings which are self-contained and separated from other structures by a space of at least half a metre to allow access on all sides. Includes houses with an attached flat.
Reference: Income and Housing Surveys; 1992 Family Survey; and Surveys of Income and Housing Costs.

Size of new private/public sector houses — average floor area of houses intended for private/public ownership at building approval.
Reference: ABSDB (database), Building Approvals Dataset: New houses by SLA, Materials and Floor Area.

First home buyers

HOUSING AND LIFESTYLE

Young Australians are staying in education longer, marrying later, having children later, and buying their first home later in life than they used to. The median age of recent first home buyers rose from 30.2 to 31.8 years between 1988 and 1996–97.

Buying a first home represents a major commitment for any couple or individual. Those involved will generally need to have accumulated funds to make the initial deposit on the home and to have a steady income to meet on-going mortgage repayments.

Despite a general increase in the affordability of housing over the last decade (see *Australian Social Trends 1999*, Housing — national summary table, p. 148), young Australians have become less likely to embrace home ownership.

The reduced likelihood of young people purchasing a home is evident from changes in age-specific home ownership rates over the last decade. Between 1988 and 1996–97, home ownership rates among income units in which the age of the reference person was 25–34 declined from 42% to 32%. Substantial declines were also evident among those aged 35–44 (70% in 1988 compared to 63% in 1996–97).

These trends may in part be associated with changing patterns of family formation among young people, particularly since young people are staying in education longer, delaying marriage, and having their first child later in life (see *Australian Social Trends 1997,* Age at first marriage, pp. 27–29 and *Australian Social Trends 1996,* Trends in fertility, pp. 36–40). Consistent with these changes, young people have been delaying buying their first home. Between 1988 and 1996–97, the proportion of first home buyer income units whose reference person was aged less than 35 declined from 70% to 62%. As a result, the median age of first home buyers (median age of reference person) increased from 30.2 years to 31.8 years.

A declining home ownership rate for young Australians means that they have become more likely to rent, board or live rent free. Part of the shift to these forms of tenure is related to substantial increases in the proportion of young adults, those aged in their twenties, continuing to live with their parents (see *Australian Social Trends 1999*, Families — national summary table, pp. 28–29).

Home owners

The information for this review has mostly been taken from the 1988 Housing Survey and the 1996–97 Survey of Income and Housing Costs.

Income units are single persons, or groups of related persons within a household whose income is assumed to be shared. Income sharing is assumed to take place within couples and between parents and dependent children. It is assumed that decisions concerning the purchase of a home are also generally made by adults in such units.

Owner occupiers are income units who own their home, with or without a mortgage. First home buyers are a subset of owner occupiers.

First home buyers are income units who bought their first home in the three years prior to the survey reference period. The number of recent home buyers should not be compared across surveys as the nature of the three-year period is different for the two surveys. To be regarded as a first home buying income unit, neither the income unit reference person nor the income unit reference person's spouse could have owned a home previously in Australia.

Changeover buyers are income units who bought their home within the same periods described for first home buyers. However, the income unit reference person and/or the income unit reference person's spouse had owned a home previously in Australia.

Age distribution of first home buyers, and age-specific home ownership rates(a), 1988 and 1996–97

	First home buyers		*All owner occupiers*	
	1988	*1996–97*	*1988*	*1996–97*
Age of income unit reference person	%	%	rate(a)	rate(a)
15–24	14.6	13.6	4.6	4.2
25–34	55.8	48.4	42.3	32.1
35–44	19.2	26.7	70.5	62.5
45–54	5.7	6.8	76.7	74.8
55 or older	4.7	4.4*	78.4	77.7
Total income units	**100.0**	**100.0**	**53.9**	**52.8**
	'000	'000	'000	'000
Total income units	**391.0**	**393.9**	**4 095.8**	**4 795.8**
	years	years	years	years
Median age	30.2	31.8	49.4	50.9

(a) As a proportion of all income units in each age group.

Source: Unpublished data, 1988 Housing Survey; 1996–97 Survey of Income and Housing Costs.

First home buyer and overall home ownership rates(a) for selected income unit types, 1988 and 1996–97

	First home buyers			*All owner occupiers*			
	1988	*1996–97*		*1988*	*1996–97*		*Total income units 1996–97*
Age of reference person by income unit type	**%**(a)	**%**(a)	'000	**%**(a)	**%**(a)	'000	'000
Less than 35 years							
One-person	3.4	3.3	76.3	6.0	7.3	169.7	2 311.0
Men	3.5	3.4	46.2	6.3	8.1	112.2	1 376.6
Women	3.1	3.2	30.2	5.6	6.2	57.6	934.4
Couple	20.2	19.2	164.3	61.1	55.7	477.7	857.2
Registered marriage	20.7	18.6	123.7	66.1	62.0	412.3	664.7
De facto marriage	16.5	21.1	40.6	29.0	33.9	65.4	192.6
35 years or more							
One-person	2.3	2.2	46.3	59.5	54.9	1 138.8	2 073.2
Couple	2.8	2.7	92.4	85.3	85.1	2 864.7	3 367.2
Registered marriage	2.7	2.6	83.7	86.0	85.7	2 776.7	3 239.6
De facto marriage	5.4*	6.8*	8.7*	59.7	69.0	88.0	127.6
Total income units(b)	**5.1**	**4.3**	**393.9**	**53.9**	**52.8**	**4 795.8**	**9 083.3**

(a) As a proportion of all income units of each type.
(b) Includes one-parent income units.

Source: Unpublished data, 1988 Housing Survey; 1996–97 Survey of Income and Housing Costs.

Changing pre-conditions for buying the first home

Some young people purchase their first home before they establish family relationships of their own. In 1996–97, as in 1988, about 3% of one-person income units aged under 35 (and slightly higher proportions of men than women) had recently purchased their first home. Although there were slightly more owner occupiers among young people in this age range in 1996–97 (7%) than in 1988 (6%), there had been little change over the decade to the strongly prevailing social norm of partnering prior to purchasing property.

Of all income unit types, young couples are most likely to be first home buyers. In 1996–97, 19% of all couples in which the reference person was aged less than 35 were first home buyers. Moreover, 56% of young couples lived in a home that they owned with or without a mortgage. Young couples who were in a registered marriage were more likely than those who were in a de facto marriage to own their home (62% compared to 34%). Nevertheless, while clearly still strong, the importance of registered marriage has diminished for making the commitment that accompanies purchasing a home. Between 1988 and 1996–97, the proportion of young de facto married couples who owned their home increased (by 5 percentage points, up from 29%), while it decreased among young registered married couples (by 4 percentage points, down from 66%).

Types and characteristics of dwellings purchased

Although separate houses have continued to be the most favoured form of housing, there has been some shift among first home buyers towards higher density housing. In 1996–97, 17% of first home buyers had purchased medium-high density accommodation (such as a semi-detached, row or terrace house, flat, unit or high rise apartment) as opposed to a separate house, up from 14% in 1988. A similar shift has occurred among changeover buyers.

Between 1988 and 1996–97, there was also, among first home buyers, some movement away from buying new homes towards buying homes that had been lived in previously. The proportion of first home buyers who bought a new home fell from 23% in 1988 to 21% in 1996–97. This change, as well as the move away from separate houses, suggests that homes in more established areas have become more popular with first home buyers than homes in urban fringe developments.

Dwelling structure chosen by recent home buyers, 1988 and 1996–97

	1988		*1996–97*	
	First home buyers	*Changeover buyers*	*First home buyers*	*Changeover buyers*
Dwelling structure	%	%	%	%
Separate house	85.3	85.3	82.1	83.3
Semi-detached houses and flats(a)	13.9	13.7	17.1	15.9
Total income units(b)	100.0	100.0	100.0	100.0
	'000	'000	'000	'000
Total income units(b)	391.0	600.1	393.9	686.8

(a) Includes all semi-detached, row, terrace and townhouses, flats and units but excludes houses/flats attached to shops etc.
(b) Includes income units living in a dwelling structure other than a separate house, semi-detached house or flat.

Source: Unpublished data, 1988 Housing Survey; 1996–97 Survey of Income and Housing Costs.

Another trend has been for first home buyers to purchase larger dwellings as measured by the number of bedrooms. Higher proportions of first home buyers bought a home with more than three bedrooms in 1996–97 (20%) than in 1988 (13%). Even though most first home buyers purchase established homes, this trend partly reflects an increase in the size of new dwellings being built (see *Australian Social Trends 1998,* Smaller households, larger dwellings, pp. 157–159).

Dwelling problems

When buying a home, first home buyers have appeared to be more likely than recent second or subsequent home buyers to tolerate property troubled by problems such as pests, electrical faults, draughts, defective windows, mould and mildew. According to the 1994 Australian Housing Survey, only 25% of recent first home buyer income units reported no problems with their home, compared to 35% of recent changeover buyer income units. At the same time, 11% of recent first home buyers were troubled with 5 or more problems, compared with only 7% of recent changeover buyers. However, these differences may also reflect relatively less knowledge and experience of housing problems among first home buyers.

Age and size of homes bought by first home buyers, 1988 and 1996–97

	1988	*1996–97*
	%	%
Age of home		
New home	23.1	21.0
Established home	76.9	79.0
Number of bedrooms		
One(a)	4.2	3.1*
Two	23.0	21.1
Three	59.8	56.0
Four	11.8	18.1
Five or more	1.3	1.7*
Total income units	100.0	100.0
	'000	'000
Total income units	391.0	393.9

(a) Includes bedsitters.

Source: Unpublished data, 1988 Housing Survey; 1996–97 Survey of Income and Housing Costs.

Affordability

The cost of purchasing a home, and of meeting the associated establishment costs, is a major issue of concern to first home buyers. Broad measures of housing affordability suggest that purchase of a first home is within much closer reach in the late 1990s than it was in the late 1980s (see Housing — national summary table, p. 148). Yet recent first home buyers spent about the same share of their income on housing in 1988 and 1996–97 (about 22%).

For some owner occupiers with a mortgage, housing affordability problems may be self-imposed. Such owner occupiers may choose to repay large amounts in the short term to acquire an asset that tends to appreciate in value over the long term.

There is no single standard method for defining people who are experiencing housing affordability problems. However, one measure used in housing research is the ratio of housing costs to income for those income units whose income is relatively low (that is, those in the bottom 40% of the income unit income distribution). Among these units, those whose housing costs consume more

Housing costs as a proportion of income, 1988 and 1996–97

	1988	*1996–97*
Housing tenure	%	%
First home buyers	22.5	21.7
All owners without a mortgage	3.2	3.4
All owners with a mortgage	19.6	20.5
Renters	20.5	20.8
All income units(a)	**12.4**	**13.3**

(a) Includes other forms of housing tenure such as boarding and living rent free.

Source: Unpublished data, 1988 Housing Survey; 1996–97 Survey of Income and Housing Costs.

than 30% of their income, are considered to be experiencing affordability problems.[1] In 1996–97, 7% of first home buyers experienced housing affordability problems according to this criterion. One-parent income units (24%) were more likely than one-person income units (16%), and considerably more likely than couple income units (5%) to be experiencing such affordability problems.

Endnotes

1 National Housing Strategy 1992, *The Affordability of Australian Housing, Issues Paper* No.2, AGPS, Canberra.

Home care, hostels and nursing homes

HOUSING ASSISTANCE

In 1998, most people aged 65 years or more lived in private dwellings (91%). However, 6% lived in hostels or nursing homes.

Most people when they become older would prefer to continue living independently in their own homes.[1] Most older people are able to do this. However, as people age, their need for assistance increases. This is often obtained from family, friends and/or community and government organisations, although some people may enter one of various forms of supported accommodation.

Partly in recognition of the preferences of older people for living independently, and also on account of the large projected increase in the size of the older population, the Commonwealth government initiated a process of aged care reforms in the mid 1980s. This included the expansion of home-based care services and hostel accommodation, and a reduction in the proportion of older people being placed in nursing home accommodation. More recently, there has also been an increased emphasis on user-pays issues. Changes have also been made to the quality assurance program for nursing homes and hostels, now combined into one residential care stream.[2,3]

According to ABS population projections (Series 2), the number of people aged 65 and over is projected to increase from 2.3 million people in 1998 to 5.1 million people by 2031 (up from 12% of the total population to 21%).

Residential care of older people

In this review, *older people* are people aged 65 years and over.

Supported or residential care accommodation refers to nursing homes and hostels for the aged.

Nursing home refers to a facility for the aged which provides 24-hour nursing care for its residents. These homes generally provide a higher level of care than hostels for the aged.[4]

Hostel refers to a care facility for the aged in which residents receive personal care and accommodation support. Most hostels also provide some nursing care.[5]

Formal care refers to services provided to persons with one or more disabilities by government and private (for-profit and not-for-profit) organisations.

A person with *severe or profound core activity restrictions* refers to someone who sometimes or always needs help with self-care, mobility or communication activities.

Those aged 80 and over, the group most likely to require nursing home or hostel accommodation or other forms of support, are projected to increase from 520,000 people to 1.4 million people (up from 3% of the total population to 6%).

This review focuses on the number and characteristics of older people receiving some type of formal assistance in the home (which includes those who live in self-cared retirement villages), and who live in supported accommodation such as hostels or nursing homes. Information on the services they receive, and the supported accommodation in which they live, is also provided. (For more general information on older people's housing, see *Australian Social Trends 1996,* Housing for older people, pp. 150–155).

Living arrangements of older people, 1998

	65–79 years		*80 years and over*		*65 years and over*
	Males	*Females*	*Males*	*Females*	*Persons*
	%	%	%	%	%
With partner(a)	74.3	49.8	45.1	11.2	52.5
With other relatives	3.9	11.0	5.1*	18.7	9.1
With non-relatives	1.5	1.3	1.5*	0.8*	1.3
Alone	16.8	32.7	29.7	38.3	27.6
Nursing homes and hostels(b)	1.5	2.2	13.4	22.8	5.9
Total(c)	100.0	100.0	100.0	100.0	100.0
	'000	'000	'000	'000	'000
All persons 65 and over	815.0	942.1	178.2	335.8	2 271.2

(a) Comprises people who live with their partner only, or with their partner and other people.
(b) Comprises establishments which are for the care of older people, and retirement homes, which include a hostel and/or nursing home component such as nursing or medical care.
(c) Includes persons living in other non-private dwellings, such as boarding houses and hostels for the homeless (4% of total population).

Source: Unpublished data, 1998 Survey of Disability, Ageing and Carers.

Living arrangements

There are many factors which influence whether older people stay at home or eventually transfer to other forms of accommodation with different levels of care provided, such as hostels or nursing homes. These factors include their level of disability, their current living arrangements, access to support from family, friends or from government and/or private organisations, and

their financial situation. Income levels can determine their ability to pay for services they can no longer do for themselves.

Results from the 1998 Survey of Disability, Ageing and Carers indicated that most older people lived in private dwellings with their spouse or other relatives (62%). As the likelihood of having a disability or becoming widowed increases with age, people aged 80 and over were more likely to be living in a hostel or nursing home (20%) or living alone (35%) than those aged 65–79 (2% and 25% respectively).

The living arrangements of people aged 80 and over also varied for men and women. In 1998, there were greater proportions of women in this age group than men who lived alone (38% and 30% respectively). This reflects the fact that women of this age are less likely than men to have a partner (77% of women aged 80 and over were widowed compared to 36% of men of this age). There were also greater proportions of women aged 80 and over than men who lived in hostels or nursing homes (23% and 13% respectively). Women in this age group were also more likely than men to have severe or profound core activity restrictions (51% and 37% respectively). These patterns underline the fact that more women live to advanced old age (over 90 years) than men.

Persons aged 65 and over in households, 1998

	65–79 years	*80 years and over*	*65 years and over*
Source of assistance(a)	%	%	%
Informal	*82.9*	*84.2*	*83.3*
Family(b)	76.1	76.8	76.3
Partner	42.9	16.7	34.5
Adult child	26.7	33.8	28.9
Friends	13.8	15.7	14.4
Formal	*55.9*	*66.9*	*59.4*
Private for-profit	39.7	43.8	41.0
Private not-for-profit	6.5	13.5	8.7
Government	24.1	35.8	27.8
	'000	'000	'000
Persons receiving assistance	580.7	272.6	853.3
Persons requiring assistance(c)	609.4	278.5	887.9
Total persons	**1 712.3**	**392.1**	**2 104.4**

(a) As a proportion of people receiving assistance. People may receive assistance from more than one source, therefore components do not add to totals.
(b) Total includes other family members.
(c) Comprises people who need help with self-care, mobility, communication activities, health care, housework, property maintenance, meal preparation, paperwork or transport.

Source: Unpublished data, 1998 Survey of Disability, Ageing and Carers.

Disability status of all persons aged 65 and over, 1998

	65–79 years		*80 years and over*	
	Male	*Female*	*Male*	*Female*
	%	%	%	%
No disability	49.7	53.7	28.5	25.1
Disability	50.3	46.3	71.5	74.9
Core activity restrictions	*42.6*	*41.7*	*67.1*	*73.5*
Profound	6.4	8.9	26.7	40.5
Severe	5.5	6.8	9.9	10.6
Moderate	11.7	9.8	8.8	6.9
Mild	19.0	16.3	21.7	15.5
Total	100.0	100.0	100.0	100.0
	'000	'000	'000	'000
Total persons	815.0	942.1	178.2	335.8

Source: *Disability, Ageing and Carers: Summary of Findings, Australia, 1998* (Cat. no. 4430.0).

Level of independence

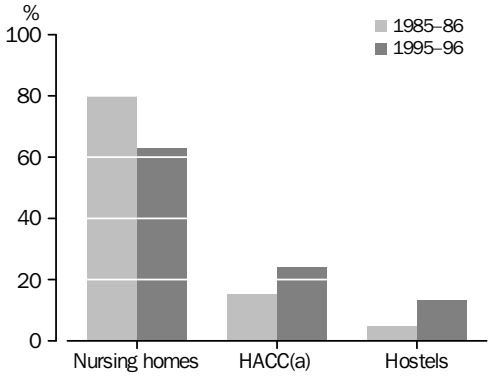
In 1998, less than half of people aged 65 and over in households required help with everyday activities (42%), most commonly property maintenance (30%), transport (22%) and housework (19%). Many received help from more than one person or organisation, depending on the type of assistance needed. However, most older people received help from family or friends (83% of those who received help), usually from a partner (35%) or an adult child (29%), rather than from formal sources (59%).

Formal care in the home

Most older people who need assistance are able to remain at home, provided they can obtain enough help of the type and level they feel they need. Formal organisations provide an important avenue of assistance, either as a supplement to informal help from family or friends or when no informal help is available. Formal services are provided by government and private (for-profit and not-for-profit) organisations. Access by older people to these services is dependent on their knowledge of the existence of the services, their availability and cost, and the financial circumstances of the recipient – whether they can afford to pay for private services if necessary.

In 1998, there were 853,300 people aged 65 and over who received assistance in the home (41% of all persons aged 65 and over in households). Of these, 59% received help

Distribution of government aged care expenditure, 1985–86 and 1995–96



(a) Available data suggested that 20–25% of HACC clients were under 65 during this period, as well as a small proportion of nursing home and hostel residents. Expenditure on Community Aged Care packages and assessments is included in HACC expenditure (2% of total expenditure in 1995–96).

Source: *Australian Institute of Health and Welfare 1995: Services and Assistance; Australian Institute of Health and Welfare 1997: Services and Assistance.*

from formal sources. Help was commonly received from more than one formal source, with 41% receiving help from private for-profit organisations, 9% from private not-for-profit organisations, and 28% from government organisations. For most people, help was more likely to have been received from family and friends than from formal sources, although many used both avenues of assistance. However, for those reporting a need for assistance with health care (a more specialised form of help), 67% obtained some assistance from formal sources and 49% from family and friends.

For people living at home, the major services funded by the Commonwealth, State and Territory governments included the Home and Community Care (HACC) program and Community Aged Care packages.[3] The majority of these services are provided by government or community non-profit organisations.[6,7]

Home and Community Care

The HACC program is a jointly funded Commonwealth and State government program which provides services to people in their homes. HACC services are administered by government departments (usually health or community services, but sometimes local government) in each State and Territory.[4] The program targets people of all ages who, due to disability, have difficulty or require assistance with self-care, mobility or communication tasks – 26% of people aged 65 and over in 1998. Services provided include personal (for example, washing and dressing), health and respite care, home and centre-based meals, home help and home maintenance, centre day care and transport.[2] It is estimated that up to 240,000 people receive one or more HACC services in an average month (based predominantly on 1997 patterns of use).[7]

As the population continues to age, there are likely to be large increases in absolute numbers in the HACC target group. In 1993, there were 437,500 persons aged 65 years and over in the target group. By 1998, this had risen to 550,400. If current levels of need for assistance or difficulty with personal care tasks are maintained, and the proportion of that group currently living in households remains the same, then in 2031 (based on current population projection assumptions) there will be over 1.2 million people in this group, an increase of 692,500 or 126% from 1998. If levels of informal assistance are maintained, most of these people will receive their main support from family or friends. However, changes in female workforce participation and in levels of volunteer labour in the welfare industry, together with increases in divorce and single-person households, may reduce the amount of informal support available.[2]

Between 1985–86, when the aged care reform process started, and 1995–96, expenditure on HACC services increased from $233.8 million to $601.9 million (in real terms, i.e. constant 1989–90 values), an increase of 157%. HACC services also increased their share of total recurrent aged care expenditure during this time from 15% to 22%, reflecting the shift away from funding for supported accommodation.[2,8]

Community Aged Care Package

An additional area of home-based care is the Community Aged Care Package, which is a Commonwealth-funded program, initiated in 1992, providing an alternative to residential hostel care. The scheme provides an intensive level of home care. The aim is to enable as many older people as possible, even those with more complex care needs, to remain at home.[6]

Between 1993 and 1998, the number of people receiving the Community Aged Care Package increased from 211 to 8,831. Most of the recipients were female, although during this time their proportion of total recipients decreased from 83% to 72%.[7] In 1997–98, the annual government outlay for each

Persons aged 65 and over in nursing homes and hostels, 1993 and 1998(a)

	1993				1998(b)			
	Nursing homes		Hostels		Nursing homes		Hostels	
	'000	%(c)	'000	%(c)	'000	%(c)	'000	%(c)
Males								
65 and over	*18.4*	*2.1*	*11.6*	*1.3*	*18.9*	*1.9*	*14.1*	*1.4*
65–79	8.2	1.1	4.3	0.6	8.0	1.0	4.8	0.6
80 and over	10.1	7.1	7.4	5.1	11.0	6.1	9.2	5.1
Females								
65 and over	*49.7*	*4.3*	*35.6*	*3.0*	*49.0*	*3.8*	*43.5*	*3.4*
65–79	12.2	1.4	8.5	1.0	11.3	1.2	9.1	1.0
80 and over	37.6	13.4	27.1	9.7	37.7	11.2	34.4	10.2
All persons 65 and over	**68.1**	**3.3**	**47.3**	**2.3**	**67.9**	**3.0**	**57.5**	**2.5**

(a) As at June 30 in each year.
(b) Includes 1,480 residents classified under new scheme and allocated to nursing homes if rated high dependency, and to hostels if rated low dependency.
(c) Per cent of all persons in each age/sex group.

Source: *Australian Demographic Statistics, June Quarter 1998* (Cat. no. 3101.0); and unpublished data, DHAC.

Community Aged Care Package was $9,923 – similar to the subsidy for a hostel place which was $9,360.[3]

Hostels and nursing homes

Reflecting the change in emphasis from intensive forms of residential care, such as nursing homes, to community care programs and hostel accommodation, hostels increased their share of total aged care expenditure between 1985–86 and 1995–96. Their share increased from 5% to 13% over this period, while nursing home expenditure declined as a proportion of the total (from 80% down to 63%). By 1997–98, the annual cost to government (excluding capital funding) was $29,648 for a utilised place in a nursing home and $9,360 for a hostel. The cost to an individual varied according to their income and assets.

Since 1997, funding for hostels and nursing homes has been based on the dependency level of residents rather than accommodation type, and entry to a nursing home or hostel is governed by an assessment process. This process, for example, enables residents in a hostel to receive a higher level of care in the hostel as they become more dependent, rather than having to move to a nursing home to receive this level of care.[3]

At 30 June 1998, there were about 57,500 people in hostels and 67,900 in nursing homes. In 1998, the likelihood of living in either a nursing home or a hostel was greater for people aged 80 and over (9% and 8% respectively) than for those aged 65–79 (1% in each case). Women aged 65 and over were also more likely than men of this age to live in these two types of care (4% and 3% compared to 2% and 1% respectively).

Since 1993, the proportion of people aged 65 and over in nursing homes has dropped slightly from 3.3% to 3.0% in 1998, and there has been a corresponding small increase for hostel residents, from 2.3% to 2.5%. Long-term targets have been set for the year 2011 to reduce the proportion of nursing home beds and increase the proportion of hostel beds and care packages.[3] Between

Costs of residential aged care[7]

In 1998, the basic daily fee for nursing home and hostel care was $21.69 for full and part pensioners and $27.11 for self-funded retirees. More recently, income-tested fees have also been applied to residents with a greater capacity to pay. Since March 1998, new residents with an income above the income-test threshold have to pay an additional fee averaging $4.50 per day. New nursing home residents (those who have entered care since October 1997), depending on assets, may also pay up to $12 per day extra in accommodation charges. Since 1997, hostel residents may, depending on assets, pay an accommodation bond from which providers may keep up to $2,600 per year for up to 5 years.

No resident has to pay the new charges or bonds if doing so would reduce their assets to less than $23,000. In 1998, the average bond was $54,000 and the average daily charge in nursing homes was $10.80 (in addition to the basic daily fee and the income-tested fee).

Residential beds and community care

	1985 rate(b)	1998 rate(b)	2011(a) rate(b)
Nursing home beds	67	47	40
Hostel beds	32	41	50
Community Aged Care Packages	0	6	10
Total	**100**	**94**	**100**

(a) Commonwealth government target for 2011.
(b) Number of beds or Community Aged Care Packages per 1,000 people aged 70 and over. Rates may not add to total due to rounding.

Source: *DHFS Annual Report 1997–98*.

1985 and 1998, substantial progress (based on the number and type of residential beds and care packages available for those aged 70 and over) was made towards these targets. For example, the number of hostel beds increased from 32 per 1,000 persons aged 70 and over in 1985 to 41 per 1,000 by 1998. The reduction in the number of nursing home beds was greater than the increase in hostel beds, and the supply of care packages had not yet made up the shortfall. The level of need for assistance (as measured by proportions with severe to profound core activity restrictions) did not decline during this time.[9] However, there has been an increase in the level of funding of HACC services over this period, which may have been providing increased community-based support in the interim.

Endnotes

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Rental investors

HOUSING STOCK

In 1997, over half a million income units comprising couples, lone parents or individuals, were investors in residential rental property. Just over three quarters had invested in only one rental property.

The private rental market provides housing for approximately one fifth of Australian households (21%). Householders, as well as businesses and non-profit institutions, invest in private rental housing. Estimates from the 1996–97 Survey of Income and Housing Costs indicated that householders provided approximately half the rental housing for those who rented in the private market.

People rent for many reasons. For example, they may choose to rent because they prefer to keep their housing options open, or they may be forced to rent because they cannot afford to buy a home. People who rent may be either in the private or the public rental housing market.

Between 1988 and 1997, the apparent demand for private rental housing increased. The numbers of households renting privately grew from 959,100 in 1988 to 1,448,800 in 1997 (from 17% to 21% of all households) (see *Australian Social Trends 1999,* Housing — national summary table, p. 148).

Persons(a) owning residential rental property, July 1993 and June 1997

	1993	*1997*
Age group (years)	%	%
18–34	22.6	19.4
35–44	26.7	27.8
45–54	27.3	31.6
55–64	14.9	14.0
65 and over	8.4	7.2
Total	*100.0*	*100.0*
Sex		
Males	54.5	52.6
Females	45.5	47.4
Total	*100.0*	*100.0*
	'000	'000
Person investors	752.1	889.9
Total population(a)	**12 638.4**	**13 132.6**

(a) Persons aged 18 years and over.

Source: Household Investors in Rental Dwellings, June 1997 (Cat. no. 8711.0).

Residential rental properties

This review uses data from both the July 1993 and June 1997 Household Investors in Rental Dwellings surveys, and relates only to people aged 18 years or more. Data from the 1993 survey is available at the person level only, whereas the 1997 survey mainly collected information on investments by income unit. This change recognises that the benefits of income and rental property ownership are often shared between partners in couple families. Information on the characteristics of residential rental properties was also collected. Comparative figures for all income units were obtained from the 1996–97 Survey of Income and Housing Costs.

Dwelling units are the total number of units when multiple dwelling units such as blocks of flats are taken into account. That is, houses or flats etc. are regarded as one dwelling unit each, but a block of flats, containing for example, six flats, is counted as six dwelling units.

Residential rental properties are private dwellings for which rent was paid to the owner either directly or through an agent. These properties provide long-term accommodation and could be single dwelling units such as a separate house, or multiple dwelling units such as a block of flats. Respondents reported data on properties up to a maximum of three for one-parent and one-person income units and up to six for couple income units.

Income unit is one person, or a group of related people within a household, whose command over income is assumed to be shared.

Investor income units (also called investors) are those income units who in June 1997 owned, or owned a share in, a residential rental property.

Rental investment trends

Investment in private rental housing has fluctuated over the last few decades (see *Australian Social Trends 1995,* Investment in residential rental property, pp. 139–142). However, between July 1993 and June 1997 there was an 18% increase in the number of rental investors – from 752,100 to 889,900. This represented an increase, from 6.0% to 6.8%, in the proportion of all people in private dwellings who had invested in residential rental properties.

The age and sex profile of individuals with investments in residential property in 1997 was similar to that in 1993; most investors were aged between 35 and 54 and slightly

Income units with residential rental property, June 1997

	Couple income units		One person income units		All income units	
	No. of investors	Per cent investing(a)	No. of investors	Per cent investing(a)	No. of investors(b)	Per cent investing(a)
Age(c)	'000	%	'000	%	'000	%
18–34	61.5	6.7	49.0	2.4	113.4	3.6
35–44	128.9	11.8	21.9	5.2	155.5	9.1
45–54	144.8	15.0	27.1	7.0	177.6	12.3
55–64	73.5	11.8	13.9	4.0	88.1	9.0
65+	32.2	4.7	17.4	2.0	49.6	3.2
Total	**440.9**	**10.3**	**129.3**	**3.2**	**584.2**	**6.6**

(a) Investor income units as a proportion of all income units in group.
(b) Includes one-parent investor income units (14,000 income units).
(c) Age of reference person in income unit.

Source: Household Investors in Rental Dwellings, June 1997 (Cat. no. 8711.0).

more men than women were investors. However, over the period there was a decrease in the proportion of all investors aged 18–34 years (from 23% to 19%) and in those aged 55 and over (from 23% to 21%).

Investor income units

Investment decisions are often made by income units, such as both people in a couple, rather than individuals. The investments may also be shared with other income units (17% of investors owned their most recently acquired property in partnership with one or more other income units in June 1997).

In June 1997, 584,200 income units had an investment in at least one residential rental property (7% of all income units). Most were small investors, with just over three quarters (76%) owning or partly owning only one property.

Investment rates in residential property vary according to life-cycle stage. As might be expected, couples in their prime earning years were most likely to have such an investment. In 1997, income units in which the reference person was aged 45–54 were the group most likely to have a residential rental property (12%), especially if the income unit involved a couple (15%). More generally, couples were over three times as likely (10%) to have a residential rental property as one-person (3%) or lone-parent income units (3%).

Partly reflecting the concentration of investors among people of prime working age, investor income units had higher incomes than income units in general, and were more likely to have their main source of income from employment or business. In June 1997, the median gross weekly income of investor income units was $1,009 – more than twice the median of all income units ($486). Two thirds (65%) of investors received their main source of income from wages or salaries, and 18% from their own business or partnership. The corresponding proportions among all income units were 55% and 6% respectively, largely because a much higher proportion of the general population was dependent on government pensions and allowances (30% of all income units compared to 6% of investor income units).

Investors were also more likely to own their own home than the general population. In June 1997, more than three quarters (76%) of investors owned or were paying off their own home, nearly half of investors owning their own home outright (47%). In contrast, 54% of

Amount and principal source of cash income, June 1997

	Investor income units			All income units(a)		
	One-person	Couple	All(a)	One-person	Couple	All(b)
Principal source of income	%	%	%	%	%	%
Wage or salary	67.0	64.6	64.9	51.0	61.2	54.7
Own business or partnership income	11.4	19.9	17.8	3.2	9.1	5.9
Government pensions and allowances	6.3	4.8	5.5	35.1	21.4	30.2
Other income	15.3	10.5	11.7	7.8	7.2	7.3
All sources	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**	**100.0**
	$	$	$	$	$	$
Median gross weekly income	666	1 162	1 009	322	766	486

(a) Includes one-parent investor income units (14,000 income units).
(b) Includes one-parent income units.

Source: Household Investors in Rental Dwellings, June 1997 (Cat. no. 8711.0); *Income Distribution, Australia,* 1996–97 (Cat. no. 6523.0).

Tenure type of own home, June 1997

	Investor income	*All income units*
Tenure type	%	%
Owner(b)	*75.9*	*54.3*
Without a mortgage	28.9	23.1
With a mortgage	47.0	31.2
Renter(c)	17.4	35.2
Rent free	5.9	7.6
Total(d)	*100.0*	*100.0*
	'000	'000
Total(d)	**584.2**	**8 965.3**

(a) Investors in private residential rental property.
(b) Includes owners with and without a mortgage.
(c) Includes public renters.
(d) Includes other tenure e.g. being purchased under a rent/buy scheme or occupied under life tenure.

Source: Household Investors in Rental Dwellings, June 1997 (Cat. no. 8711.0); and unpublished data, Rental Investors Survey, June 1997.

all income units owned or were paying off their own dwelling, and only 31% owned their dwelling without a mortgage.

Buying and selling

Consistent with increases in demand for, and investment in, private rental housing, in June 1997 there were more than twice as many income units intending to buy a rental property in the next two years (215,500) than intending to sell (113,500). Over one quarter (26%) of those intending to buy already owned a residential rental property.

For just over one quarter of investors, their most recently acquired rental property was a home they had previously lived in (26%). This was particularly so for those aged 18–34 years with sole ownership of their property (42%). The majority of investors obtained their most recently acquired rental property by purchasing it with a loan (59%). Very few had purchased their rental property outright (10%) although those aged 65 and over with sole ownership were more likely to have done so (39%). This group was also more likely to have received the property as an inheritance (13%) than the average rental property investor (4%).

The most common reasons given by income units intending to invest were the desire for a long-term investment (80%) and for the taxation benefits to be gained by negative gearing (23%). In contrast, lower proportions of existing investors gave these as reasons (66% and 16%). Existing investors were more likely to cite possible future home (15%) and rental income (15%) as their reasons than intending investors (12% and 9% respectively).

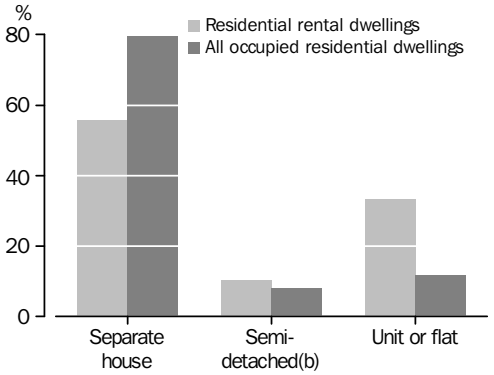
The most common reason reported by those who had already sold (34%) their residential rental property and those intending to sell (22%) was that they needed the funds for family or business purposes. Similar proportions of both groups (16% and 14% respectively) also reported that they had sold or would sell because the property caused them too much work and worry.

Type of investment property

People have different reasons for buying a rental property than for buying their home, and are therefore likely to choose different types of property. Separate houses were the most common type of private residential dwelling for both groups, followed by units or flats. However, investors were less likely to have acquired a separate house (56% of all rental dwellings in 1997) than were all householders living in a separate house (80% of all private dwellings). Conversely, 33% of rental dwellings were units or flats (either single flats or within a whole block as a number of flats) compared to 12% of private dwellings. One reason for this may be that units or flats tend to be cheaper than separate houses (see *Australian Social Trends 1998,* Wealth in the family home, pp. 154–159).

Investor income units were more likely to invest in single flats or units rather than blocks of flats. Of all residential rental properties owned by investor units, 22% were single flats or units and 4% were blocks of

Type of dwelling(a), June 1997



(a) Comprises total number of individual residential dwellings, including all units/flats within a block of units/flats.
(b) Comprises semi-detached/row or terrace houses/townhouses.

Source: Unpublished data, Rental Investors Survey, June 1997; and unpublished data, Survey of Income and Housing Costs, 1996–97.

flats. For their most recently acquired property, rental investors with sole ownership of this property were somewhat less likely to invest in blocks of flats (3%) than investors with shared ownership (7%), probably because of the greater cost involved.

Location of investment property

Potential rental properties are likely to be easier to select, and then manage, when situated close by. In 1997, nearly half of all investment properties were located near the homes of investors (48% in the same statistical sub-division), and 88% were located in the same State or Territory. The same proportions of all dwellings and investment dwellings were located in capital cities (63%), although there was some variation between the States and Territories.

Naturally, investors are more likely to buy a rental property in an area where there are many people wanting to rent. The inner areas of capital cities, in particular, have higher proportions of young singles or childless couples, who are traditionally more mobile and therefore more likely to rent (see *Australian Social Trends 1999,* Inner city residential development, pp. 167–170). In contrast, rural areas have higher rates of home ownership than urban areas, and therefore a smaller potential rental market (see *Australian Social Trends 1998,* Rural families, pp. 42–45). Therefore, it might be expected that a higher proportion of rental dwellings than all private dwellings would be located in the capital cities. However, this was not true in every State. For example, there were similar proportions of rental investment dwellings in Sydney (60%) and Brisbane (44%) as there were of all private dwellings (61% and 44% respectively). The relatively high proportions of people in New South Wales and Queensland living in coastal towns and cities may help to account for this difference.[1]

Statistical sub-divisions

Statistical sub-divisions (SSD) are defined as socially and economically homogeneous regions characterised by identifiable links between the inhabitants. In July 1998, there were 194 SSDs in Australia, ranging from 45 in Victoria to 8 in the Australian Capital Territory.

Value of investment property

The value of rental properties differed from that of owner-occupied properties. In 1997, the estimated median value of investment properties in Australia was $125,000. This was lower than the estimated median value of owner-occupied dwellings ($141,000 in 1995–96)[2], partly because a greater proportion of rental properties were flats and units (33% in 1997) than were all owner-occupied dwellings (5% in 1995–96). Property values vary considerably according to their location. In 1997, the median value of rental properties in all capital cities was $133,000 compared to $107,000 outside the

Location of residential dwellings, June 1997

	Investment dwellings(a)			*All residential dwellings*		
	Total	*Capital cities*	*% in Capital cities(b)*	*Total*	*Capital cities*	*% in Capital cities(b)*
	'000	'000	%	'000	'000	%
New South Wales	196.6	117.7	59.9	2318.2	1 407.3	60.7
Victoria	170.3	128.4	75.4	1702.3	1 213.1	71.3
Queensland	210.2	92.0	43.8	1255.0	549.5	43.8
South Australia	66.3	51.5	77.7	589.6	441.1	74.8
Western Australia	79.2	61.2	77.3	674.5	493.1	73.1
Tasmania	18.9	8.5	45.0	185.7	75.3	40.5
Northern Territory(c)	8.1	n.a.	n.a.	485.8	n.a.	n.a.
Australian Capital Territory	16.3	16.3	100.0	115.5	115.5	100.0
Australia	**765.9**	**480.9**	**62.8**	**6 889.3**	**4 326.0**	**62.8**

(a) Private residential rental dwellings – respondents reported details on a maximum of three rental properties.
(b) Proportion of total private residential dwellings which are in capital city statistical divisions.
(c) Available data refers to mainly urban areas.

Source: Household Investors in Rental Dwellings, June 1997 (Cat. no. 8711.0); and unpublished data, Survey of Income and Housing Costs, 1996–97.

capital cities. The highest median value was in Sydney ($192,000), reflecting its higher real estate prices generally. Hobart had the lowest median value of $97,000.

Investment return

There are a number of ways in which investors can receive a return on their residential rental property. For example, the capital value of their property can appreciate over time, they can gain benefits of reduced taxation through negative gearing, and they can earn rental income from the investment.

A commonly used measure of return on investments is the 'gross rate of return'. This is calculated by dividing the gross annual rent by the value of the property (as estimated by the owner). While useful, it should be noted that this measure is limited as it does not take into account any capital gains (or losses) from changes in the value of the property over time. It also excludes the benefits received from negative gearing.

In 1997, the average gross rate of return for all private residential rental properties was 7% per annum. Generally, properties with lower gross rates of return tended to be the higher-priced properties. Of properties with gross rates of return less than 5% per annum, 57% were valued at $200,000 or more. In comparison, of properties with gross rates of return of 8% or more, 63% were valued at less than $100,000.

Properties in Hobart and Adelaide had the highest rate of return (7.6% and 7.5% respectively), reflecting their lower median value.

For the 1995–96 financial year, investors reported that they were more likely to have made a profit on their rental property if they did not have a mortgage (58%) or if the mortgage was less than $50,000 (31%). For investors with larger mortgages, over half had made a loss (55%). Many of these, however, would have invested to gain the reduction in personal taxation from the negative gearing of a rental property.

Residential rental properties in capital cities(a), June 1997

	Median value(b)	*Median weekly rent(c)*	*Gross rate of return(d)*
	$'000	$	%
Sydney	192	197	5.9
Melbourne	120	153	6.9
Brisbane	127	158	6.7
Adelaide	98	136	7.5
Perth	127	132	6.1
Hobart	97	133	7.6
Canberra	137	173	7.0
All capital cities(e)	*133*	*161*	*6.6*
Rest of State	*107*	*141*	*7.3*
Australia	**125**	**154**	**6.8**

(a) Respondents provided data on a maximum of three properties.
(b) Current market value of the property and its land as estimated and reported by respondent.
(c) Median weekly rent charged for the property regardless of whether the property was occupied or vacant.
(d) Gross annual rent (i.e. weekly rent x 52) divided by the value of the property.
(e) Includes Darwin.

Source: Unpublished data, Rental Investors Survey, June 1997.

Average gross rate of return(a), June 1997

(a) Per cent annual return is gross annual rent divided by the estimated value of the property.

Source: Household Investors in Rental Dwellings, June 1997 (Cat. no. 8711.0).

Endnotes

1 Australian Bureau of Statistics 1998, *Australia in Profile: A regional analysis, 1996,* Cat. no. 2032.0, ABS, Canberra.

2 Australian Bureau of Statistics 1997, *Housing Occupancy and Costs 1995–96,* Cat. no. 4130.0, ABS, Canberra.

Inner city residential development

HOUSING STOCK

Inner city living in Sydney, Melbourne, Brisbane, Adelaide and Perth has become more popular. Between 1986 and 1996, all of these inner city areas had growing populations, with much of the increase being housed in high-rise apartments.

Characterised by an agglomeration of offices, shops, hotels, theatres and restaurants in a mix of modern high-rise and historic buildings, inner city areas have a large daily flow of commuters from suburban areas and also provide places of residence for many people. Many of the people who reside in inner city areas, often for very short periods (i.e. tourists and people on business), do so in a variety of non-private dwellings such as hotels, motels, boarding houses and hostels. For instance in 1996, 41% of all people counted in inner Sydney on census night, and 61% of those in inner Melbourne, were residing in non-private dwellings. However, supported by urban planning policies,[1,2,3] inner city areas are also becoming home to a growing number of residents living in private dwellings, especially in high-rise apartments.

Focussing on occupied private dwellings, this review uses information from the 1986 and 1996 Censuses of Population and Housing to describe housing trends in the inner city areas of Australia's five largest cities. It also describes some of the characteristics of the people living in private dwellings in these areas.

Inner city areas and places of residence

Inner city areas have been defined to include census collection districts within a 1.5 km radius of the General Post Office located within each city's Central Business District (CBD). These areas include the full CBD as well as the inner areas of any surrounding suburbs.

Metropolitan areas include Sydney, Melbourne, Brisbane, Adelaide and Perth as defined by their statistical division boundaries.

Private dwellings are defined as premises, typically a house or apartment, usually occupied by households (a person living alone or a group of related or unrelated people who usually reside and eat together). Occupied private dwellings are those that were occupied on census night by at least one usual resident.

Non-private dwellings include premises (such as hotels, boarding houses, hostels, hospitals and prisons) designed to provide special-need housing services for (often large) groups of individuals.

Change in inner city areas

The extent of residential development can be viewed in terms of the growth in the number of occupied private dwellings in an area and the number of people living in the area. It is evident from census data that more people now live in inner city areas and that recently the rate of residential development has usually been higher in inner city areas than for metropolitan areas as a whole.

Inner Sydney (already with the largest number of inner city residents in 1986 – 12,100 people) recorded the highest growth in

Census population counts in 1996 and changes since 1986

	All persons		*Persons counted at home in private dwellings(a)*			
	Inner city area		*Inner city area*			*Metropolitan area*
	Population in 1996	*Proportion in non-private dwellings*	*Population in 1996*	*Change since 1986*		*Change since 1986*
City	no.	%	no.	no.	% increase	% increase
Sydney	35 165	41.4	18 828	6 691	55.1	12.5
Melbourne	10 781	60.9	3 820	2 609	215.4	12.0
Brisbane	15 479	54.3	6 486	1 432	28.3	29.7
Adelaide	8 862	48.2	4 266	867	25.5	7.3
Perth(b)	8 654	57.1	3 393	n.a.	n.a.	28.2

(a) Excludes visitors.
(b) Figures showing change for Inner Perth have been omitted. Unlike the other cities, in Perth the 1986 Census coincided with school holidays and does not allow reasonable comparisons to be made with respect to changes in numbers of people for small geographic areas.

Source: Unpublished data, 1986 and 1996 Censuses of Population and Housing.

residents, adding about 6,700 people over the decade. However, the proportionate increase was largest in inner Melbourne, where the number of people in occupied private dwellings more than tripled (increasing from about 1,200 to about 3,800 people). The number of people in the inner city areas of both Brisbane and Adelaide increased at a more moderate rate; 28% in Brisbane (which was on par with the high rate of growth for the city as a whole), and 26% in Adelaide (which was more than three times the growth rate of the entire city).

For each city, the same trends are evident when examining the overall growth in numbers of private dwellings. The change in dwellings counted in Perth over the decade suggests that the rate of residential development in inner Perth has been slower than in other cities (12% compared to the next lowest, 26% in Brisbane).

Dwelling types

While the mix of dwelling types in inner city areas (such as separate houses, row and terrace houses, flats and high-rise apartments) varies between each city, a common feature of inner city housing is the low proportion of separate houses. On average, 7% of all occupied private dwellings in the five inner city areas were separate houses, compared to 74% for the metroplitan areas as a whole. As well as the historical development of medium density housing (e.g. terrace houses close to the CBD in Sydney and Melbourne), the on-going competition for land in inner city areas has favoured the development of adjoined dwellings and, increasingly, dwellings in high-rise blocks.

Separate houses and adjoined dwellings

Separate houses are those that stand on their own grounds separated from other dwellings by at least half a metre.

Adjoined dwellings are all dwellings other than separate houses and have been classified in this review as being in either high-rise blocks or an "other adjoined dwelling type". *Other adjoined dwelling types* include, row and terrace houses, units/flats and other adjoined dwellings, as long as the dwelling is in a building less than four storeys high. Dwellings in *high-rise blocks,* conversely, are those in residential buildings four or more storeys high.

In 1996, the inner city areas of both Sydney and Melbourne had very few separate houses (both less than 40, representing 0.3% and 1.1% of all occupied private dwellings respectively). In all cities, the number of occupied separate houses declined between 1986 and 1996. Most of the losses were in Brisbane (101), Perth (49), and Adelaide (39).

Nearly two thirds of all dwellings in inner Sydney (64%) were in high-rise blocks (i.e. dwellings in blocks four or more storeys high), while in inner Melbourne, the proportion of dwellings in high-rise blocks and the other types of adjoined dwellings were similar (45% and 50% respectively). Inner Adelaide, in contrast, had relatively few occupied dwellings within high-rise blocks (10%).

Occupied private dwellings in inner city areas, 1996 and change since 1986

	1996				*Change since 1986*			
		Adjoined dwellings			*Adjoined dwellings in high-rise blocks*		*Total dwellings(b)*	
	Separate house	*High-rise blocks*	*Other*	*Total dwellings*				
Inner city areas	%(a)	%(a)	%(a)	no.(b)	no.	% increase	no.	% increase
Sydney	0.3	64.2	34.7	11 028	3 042	79.9	3 724	51.0
Melbourne	1.1	45.1	49.7	2 034	754	566.9	1 464	256.8
Brisbane	17.5	42.9	39.0	3 726	867	127.1	779(c)	26.4
Adelaide	12.1	9.5	74.9	2 587	147	156.4	633	32.4
Perth	21.2	26.8	49.8	1 960	113	27.9	205	11.7

(a) As a per cent of total dwellings, but excluding private dwellings with unknown structures and dwelling types such as dwellings attached to shops.
(b) Includes private dwellings with unknown structures and dwelling types such as dwellings attached to shops.
(c) Increase is smaller than the increase in adjoined dwellings in high-rise blocks because the number of separate houses declined.

Source: Unpublished data, 1986 and 1996 Censuses of Population and Housing.

Proportion of dwellings rented, and median weekly rent payments of those renting, 1996

	Inner city area		*Metropolitan area*	
	Proportion rented	*Median rent*	*Proportion rented*	*Median rent*
Location	%	$ per week	%	$ per week
Sydney	71.0	210	31.3	162
Melbourne	65.4	222	24.7	137
Brisbane	62.4	152	30.4	135
Adelaide	65.2	120	28.2	102
Perth	69.2	102	26.5	126
Total	**68.1**	**172**	**28.3**	**140**

Source: Unpublished data, 1996 Census of Population and Housing.

In all cities, the most rapid development (measured in terms of percentage change) occurred in the construction of

units/apartments within high-rise blocks. Over the ten-year period 1986 to 1996, almost all of the residential development in Brisbane's inner city, and most of the development in Sydney's inner area was in units in high-rise blocks. In Adelaide, much of the growth occurred in units in the other types of adjoined dwellings (526 units compared to 147 in high-rise blocks).

Housing tenure and costs

Against the norm of high levels of home ownership (with or without a mortgage) of people in Australia, people living in inner city areas were much more likely to be renting. The low home ownership in inner city areas may be associated with: the type of people attracted to inner city areas (i.e. highly mobile, young adults); the most common type of dwelling available in inner city areas (smaller adjoined dwelling types that are generally not suited to families with dependants); and the higher housing costs which is partly indicated by higher rental payments in inner city areas compared to metropolitan areas.

Characteristics of residents

People living in inner city areas do so for many reasons, such as being close to work and places of entertainment, living near friends or relatives, or simply having a preference for the ambience of inner city living. However, it is likely that the high costs associated with inner city housing, and the preferences for families with children to live in suburbs, would lead to differences between the socio-economic characteristics of inner city residents and residents of metropolitan areas generally. Various indicators reinforce the popular stereotype that many inner city residents are relatively young, financially advantaged adults.

In 1996, all inner city areas had a greater proportion of males than females, while the reverse was true for the total population of the five metropolitan areas. Inner city areas also had larger proportions of people living with unrelated adults (i.e. in group households) and people living alone, and lower proportions of family households. In 1996, lone-person households made up 49% and group households made up 16% of inner city households (compared to 23% and 5% respectively in metropolitan areas). Family households made up 35% of all households in

Selected characteristics of residents of private dwellings, 1996

	Males per 100 females	*Persons aged 0–9*	*Persons aged 20–29*	*Persons aged 65+*	*Lone-person households*	*Group households*	*Family households*	*Couple-only families*	*Families with dependent children*
Location	number	%(a)	%(a)	%(a)	%(b)	%(b)	%(b)	%(c)	%(c)
Inner city areas									
Sydney	122	5.0	32.8	8.4	50.3	14.9	34.8	57.3	24.8
Melbourne	115	4.2	38.2	6.5	40.7	19.3	39.9	51.5	23.2
Brisbane	106	4.1	30.0	12.0	46.5	16.4	37.0	54.2	25.5
Adelaide	119	4.1	30.3	11.8	52.3	14.2	33.5	54.3	25.6
Perth	128	5.6	31.6	9.9	52.3	15.1	32.6	50.3	33.0
Total inner city areas	119	4.7	32.5	9.4	49.2	15.5	35.3	55.2	25.6
Total metropolitan areas	96	14.1	15.9	10.9	22.9	4.6	72.4	31.6	50.4

(a) Of all persons.
(b) Of all households.
(c) Of all families.

Source: Unpublished data, 1996 Census of Population and Housing.

Employment and income of people(a) living in private dwellings, 1996

Location	*Unemployment rate* %	*Persons employed in more highly skilled occupations(b)* %(c)	*Persons with gross income > $799 per week* %(c)	*Persons with gross income < $300 per week* %(c)
Inner city areas				
Sydney	8.4	53.4	29.6	12.7
Melbourne	8.8	64.2	36.4	18.5
Brisbane	9.3	57.6	26.9	16.0
Adelaide	10.8	58.2	25.1	18.1
Perth	14.5	48.7	20.5	26.8
Total inner city areas	9.4	55.4	28.5	15.7
Total metropolitan areas	8.3	39.0	19.5	20.8

(a) Aged 15 years and over.
(b) Managers and administrators, professionals and associate professionals (ASCO, Second Edition).
(c) Of all employed persons.

Source: Unpublished data, 1996 Census of Population and Housing.

inner city areas, compared to 72% in metropolitan areas. Furthermore, among family households, couple-only families made up the largest proportion in inner city areas (55%), whereas in metropolitan areas, families with dependent children made up the largest proportion (50%).

Residents in inner city areas and metropolitan areas also had different age profiles. For example, in metropolitan areas the proportion of children aged under 10 was three times greater than that in inner city areas (14% compared to 5%). In contrast, inner city areas had a substantially higher proportion of residents aged 20–29 years (ranging between 30% and 38%) than in metropolitan areas (an average of 16%).

Employment and income

In 1996, inner city areas tended to have a higher unemployment rate than metropolitan areas taken as a whole (with particularly high rates in the inner city areas of Adelaide and Perth – 11% and 15% respectively). However, in all cities, among inner city residents who were employed, relatively high proportions were employed as managers, administrators, professionals or associate professionals. The proportions in these more highly skilled occupations ranged from 64% in inner Melbourne to 49% in Perth; all higher than the average of the five metropolitan areas (39%).

Associated with differences in concentration of people employed in more highly skilled occupations, inner Melbourne had the highest proportion of employed people who had a gross weekly income of $800 or more (36%) while inner Perth had the lowest (21%). Inner Perth also had the highest proportion of employed people with a weekly income of less than $300 (27%). However, among inner city residents who were employed, a greater proportion were on high incomes compared to the average of employed people living in metropolitan areas.

Endnotes

1 Forster, C., & O'Connor, K. 1997, 'A new era for the inner city?', *Urban Policy and Research – An Australian and New Zealand Guide to Urban Affairs*, vol. 15, no. 2, pp. 137–156.

2 Searle, G. 1991, 'Restructuring Sydney', *New Planner*, December 1991, pp. 5–7.

3 Baird, M. 1994. 'Postcode 3000', *Australian Planner. 1994*, vol. 31, no. 3, pp. 153–158.

Culture and leisure

How Australians use their free time

RECREATION

In 1997, Australians enjoyed an average of over five hours of free time per day. The most popular free-time activities were watching TV and videos, and socialising and talking.

Most people would agree that having free time to relax, to enjoy the company of friends and family, and to pursue interests beyond their work, family or household commitments (e.g. hobbies, entertainment, sport) is important to their personal wellbeing. However, individual perceptions about what constitutes free time and how it is spent may differ widely. For example, some people see gardening as a chore (and time use surveys generally classify it as a form of unpaid household work) while others see gardening as an absorbing and enjoyable hobby. On the other hand, time use surveys generally classify time spent on religious observance as free time, while some people might view it as committed time (see *Types of free-time activities* box on page 175). Nevertheless, time use data does provide a useful broad indicator of how much free time Australians have and how they use it.

How much free time do we have?

The amount of free time a person has is largely determined by the nature and extent of other demands on their time such as paid work, education, family and household commitments. ABS time use surveys define free time as the amount of time left in the day after time spent on sleeping, eating, personal care (necessary time); paid work and formal education (contracted time); and family and household responsibilities and unpaid voluntary work (committed time). This classification is based on the main activity undertaken at any time.

In 1997, Australians enjoyed an average of over 5 hours of free time per day – 4hrs:44mins on weekdays and 6hrs:37mins on weekends. Men and women had roughly the same amount of free time on weekdays, but on weekends men averaged an hour more free time per day than women. This is mainly because women undertake a greater share of child care and household work (see *Australian Social Trends 1999,* Looking after the children, pp. 39–41 and How couples share domestic work, pp. 119–121) which, unlike paid work, does not decrease on weekends.

Time use

Information on time spent on various activities is taken from the 1997 ABS Time Use Survey. Time use data was compiled from a household questionnaire and a 48-hour diary of time use, completed by respondents aged 15 years and over. For each 5-minute time slot in the diary, people could record up to 2 concurrent activities:
main activity refers to the first activity people recorded;
secondary activity refers to the activity recorded in response to the question, 'What else were you doing at the same time?'

Types of time

The entire day can be divided into the following broad time use categories according to the types of activities recorded as *main activities:*
necessary time refers to time spent on main activities associated with personal care (e.g. sleeping, eating and personal hygiene);
contracted time refers to time spent on main activities such as paid work and formal education where there are explicit contracts which control the periods of time in which the activities are performed;
committed time refers to time spent on main activities to which a person has committed him/herself through social or community contracts. Includes time spent on family and household responsibilities (e.g. child care, housework, shopping) and unpaid voluntary work; and
free time is the residual category and comprises time spent on all other main activities including religious observance, socialising and a range of activities commonly associated with recreation and leisure (e.g. sports, hobbies, watching TV).
See *Types of free-time activities* box on page 175.

Weekday/weekend time use, 1997

	Weekday(a)	*Weekend*(a)	*Total*
Types of time	hrs:mins	hrs:mins	hrs:mins
Necessary	10:50	11:41	11:05
Contracted	4:36	1:26	3:41
Committed	3:45	4:12	3:53
Free	4:44	6:37	5:16
Men	4:48	7:07	5:29
Women	4:39	6:06	5:04
Total(b)	**24:00**	**24:00**	**24:00**

(a) Daily average for all persons aged 15 years and over.
(b) Includes a small amount of time unable to be classified into a time use category.

Source: Unpublished data, Time Use Survey, 1997.

Free time and free-time activities, 1997

	Average(a) daily free time(b)		Average(a) daily time spent on all free-time activities(c)	
	Men	Women	Men	Women
	hrs:mins	hrs:mins	hrs:mins	hrs:mins
Selected life stages				
People with dependent children	*4:15*	*4:03*	*7:59*	*7:42*
Youngest child under 5 years	3:55	3:43	7:32	6:48
Youngest child 5–14 years	4:16	4:09	8:06	8:02
Youngest child 15–24 years(d)	5:05	4:41	8:46	9:12
People without dependent children	*6:01*	*5:37*	*9:45*	*9:59*
15–24 years	6:22	5:26	10:12	10:06
25–54 years	5:11	4:44	9:06	9:21
55–64 years	6:06	5:54	9:59	10:13
65 years and over	7:22	7:00	10:21	10:43
Labour force status				
Employed full-time	4:23	4:00	8:16	8:13
Employed part-time	5:52	4:35	9:40	8:48
Not employed(e)	7:23	5:53	10:46	9:53
Total persons	**5:29**	**5:04**	**9:12**	**9:11**

(a) Daily average for all persons aged 15 years and over.
(b) Time spent on main free-time activities.
(c) Time spent on main free-time activities plus secondary free-time activities.
(d) Refers to full-time students (who are neither parents nor partners) living with their parents.
(e) Unemployed plus persons not in the labour force.

Source: Unpublished data, Time Use Survey, 1997.

A person's labour force status is a major determinant of how much free time they have. People who are not engaged in paid work (unemployed or not in the labour force) have more free time than those who work part-time, and those who work part-time have more free time than those employed full-time. While this is true for both men and women, the effect is less marked for women. Women exchange less of their non-contracted time for free time than men do (again reflecting women's greater involvement in committed activities).

Family responsibilities are also an important determinant of how much free time a person has. In 1997, people with dependent children had significantly less free time than people without dependent children. Women with dependent children had an average of 1hr:34mins less free time per day than women without dependent children. Men with dependent children had 1hr:46mins less free time per day than men without dependent children. Parents with young children (youngest under 5 years) had the least free time. The amount of free time available to parents with dependent children gradually increased with the age of their youngest child.

Free-time activities

Main free-time activities refers to the first or only free-time activity recorded in each time slot of the time use diary. (See *Time use* box on previous page.) For any person, the total amount of time spent on main free-time activities is equal to their total amount of free time.

Secondary free-time activities were done at the same time as some other main activity. Secondary free-time activities may have been combined with a main free-time activity (in free time) or a different type of main activity such as work, child care or eating (not in free time).

All free-time activities comprise main free-time activities plus secondary free-time activities. For most people, time spent on all free-time activities is greater than their total amount of free time.

The amount of free time available to people without dependent children is largely a function of their labour force participation, household responsibilities and, to a lesser extent, family responsibilities. Those aged 25–54 years had the least free time, reflecting high labour force participation for both men and women, some family commitments (since most have partners) and substantial household commitments. Despite their relatively high rates of participation in formal education, younger people (aged 15–24 years) without dependent children had more free time than 25–54 year olds. This reflects the younger group's relatively low participation in full-time employment, and fewer household responsibilities, since a relatively high proportion are still single and live with their parents. At the other end of the age spectrum, people aged 65 and over (without dependent children) had the most free time, due to their having very few work or family commitments.

Women have less free time than men regardless of age, employment status or family responsibilities. However, the difference between men and women is much less among those groups with the least free time (parents with dependent children under 15 and people in full-time employment).

Free time and free-time activities

The amount of free time available has an important influence on how much time a person can spend on recreation, leisure and other free-time activities. However, people frequently undertake more than one activity

Average(a) daily time spent on free-time activities, 1997

	Main activity	All activities(b)	
	Average daily time	Average daily time	Participation rate(c)
Free-time activities	hrs:mins	hrs:mins	%
Watching TV/videos	2:01	2:45	87.6
Socialising/talking (including phone)	0:47	2:07	74.7
Listening to radio/records/tapes/CDs	0:08	1:20	56.9
Reading	0:25	0:36	48.0
Sport and outdoor activities	0:27	0:28	27.1
Games/hobbies/arts/crafts	0:16	0:20	19.6
Resting/relaxing/doing nothing	0:13	0:16	21.2
Attending entertainment/sports events	0:07	0:07	5.8
Other	0:53	1:11	68.1
Total	**5:16**	**9:11**	**99.4**

(a) Daily average for all persons aged 15 years and over.
(b) Main free-time activities plus secondary free-time activities.
(c) The number of people who reported taking part in an activity over a two-day period, expressed as a percentage of the population aged 15 years and over.

Source: Unpublished data, Time Use Survey, 1997.

at the same time (e.g. socialising while playing tennis, watching TV while looking after children, or listening to the radio while travelling to work). Consequently, for most people, the total amount of time spent on all free-time activities is greater than their total amount of free time (time spent on main free-time activities). In 1997, people spent an average of 9hrs:11mins per day on free-time activities – 3hrs:55mins (74%) more than their available free time.

Women are more likely than men to do more than one thing at a time (or at least to report having done so). Consequently, they managed to spend about the same amount of time, on average, as men on free-time activities even though they had 25 minutes less free time per day. In general people who had less free time, spent proportionally more time on secondary free-time activities. For example, people in full-time employment spent 94% more than their available free time on free-time activities, while people who were not employed spent 59% more.

Some free-time activities were more often undertaken as secondary activities than main activities. For example, Australians spent an average of 2hrs:7mins per day socialising or talking but only 47 minutes per day as a main activity. They also spent an average of 1hr:20mins per day listening to radio, records, tapes or CDs but only 8 minutes per day as a main activity. Watching TV or videos as a secondary activity also contributed significantly (44 minutes per day) to the total time spent watching TV or videos.

Types of free-time activities

For the purposes of this article, free-time activities were aggregated into the following groups:

- *Socialising/talking (including phone)* – includes entertaining guests at home, meeting others away from home, conversations about social/recreational activities, and all general conversation;
- *Attending entertainment/sports events* – includes attendance at movies/cinema, theatre, concert, library, museum, zoo/botanic garden, amusement park, sports, racing and other mass events;
- *Watching TV/videos* – includes listening;
- *Listening to radio/records/tapes/CDs;*
- *Reading* – includes books, CD-ROM, newspapers, magazines, brochures, etc. Excludes letters. Excludes reading for study/research purposes;
- *Resting/relaxing/doing nothing* – includes dozing, staying in bed or going back to bed;
- *Sport and outdoor activities* – includes participation in organised or informal sport, exercising, walking, hiking/bushwalking, fishing, holiday travel/driving for pleasure, camping, spending time in an outdoor setting. Excludes gardening;
- *Games/hobbies/arts/crafts* – includes cards, board games, puzzles, computer games, arcade games, gambling, arts (e.g. painting drawing, writing, composing, performing), collecting, handwork and crafts such as sewing, knitting (excluding clothing), wood and metal work (excluding furniture and home repairs), spinning, weaving, etc; and
- *Other* – includes religious activities such as prayer (alone or with others), attending church services, wedding/funeral/christening ceremonies; community participation (e.g. community meetings); attendance at recreational courses (e.g. art/craft/hobby courses, do-it-yourself courses, personal development courses); and other activities such as thinking and worrying.

Most popular free-time activities

Australians prefer the more leisurely free-time pursuits such as watching TV, talking, socialising, listening to the radio and reading. The 1997 Time Use Survey found that 88% of the population spent some time watching TV or videos during the two-day reference period, 75% spent some time socialising or talking, 57% listened to the radio, records, tapes or CDs, and 48% spent some time reading. Only 27% participated in sports or outdoor activities and only 6% attended an entertainment or sports event. However, because of the relatively short reference period (two days), participation rates for

Average daily time(a) spent on all free-time activities(b) for selected life stages, 1997

	With dependent children		*Without dependent children, and aged 15–24 years*		*Without dependent children, and aged 65 years and over*	
	Average daily time spent	*Participation rate(c)*	*Average daily time spent*	*Participation rate(c)*	*Average daily time spent*	*Participation rate(c)*
Free-time activities	hrs:mins	%	hrs:mins	%	hrs:mins	%
Watching TV/videos	2:17	85.6	2:47	86.0	3:40	93.6
Socialising/talking (including phone)	2:06	78.7	2:35	76.0	1:36	68.4
Listening to radio/records/tapes/CDs	1:10	56.2	1:12	52.7	1:29	56.5
Reading	0:28	45.5	0:22	33.0	1:10	67.1
Sport and outdoor activities	0:21	23.2	0:37	31.5	0:30	30.0
Games/hobbies/arts/crafts	0:12	14.5	0:26	24.8	0:35	29.2
Resting/relaxing/doing nothing	0:13	19.4	0:12	15.1	0:34	35.7
Attending entertainment/sports events	0:06	5.1	0:12	8.8	0:05	4.5
Other	0:56	64.7	1:48	79.2	0:54	60.5
Total	**7:50**	**99.1**	**10:09**	**99.7**	**10:33**	**99.9**

(a) Daily average for all persons aged 15 years and over.
(b) Main free-time activities plus secondary free-time activities.
(c) For any group, the number of people who reported taking part in an activity over a two-day period, expressed as a percentage of the population in the same group.

Source: Unpublished data, Time Use Survey, 1997.

some activities, particularly those which are undertaken infrequently, are likely to be lower than participation rates derived from other surveys using longer reference periods (e.g. two weeks or longer).

Australians spent more time watching TV and videos (2hrs:45mins per day) than on any other free-time activity. They spent 2hrs:7mins per day talking and socialising, 1hr:20mins listening to the radio, records, tapes or CDs, and 36 mins per day reading. On average, women spent more time than men socialising and talking (27 minutes more per day). Men spent more time than women on sports and outdoor activities (14 minutes more per day) and watching TV and videos (8 minutes more per day).

Life stage and free-time activities

Regardless of life stage, the most popular free-time activities are watching TV and videos, talking and socialising, and listening to the radio, records, tapes or CDs (in that order). However there are differences between life-stage groups in the amount of time spent on various free-time activities. For example, older people (aged 65 years and over) without dependent children spend more time than other life-stage groups on most free-time activities, particularly watching TV and videos, and reading. In 1997, they spent an average of 3hrs:40mins per day watching TV and videos, 53 minutes more than young people (aged 15–24) without dependent children, and 1hr:23mins more than parents with dependent children. Older people without dependent children spent an average of 1hr:10mins per day reading, three times more than young people without dependent children (who spent less time reading, other than for study or research, than any other life-stage group). Older people also spent the most time on resting, relaxing, doing nothing; games, hobbies, arts, crafts; and listening to the radio, records, tapes or CDs. On the other hand, they spent the least time talking and socialising, an average of 1hr:36mins per day. This is because a relatively large proportion of older people live alone, and those who do, spend more time alone than any other life-stage group (see *Australian Social Trends 1999,* Spending time alone, pp. 35–38).

In contrast, young people without dependent children spent the most time socialising and talking, an average of 2hrs:35mins per day. They also spent more time than other life-stage groups on sport and outdoor activities (an average of 37 minutes per day) and attending entertainment and sports events (an average of 12 minutes per day).

Parents with dependent children spent the least time watching TV and videos (an average of 2hrs:17mins per day), sport and outdoor activities (21 minutes per day) and games, hobbies, arts and crafts (12 minutes per day). They also spent the least time on free-time activities overall.

Interests in the arts and cultural activities

In the 12 months to March 1995, around 11.7 million people (83% of all people aged 15 years and over) had attended at least one cultural venue or activity. Attendance was generally higher for women, and lower for people aged 65 and over.

The arts in Australia reflect the diverse cultural identity of its people. Information about the arts and people's involvement in cultural activities is fundamental to developing an appreciation of our culture and the impact it has in both social and economic terms. People can be involved in cultural activities in several ways – for example, by attending performances or venues, or as a performer, artist or other worker in the field. This article focuses on patterns of patronage for the arts, numbers of people working in cultural jobs and those training to be artists. It then looks at people's attitudes to the arts.

Numbers attending

Cultural activities contribute to the quality of life, and take many forms. They can range from taking a stroll through a botanical garden to watching an opera or ballet performance.

Around 11.7 million people (83% of all people aged 15 years and over) had been to at least one of the cultural venues and activities included in the supplementary questions in the Monthly Population Survey referring to the 12 months to March 1995. The most popular cultural venue was the cinema, with 8.7 million people (62% of the population) having gone to the cinema in the 12-month reference period. Other venues which were popular included botanical gardens, which had been visited by 39% of the population, libraries (38%) and animal and marine parks (35%).

The arts and cultural activities

The information presented in this review concerning levels of attendance at cultural and leisure venues comes from the Survey of Attendance at Selected Culture/Leisure Venues, conducted in March 1995 as a supplement to the Monthly Population Survey (MPS). The survey provided data for people aged 15 and over in private and non-private dwellings.

The information concerning public attitudes to the arts comes from a set of questions included in the November 1997 Population Survey Monitor (PSM). The PSM is a quarterly household survey of people aged 18 years and over from approximately 3,000 households, and covers rural and urban areas across all States and Territories.

Attendance(a) at cultural venues, 1995

	Attendance rate					*Total attending*
	Males	*Females*	*Capital city*	*Rest of State*	*Persons*	*Persons*
	%	%	%	%	%	'000
Cinema	58.8	65.2	67.0	54.1	62.1	8 733.8
Botanic garden	35.5	41.3	42.9	31.2	38.5	5 410.5
Library	32.2	44.4	..	..	38.4	5 403.1
Animal or marine park	32.8	37.7	38.3	30.4	35.3	4 966.0
Museum	27.0	28.5	28.7	26.1	27.8	3 905.6
Popular music concert	26.9	27.0	27.6	25.8	26.9	3 790.7
Art gallery	19.0	25.4	23.6	20.1	22.3	3 134.1
Opera or music theatre	14.7	23.8	22.1	14.8	19.3	2 722.1
Other performing arts	17.5	19.9	17.9	20.1	18.7	2 634.4
Theatre	13.1	20.0	17.8	14.7	16.6	2 336.3
Dance	7.4	12.5	11.1	8.2	10.0	1 407.5
Classical music concert	6.3	9.0	8.8	5.8	7.7	1 081.3

(a) Attendances are for those aged 15 years or over.

Source: Attendance at Selected Cultural Venues, March 1995 (Cat. no. 4114.0).

Attendance rates

For each type of cultural venue identified in the 1995 survey, women had a higher attendance rate than men. The difference was most marked for libraries (44% of women had been to a library compared with 32% of men) and opera and music theatre (24% and 15% respectively).

Attendance rates for people living in capital cities were higher than those living elsewhere for each of the venues (except those included in the category 'other performing arts', which were not separately identified). To some extent, these differences would arise because some venues are more accessible to people living in capital cities. For example, most zoos and major botanical gardens are located in the capital cities. Similarly, performances such as operas and musicals may be staged only in capital cities.

The slightly higher attendance rate of people living outside the capital cities at other performing arts (20%, compared with 18% of those in capital cities) was mainly due to their higher attendance at circuses (11% and 6% respectively).

In general, attendance rates at venues were highest for people in the younger to middle age groups, with persons 65 years and over usually participating at much lower rates than people in other age groups.

People aged 15–17 years had the highest attendance rates at theatre (27%) and the cinema (90%); those aged 18–24 were most likely to attend popular music concerts (49%);

Attendance at festivals

According to information collected from the PSM, about 2.9 million Australians (22% of the population aged 18 years and over) attended at least one art and cultural festival in the 12 months prior to September 1996. These people accounted for 4.1 million attendances at festivals, an average of 1.4 attendances per person.

Over half of attendances were at multi-arts festivals (2.7 million attendances), such as the Sydney Festival and Carnivale and the Melbourne International Festival of the Arts. The next most attended was popular music festivals (0.6 million attendances) and film/video festivals (0.3 million attendances). Attendance rates were highest amongst the younger age groups (31% of 18–24 year olds) and declined steadily with age (10% of persons aged 65 years and over).

Attendance at festivals, 1996

	Attendance rate		
	Males	*Females*	*Persons*
Age group (years)	%	%	%
18–24	28.5	33.4	30.9
25–34	25.5	25.2	25.3
35–44	21.8	23.6	22.7
45–54	19.6	25.5	22.5
55–64	15.6	19.5	17.5
65 and over	9.4	9.9	9.7
Total	**20.8**	**23.0**	**21.9**

Source: Population Survey Monitor, November 1995 to September 1996, published in *Cultural Trends in Australia No. 6: Attendance at Festivals, Australia*, Department of Communications and the Arts.

Attendance rates at cultural venues by age, 1997

	Age group (years)						
	15–17	*18–24*	*25–34*	*35–44*	*45–54*	*55–64*	*65+*
	%	%	%	%	%	%	%
Cinema	89.7	86.1	73.0	67.3	56.9	41.8	28.9
Botanic garden	39.1	42.7	41.5	41.4	39.0	36.0	27.8
Library	54.9	41.2	37.2	44.8	36.6	31.3	30.2
Animal or marine park	40.3	41.7	46.7	41.7	30.5	26.8	15.5
Museum	33.1	26.5	29.5	34.6	29.3	25.6	16.0
Popular music concert	36.1	48.7	34.5	26.9	22.5	14.4	7.5
Art gallery	24.9	22.6	21.3	23.7	26.8	23.3	15.2
Opera or music theatre	19.6	19.7	17.8	19.5	24.7	20.2	14.6
Other performing arts	22.3	25.8	25.2	21.7	15.8	11.2	7.1
Theatre	26.5	17.8	18.0	17.7	18.2	14.4	8.7
Dance	12.5	11.1	9.9	11.7	11.5	8.1	5.8
Classical music concert	5.6	6.2	6.4	8.1	10.5	9.4	6.9

Source: Public Attitudes to the Arts, Australia, November 1997 (Cat. no. 4157.0), jointly published with the Australia Council.

and those aged 25–34 had the highest attendance rate at animal and marine parks (47%). This age group contains a substantial number of people with young children.

People aged 35–44 years had the highest attendance rate at museums (35%), possibly because they take their teenage children there (those aged 15–17 also had a high attendance rate, 33%). Older people aged 45–54 years had the highest attendance rates at art galleries (27%), classical music concerts (11%), and opera or music theatre (25%).

Attendance rates also varied according to country of birth. Overseas-born people were more likely to visit a botanical garden (41% compared with 37% for Australian-born people). On the other hand, Australian-born people were more likely to go to cultural activities such as popular music performances (28% compared with 23% for overseas-born people) and the cinema (65% compared with 54%).

Travelling time

The number and location of cultural venues varies according to the type of venue (for example, cinemas are located in most regions), and travelling time can be an important factor in deciding whether to attend an arts event.

Travel time to the cinema appeared to be the shortest. About 91% of those living in metropolitan areas said they were able to get to a cinema within half an hour; the equivalent figure for rural dwellers was 74%. Performing arts venues were the next most convenient – 61% of metropolitan residents said they could reach their performing arts venue within half an hour, compared with 57% of rural residents.

Art galleries were recorded as the least accessible, with 51% of people in metropolitan areas, and 61% in rural areas living within half an hour of their nearest gallery.

Numbers undertaking cultural work

Excluding involvements undertaken solely as a hobby (some 2.6 million people), the ABS Survey of Work in Selected Culture/Leisure Activities found that in the 12-month period to March 1997, 2.2 million people (15% of all people aged 15 years and over) had undertaken some work in at least one of the culture/leisure activities listed in the table opposite. Many of these people did these

People with paid involvements in culture/leisure activities(a), 1997

Type of activity	*Paid involvements(b)* no.	*Proportion paid as part of main job* %
Heritage organisations	8 700	55.2*
Museums	10 200	61.8*
Art galleries	12 600	54.0
Botanic gardens	3 700*	64.9*
Animal/marine parks	8 800	52.3*
Writing	213 600	59.7
Publishing	66 000	68.8
Libraries or archives	48 600	82.5
Music	73 800	27.6
Performing arts	37 500	35.7
Art activities		
Drawing	48 600	56.4
Painting	48 700	42.7
Sculpture	13 600	52.9
Photography	43 900	53.3
Print making	18 900	71.4
Electronic art	36 100	71.7
Other art	6 300*	57.1*
Craft activities		
Pottery/ceramics	23 500	51.1
Textiles	24 800	52.0
Jewellery	11 500	59.1
Furniture/wood crafts	44 200	46.4
Glass crafts	9 000	44.4*
Other crafts	30 400	43.8
Design	161 700	72.2
Film production	18 700	54.5
Radio	22 900	54.6
Television	36 400	65.9
Teaching cultural activities	176 700	62.1
Fete organising	9 200	54.3*
Festival organising	28 900	50.2
Art/craft show organising	21 500	53.0
Arts organisations/ agencies	10 600	56.6*
All persons	**877 000**	**60.0**

(a) Persons aged 15 years and over involved at some time in the 12-month period up to March 1997.
(b) As a person can work in more than one activity, the sum of involvements exceeds the total number of persons involved.

Source: Work in Selected Culture/Leisure Activities, Australia, March 1997 (Cat. no. 6281.0)

People training to be artists

In 1997, there were about 21,000 enrolments in higher education courses in the field of visual and performing arts[1] in Australia. Enrolments in visual arts courses dominated, with 13,200 enrolments (62%). Fine arts was the most popular field of study, representing 22% of all enrolments in visual and performing arts, followed by visual arts (general) (16%) and graphic arts and design (15%). There were 6,500 enrolments (31%) in the performing arts, where music was the main activity with 4,200 enrolments (20% of all visual and performing arts enrolments).

In addition, there were close to 40,000 enrolments in 1997 in TAFE and private vocational training colleges in the field of visual and performing arts.[2] Graphic arts and design, and fine arts were the most popular courses, representing 17% and 16% of all enrolments in the field respectively.

activities on a voluntary basis, and often for only a short period of time.

The number of people who received some payment for their work in these activities totalled 877,000 – 523,400 (60%) received payment for work done as part of their main job. This included 127,500 people who had a writing involvement as part of their main job (e.g. a journalist or author) and 116,800 people whose design work was part of their main job (e.g. a graphic, interior or fashion designer). Another 109,800 people taught cultural activities as part of their main job.

Some paid cultural activities were more likely to be associated with a main job than others. Those where a high proportion formed part of a main job included jobs in libraries and archives (83% of involvements were part of a main job), design (72%), electronic art (72%) and print-making (71%). Paid cultural activities that were least likely to be part of a main job included those involved in music (28%) and the performing arts (36%).

What is meant by 'the arts'?

'The arts' is an umbrella term, which people interpret differently. The November 1997 Population Survey Monitor, which asked questions about attitudes to the arts, showed that people included different activities in their definition of 'the arts'. When presented with a list of activities, about eight in ten people included more traditional forms of cultural expression such as plays, ballet, opera (81%) and music (80%), while fewer than four in ten (35%) included architecture and design.

Activities included in 'the arts' varied between people in different age groups, and also depended on their level of education. Those with a bachelor degree or higher, and those in the younger and middle age groups (18–34 and 35–54), included a wider range of activities as part of the arts than others.

The importance of cultural venues in communities

Despite varying opinions about what was considered to be 'the arts', most people thought it was important to have cultural venues in their communities. More than nine in ten (95%) of the population rated libraries as important or very important, and more than seven in ten thought the other venues

Activities that people included in 'the arts', 1997

	Age group			*Level of education*			
	18–34 years	*35–54 years*	*55 years and over*	*Bachelor degree or higher*	*Other post-school qualification*	*No post-school qualification*	*Total*
	%	%	%	%	%	%	**%**
Plays, ballet, opera	82.4	83.3	75.5	94.9	85.0	74.7	80.9
Architecture, design	42.1	36.6	24.1	54.7	38.0	28.5	35.2
Painting, drawing, sculpture	79.4	80.8	69.2	91.0	80.6	71.8	77.2
Photography	60.7	55.2	41.8	78.2	57.2	45.1	53.5
Literature, books, poetry	67.1	65.3	49.1	91.0	66.3	51.3	61.6
Music (concerts, orchestra, singing)	79.9	84.3	72.6	97.2	83.7	72.9	79.7
Craft, pottery, weaving	57.6	54.5	48.1	66.6	58.1	48.1	53.9
	'000	'000	'000	'000	'000	'000	'000
Persons	**4 627.3**	**5 187.4**	**3 566.7**	**1 649.6**	**4 797.9**	**6 934.0**	**13 381.5**

Source: Public Attitudes to the Arts, Australia, November 1997 (Cat. no. 4157.0), jointly published with the Australia Council.

Importance of cultural venues(a), 1997

	Attended	Did not attend	Total
	%	%	%
Libraries	99.7	92.3	95.4
Art galleries	91.1	65.4	71.5
Museums	85.7	74.0	76.6
Performing arts venues	84.6	67.3	76.1

(a) Proportion of people perceiving cultural venues as important or very important.

Source: Public Attitudes to the Arts, Australia, November 1997 (Cat. no. 4157.0), jointly published with the Australia Council.

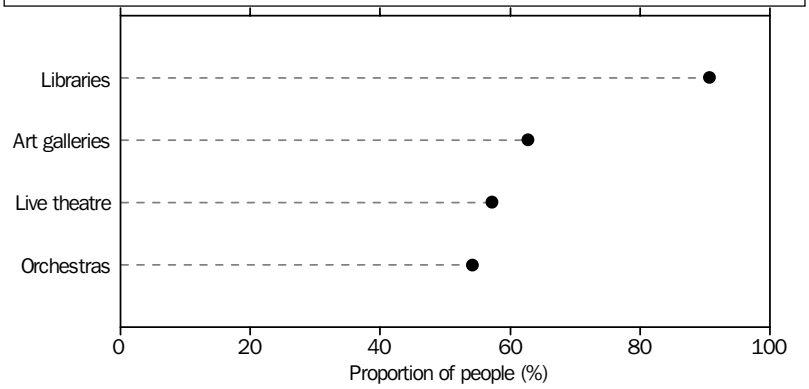
included in the survey (museums, performing arts venues and art galleries) were either important or very important.

This statement of support came from people whether or not they attended or used these facilities. For example, among those people who had not been to an art gallery in the previous 12 months, 65% rated them as being important or very important in their community, while 92% of those who had not been to a library rated libraries in the same way.

Funding for cultural activities and services

Most people were also in favour of governments providing some financial support for the arts and cultural facilities. Libraries were the most supported of the four services and activities that were identified in the survey. Over 90% of the population believed libraries should receive some government funding, while more than half the population thought live theatre, art galleries and orchestras were also deserving of financial assistance.

Support for some government funding of selected cultural facilities(a), 1997



(a) Proportion of people who support some government funding.

Source: Public Attitudes to the Arts, Australia, November 1997 (Cat. no 4157.0), jointly published with the Australia Council.

Government funding for cultural facilities and services, 1996–97

	Level of government funding	
Cultural facilities and services	$m	%
Libraries and archives	696.8	44.4
Museums	216.7	13.8
Performing arts venues and arts centres	188.3	12.0
Art galleries	122.9	7.8
Cultural heritage	89.8	5.7
Other performing arts	89.9	5.7
Zoological and botanic gardens	80.4	5.1
Music (excluding opera)	40.2	2.6
Visual arts/crafts and photography	28.7	1.8
Literature and publishing	14.5	0.9
Total	**1 568.1**	**100.0**

Source: Cultural Funding, Australia, 1996–97 (Cat. no. 4183.0).

Governments support a wide range of cultural activities and venues. For example, zoological and botanic gardens, museums and historic sites along with art galleries and libraries are all supported. Government funding for 'cultural facilities and services' (facilities included are listed in table above) totalled $1,568 million in 1996–97. Of this, approximately 16% ($253 million) was provided by the Commonwealth Government, 48% ($752 million) by the State and Territory governments and 36% ($564 million) by local government. The largest proportion (44%) of government funding for cultural activities and services was directed to libraries. This was followed by museums (14%) and performing arts venues and arts centres (12%).

Being well-informed about the arts

Most people surveyed in the 1997 PSM believed they were well-informed about sport but many thought they were less informed about the arts. A quarter of the population (25%) felt they were not adequately informed about the arts, whereas only 7% said they were not adequately informed about sport. These opinions varied between men and women. Women were more likely than men to say they were not well-informed about

'the arts' (28% and 21%, respectively). However, a higher proportion of men (22%) than women (14%) said they had no interest in the arts.

The most commonly used sources of information about the arts were newspapers, magazines or books (69%). Television (63%) was used slightly less as a source, and only one third (35%) of the population said that radio was a primary source for information about arts activities.

Endnotes

1 Department of Employment, Education, Training and Youth Affairs 1997, *Higher Education Student Statistics, 1997* (unpublished data) (excludes enrolments in courses such as arts therapy and arts teaching).

2. National Centre for Vocational Education Research Ltd. 1997, *Australian Vocational Education Training Statistics, 1997* (unpublished data).

Sporting Australians

SPORT

The most popular sports for players in Australia in 1997–98 were swimming, aerobics and golf. The most popular sports for spectators were Australian Rules football, horse racing and Rugby League.

Australia has long been regarded as a sporting nation. Its performance compared with other countries in elite sports competitions, such as the Commonwealth and Olympic games, are testimony to the high profile given to sport in Australia's culture. In the most recent Commonwealth Games (Kuala Lumpur, 1998), Australia won the most medals. Australia also ranked among the leading nations in the 1996 Olympic Games in Atlanta (USA), where it finished with the fifth highest number of medals won. Moreover, of the top ten nations, Australia and Cuba won the most medals per head of population (2.3 medals per million people) – followed by Germany (0.8) and France (0.6).[1,2]

Underpinning these successes are high levels of participation among school children and adults in a wide variety of sporting and physical activities. Because of the health benefits a physically active life-style promotes, this is encouraged for all age groups as a matter of public policy. Most recently, a national framework for participation in physical activity known as *Active Australia,* was endorsed by the Commonwealth Government in 1996. *Active Australia* has the aim of encouraging people's active involvement in sport, community recreation, fitness, outdoor recreation and other physical activities.[3]

Sport and physical activities

This review draws on a number of recent ABS surveys concerned with measuring people's involvement in sporting and physical activities in Australia. As the surveys have had different aims, they were not conducted in a consistent way with respect to the populations included, nor in the way in which activities were defined.

◆ Information from the two Involvement in Sport surveys, conducted in March 1993 and March 1997, refers to people aged 15 years and over who were involved in sport on one or more occasions during the 12 months prior to the survey. 'Involvement' in sport was defined to include both playing and non-playing activities in paid and unpaid capacities, excluding spectators. It was also defined to generally include both social and competition involvement. However, participation in some sports (such as swimming, aerobics and billiards) was recorded only when it was undertaken for competitive reasons.

◆ Two surveys of Participation in Sport and Physical Activities were undertaken by the ABS in 1996–97 and 1997–98, both as part of the ABS survey known as the Population Survey Monitor. The data relating to 1996–97 refers to participation in sport which was organised by a club, association or school and included additional information for children aged 5–14 years. Information from the 1997–98 survey, on the other hand, was limited to persons aged 18 years of age and over. It defined sport to include both social and organised activities, but excluded running, jogging and walking activities that were not organised by a club or association. For both years, the term 'participant' is defined as a person who physically undertakes the activity, excluding persons involved in a non-playing capacity only.

Involvement in sport, 1993 and 1997

	1993		*1997*	
	Number	*Participation*	*Number*	*Participation*
Type of involvement	'000	%	'000	%
Players	*3 963.6*	*29.1*	*4 115.2*	*28.5*
Paid	57.0	0.4	142.6	1.0
Unpaid	3 906.5	28.7	3 972.6	27.5
Non-players(a)	*1 419.7*	*10.4*	*1 655.9*	*11.5*
Paid(b)	166.1	1.2	203.9	1.4
Unpaid	1 253.6	9.2	1 452.0	10.1
Players and non-players(c)	*4 504.9*	*33.1*	*4 669.8*	*32.4*
Paid	213.3	1.6	328.5	2.3
Unpaid	4 291.6	31.6	4 341.3	30.1

(a) Includes players with non-playing involvement.
(b) Refers to those who received some payment for their non-playing involvement only.
(c) Persons who are involved both as players and non-players are counted only once.

Source: *Involvement in Sport, Australia, 1997* (Cat. no. 6285.0); and unpublished data, 1993 Involvement in Sport Survey.

Many businesses also contribute to the promotion of sport and the support of elite athletes – 22,700 businesses sponsored sport in 1996–97, injecting more than $280 million into sporting events, clubs, teams and individuals.[4] There are economic benefits for these and other businesses and the community at large through a diverse range of commercial activities, including the manufacture and sale of clothing and equipment, attendance at sports events and associated tourism.

Involvement in sport

In the 12-month period to the end of March 1997, the Involvement in Sport survey showed that 4.7 million people (32% of all people

Proportions of men and women playing sport, 1993 and 1997

	1993		1997	
	Men	Women	Men	Women
Age group (years)	%	%	%	%
15–24	55.5	39.4	57.9	40.0
25–34	42.5	28.1	42.7	25.7
35–44	32.3	20.7	32.8	17.6
45–54	25.0	14.8	25.2	14.3
55–64	21.1	14.5	23.2	14.8
65 and over	20.3	12.2	22.2	12.9
Total	**35.3**	**23.1**	**35.7**	**21.5**
	'000	'000	'000	'000
Total playing sport	**2 382.1**	**1 581.5**	**2 536.4**	**1 578.8**

Source: Involvement in Sport, Australia, 1997 (Cat. no. 6285.0); and unpublished data, 1993 Involvement in Sport Survey.

aged 15 years and over) were involved in playing or organising a sport on at least one occasion. Over 4.1 million people (29%) had played a sport, and 1.7 million (12%) (many of whom were also players) were involved as coaches, referees, administrators or in some other non-playing capacity.

The 1997–98 Survey of Sport and Physical Activities recorded even higher participation rates. This survey included social sports and physical activities, but excluded running, jogging or walking when it was not organised by a club or association. In 1997–98, 48% of persons aged 18 and over had participated, as a player, in a sport or physical activity on at least one occasion over the previous 12 months.

Irrespective of the measure used, participation rates were substantially higher for men than women and for young adults than older people. Using the broader measure of participation from the 1997–98 survey, for instance, participation rates among men declined from 78% for those aged 18–24 to 25% for those aged 65 years and over, while among women they declined from 64% to 19% for the equivalent age groups.

Recent trends

Over the short period for which comparative figures are available (1993 and 1997), levels of participation in sport as a player remained much the same (about 36% for men and 22% for women, as measured by the Involvement in Sports surveys). However, some small changes are apparent. This was particularly so among women in the 25–34 and 35–44 year age ranges, where their levels of participation in sport fell by about two percentage points. Against this trend, small increases appear to have occurred in participation rates among older men and women.

A notable change, among players in particular, has been the increase in numbers of people being paid for their involvement in sport. In 1997, 142,600 people were paid for playing a sport, compared with 57,000 in 1993. The number of paid players as a proportion of all players (3.5% in 1997) has nonetheless remained quite small. The number of paid non-players also increased, but to a lesser extent – an increase of 37,800 people to a total of 203,900 people in 1997.

Popular sports and physical activities

The level of involvement in particular sports varies greatly by the age of the players, and although most sports are played by both men and women, some, such as cricket and netball, are much more likely to be dominated by one group than another. A feature of children's involvement in sport, apart from having much greater participation than adults, is that they are more likely to play a team sport requiring larger numbers of players. The opportunity that team sports provides for teaching social skills and the convenience of arranging group activities for children, who have comparatively large blocks of free time, are likely to be among the main reasons for the difference.

Main organised sports played by children(a), 1996–97

Boys		Girls	
	Players		Players
Sport or activity	'000	Sport or activity	'000
Soccer (outdoor)	208.6	Netball	220.7
Australian Rules football	183.7	Swimming	177.7
Cricket (outdoor)	165.2	Dancing	133.5
Swimming	154.1	Tennis	99.3
Basketball	152.9	Basketball	82.6
Tennis	104.5	Gymnastics	57.5

(a) Children aged 5–14 years.

Source: Participation in Sport and Physical Activities, Australia, 1996–97 (Cat. no. 4177.0).

.. played by children

In 1996–97, 61% of children aged 5–14 (1.6 million altogether) had played a sport organised by a club, association or school in the previous 12 months. As with adults, boys (65%) were more likely to have participated

Adult participation in main sports and physical activities(a), 1997–98

Men		*Women*	
	Players		*Players*
Sport or activity	'000	Sport or activity	'000
Golf	873.7	Swimming	896.0
Swimming	732.8	Aerobics/fitness	876.2
Aerobics/fitness	503.0	Tennis	474.2
Fishing	477.2	Netball	285.8
Tennis	463.6	Golf	242.5
Cycling	407.3	Cycling	218.6
Billiards/pool/snooker	242.6	Tenpin bowling	217.3
Cricket (outdoor)	229.4	Fishing	164.3
Surf sports	225.0	Horse riding	154.2
Tenpin bowling	220.7	Billiards/pool/snooker	130.5

(a) Refers to persons aged 18 and over.

Source: Participation in Sport and Physical Activities, Australia, 1997–98 (Cat. no. 4177.0).

than girls (57%). For the large majority of children who had played an organised sport (87%), it had been organised by a club. However, 34% of children involved in an organised sport had participated in a school-organised sport out of school hours.

Taking boys and girls together, the two most popular organised sports among children in 1996–97 were swimming and basketball (331,900 and 235,500 participants) with netball (233,700 participants – dominated by girls) and outdoor soccer (228,800 participants – dominated by boys) following closely behind. The most popular organised sport among boys in 1996–97, with 208,600 participants, was outdoor soccer. Other football codes including Australian Rules and to a lesser extent Rugby League (183,700 and 84,400 participants) were also popular. Cricket (outdoor – 165,200) was the third most popular organised sport played by boys. Dancing and gymnastics ranked among the six most popular organised sports for girls, with 133,500 and 57,500 participants, respectively.

.. among adults

As with children, swimming was the most popular sporting activity among adults (those aged 18 years and over). In 1997–98, 1.6 million adults (12%) had been for a swim on at least one occasion during the year (84% of whom had been for a swim on more than 6 occasions). Swimming ranked among the most popular sports for all age groups, although aerobics/fitness was equally popular with those aged 18–34 (both 18%), and golf ranked as the most commonly played sport among adults aged 45 years and over with 8%, followed by swimming (7%).

Overall, with 1.4 million participants, aerobics/fitness was the second most popular sporting or physical activity with adults in 1997–98. This was followed by golf (1.1 million participants) and tennis (937,800 participants).

For men, the most popular sports were golf (873,700 participants), swimming (732,800) and aerobics/fitness (503,000). While no single code of football was among the top ten

Masters' sports

Older people who have enjoyed competitive sport at younger ages are often keen to maintain or renew their active involvement by competing with their peers. The Australian Masters' Games is a multi-sports festival for mature-aged people conducted biennially in various locations throughout Australia. Ownership of the Games is held in trust by the Confederation of Australian Sport (CAS). Competition in a variety of sports (51 in Melbourne in 1995 and 39 in Canberra in 1997) is usually offered in five-year age spans, starting at 30 and continuing into the 90s. While the number of participants in Masters' Games has increased substantially over the decade to 1997, average ages have remained fairly constant, indicating an increase in participants over all ages.

The success of the Masters' Games reflects the wider participation in Masters sports by mature-aged people. Growth in the number of sports providing participation was most rapid in the 1980s, when 44 more sports were included on top of the 17 that had started between 1950 and 1979. Reports from many sporting bodies to the CAS indicate that Masters is the fastest growing area in their sport, in terms of numbers of participants.[5]

Australian Masters' Games, 1987–1997

			Average age	
		Players	*Men*	*Women*
Year held	Venue	no.	years	years
1987	Tasmania	3 695	50	49
1989	Adelaide	7 415	46	45
1991	Brisbane	5 957	..	..
1993	Perth	5 759	46	44
1995	Melbourne	10 479	47	44
1997	Canberra	8 811	47	43

Source: Confederation of Australian Sport 1987–1997, *Australian Masters Games Final Reports*.

Participation in sport, by employment status(a), 1997–98

	Men	Women
Employment status	%	%
Employed	*60.4*	*53.6*
Full-time	60.4	53.9
Part-time	60.5	53.2
Unemployed	49.6	45.9
Not in the labour force	30.8	29.6
Total	**52.6**	**43.0**

(a) Persons aged 18 years and over

Source: Participation in Sport and Physical Activities, Australia, 1997–98 (Cat. no. 4177.0).

sports and physical activities undertaken by men, a total of 660,900 men played some form of football. Outdoor soccer was the most popular code, with 199,700 participants, followed by Australian Rules with 152,900. Touch football (147,100) was more popular than Rugby League (86,600) and Rugby Union (41,400).

For women, swimming and aerobics/fitness were by far the most popular physical activities, with 896,000 and 876,200 participants respectively. Other popular sports for women were tennis (474,200 participants) and netball (285,800).

Time and other costs

Sport and exercise take up time and often cost money. Results from the 1997 ABS Time Use Survey indicate that an average of 21 minutes each day is spent on sport or physical exercise (excluding fishing) by people aged 15 years and over, if all people in this age group are included. If limited to those who participated, however, considerably more time was allocated to these activities – on average, 1hr:14mins each day. According to the 1996–97 Survey of Participation in Sport and Physical Activities, an average of $693 was spent over the year by each participant in organised sport on membership and weekly fees, clothing and equipment, and other related expenses.

Participation in sport, States and Territories(a), 1997–98

	Men	Women	Persons
State or Territory	%	%	%
New South Wales	50.4	39.3	44.7
Victoria	50.9	44.3	47.5
Queensland	56.0	45.6	50.8
South Australia	50.0	40.4	45.1
Western Australia	55.7	48.1	51.9
Tasmania	57.2	43.9	50.4
Northern Territory(b)	56.5	45.7	51.0
Australian Capital Territory	71.5	55.7	63.6

(a) Persons aged 18 and over.
(b) Figures for the Northern Territory refer to mainly urban areas only.

Source: Participation in Sport and Physical Activities, Australia, 1997–98 (Cat. no. 4177.0).

Sydney 2000 Olympic Games

The largest sporting event in the world, involving both the largest numbers of participants and spectators, is the Olympic Games conducted every four years, almost continuously, since 1896. At the 1996 Games (in Atlanta, USA) 8.4 million tickets were sold to spectators[6] and 10,744 athletes participated[7]. Billions of people all over the world viewed the games live through satellite broadcasts to their TVs.

The Sydney Olympic Games will be held between the 15th of September and 1st of October 2000, and the Paralympics between 18th and 29th of October. Up to 10,200 athletes from over 200 countries are expected to participate in these games, and around 5.5 million tickets are available for sale.[8]

Employment status of players

While unemployed people may have more time for recreational activities such as sport, it is also likely that they are less able to afford the expense of organised sporting activities. Employed people were more likely to participate in sport (60% for men and 54% for women) than those unemployed (50% and 46% respectively).

Men and women who were not in the labour force were the least likely to play sport, with only 31% and 30% participating, respectively. However, many in this group would have been older, retired people, who are less likely to play sport than younger people.

State and Territory differences

Differences in levels of participation in sport and physical activities in different parts of the country are in part affected by the age profiles of those populations, but other factors such as climate and life-style preferences of individuals may also be important. These differences can be observed between the States and Territories. In 1997–98, residents of the ACT (aged 18 and over) recorded the highest participation rate (64%). New South Wales and South Australia, on the other hand, recorded the lowest participation rates (both 45%). The biggest difference between the

participation of men and women was in the Australian Capital Territory (72% and 56% respectively).

Reasons for discontinuing sport

People may discontinue one sport and take up another, or they may give up altogether. Also, with increasing age, fewer people engage in physical activities. The most common reason for giving up a sporting activity, among the 1.8 million people who reported having discontinued an organised activity during the two years prior to 1996–97, was lack of time. Men (31%) were more likely to give lack of time as a reason than women (24%). With 228,800 people saying that they had a sports-related injury in 1995[9], it is not surprising that the presence of injury or health problems was also commonly stated as the reason for discontinuing a sporting activity (21%).

Although women were more likely than men to discontinue an organised sport or physical activity because of child care problems, only a small proportion (3.5%, or 36,600 women altogether) gave this as a reason.

Non-player involvement in sport

In the 12 months to March 1997, 13% of males and 10% of females aged 15 years and over had been involved in sport as a non-player. The most common type of non-playing involvement was as a coach, instructor or teacher, with 628,300 people (4%) acting in this capacity. Almost as many (605,800, or 4%) were members of a committee.

Non-playing involvement in sport(a), 1997

	Number	*Participation rate*
Type of involvement	'000	%
Coach/instructor/teacher	628.3	4.4
Referee/umpire	456.8	3.2
Committee member	605.8	4.2
Administrator	266.5	1.8
Other involvement	569.9	3.9
Total non-playing(b)	**1 655.9**	**11.5**

(a) Persons aged 15 years and over.
(b) Figures may not add to total as some people may have more than one type of non-playing involvement.

Source: Involvement in Sport, Australia, 1997 (Cat. no. 6285.0).

Main reason for discontinuing organised sport(a)(b), 1996–97

	Men	*Women*
Reason	%	%
No time/too busy	30.9	23.7
Injury/health problems	20.7	20.8
Moved away from club	13.9	8.6
Lost interest	10.3	10.2
Too expensive	6.8	10.7
Change in employment	3.8	2.7
Child care problems	0.5	3.5
Other/don't know	13.2	19.7
	'000	'000
Total discontinuing sport	**909.0**	**903.7**

(a) Persons aged 18 years and over.
(b) During the previous two years.

Source: Participation in Sport and Physical Activities, Australia, 1996–97 (Cat. no. 4177.0).

Only a small minority (10%) were paid for their non-playing involvement, mostly for coaching (41%) or refereeing (31%). Non-playing involvement in sport was most common for persons aged 35–44 years, with a participation rate of 18%. This group includes many parents who are likely to be involved in supporting their children's sporting interests (see *Australian Social Trends 1997*, Voluntary work, pp. 109–112).

Attendance at selected sporting events, 1995

	Persons	*Attendance rate*
Sporting event	'000	%
Australian Rules football	1 874	13.3
Horse racing	1 701	12.1
Rugby League	1 462	10.4
Cricket	1 166	8.3
Basketball	692	4.9
Harness racing	600	4.3
Soccer	559	4.0
Motor sports	452	3.2
Tennis	432	3.1
Rugby Union	358	2.5
Netball	312	2.2

Source: Sports Attendance, Australia, 1995 (Cat. no. 4174.0).

Attendance at sporting events

Australians enjoy watching sporting events. According to a survey conducted by the ABS in November 1997[10], sporting programmes were the most commonly watched on television after news and current affairs programmes, and were viewed regularly by over half of all Australians aged over 18 (55%). As well as watching sporting events on television, attending sports events (such as club matches and international competitions) is also a popular pastime.

During the 12 months ended March 1995, 6.2 million people, (44% of all people aged 15 and over), had attended a sporting event (excluding junior and school sport). Men (52%) were more likely to have attended than women (37%). For both men and women, attendance rates were highest for the 15–24 age group (63% and 55% respectively) and steadily declined with age. Among men aged 65 and over, the attendance rate was 28%, while for women in this age group it was 15%.

The most popular spectator sport was Australian Rules football, with almost 1.9 million people having attended this sport on at least one occasion during the year. Horse racing (1.7 million), Rugby League (1.5 million) and cricket (1.2 million) were also among the most popular spectator sports.

Endnotes

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Information technology in the home

LIFESTYLE

Between 1994 and 1998, the proportion of all households with a computer rose from 29% to 47%, while from 1996 to 1998 the proportion with internet access rose from 4% to 19%.

Home computers and the internet are rapidly becoming everyday tools for communication, information gathering, study and research, tele-working and operating home-based businesses. At the same time, the multi-media dimension of home computers and the internet allows them to be used for a wide range of cultural and recreational activities: listening to music, watching television and films, photography and art.

Growth in household adoption of computers and the internet

In February 1994, there were 1.9 million households with a home computer. By November 1998 this had risen to 3.2 million – just under half (47%) of all households.

The growth in the number of households with access to the internet has been even more rapid. In February 1996, there were around 262,000 households (4% of all households) with access to the internet. This reached 1.3 million (19% of households) by November 1998.

ABS time use surveys of persons aged 15 years or more show that between 1992 and 1997 the average time spent using a computer increased from 97 to 103 minutes per day for those who used a home computer. In 1997, on average, there were around 172,000 people each day who accessed the internet at home. These people each spent 75 minutes daily on this activity, on average.

Households with home computers and internet access

	With a computer		*With internet access*	
	'000	%(a)	'000	%(a)
February 1994	1 878	29.4	n.a.	n.a.
February 1996	2 392	36.0	262	3.9
February 1998	2 880	42.4	854	12.6
May 1998	2 879	42.1	971	14.2
August 1998	3 195	45.9	1 245	17.9
November 1998	3 240	47.4	1 272	18.6

(a) Of all households.

Source: Unpublished data, Household Use of Information Technology, 1998; *Population Survey Monitor, Australia,* November 1998 (Cat. no. 4103.0).

Data sources

The primary source of data for this article is derived from responses to a set of questions first included in the February 1994 Population Survey Monitor (PSM), and included quarterly in 1996 and 1998. The PSM is an interviewer-based survey of approximately 3,300 households, and relates to usual residents aged 15 years and over. Data referring to 1998 is taken from the publication, *Household Use of Information Technology*, and relates to the average of the four PSM surveys in that year.

Access to the internet

The *internet* is an interconnection of thousands of computer networks throughout the world, linked via a number of avenues, including telephone cables and optic fibres. Often referred to as the 'information superhighway', it can be used to communicate with others, to gather and provide information, to conduct business and as a source of entertainment. A home computer with a modem can connect to an Internet Service Provider to gain access to the internet.[1]

Questions on household access to the internet were not asked in the 1994 PSM.

This rapid embrace of computer technology is set to continue in the foreseeable future. In 1998, 12% of households currently without computers said they intended to purchase one in the following 12 months. If these expectations are realised, nearly 3.5 million households will have a home computer by the end of 1999.

It is difficult to compare Australian household computer ownership or usage with other countries as there is very little data available for a comparable reference period, and what is available is derived from a variety of different sources. However, computer ownership in Australia appears to be ahead of the United Kingdom (UK) and the United States of America (USA). For example, in 1997, 33% of households in the UK, and 37% in the USA[2] had a computer, compared with 36% in Australia in the previous year.

Patterns of computer ownership and usage vary, depending on household income, household type, and the age, sex and level of educational attainment of household members.

Home computer presence and usage, and internet access by families in households, 1998

Family type	*Computer present in home*(b) %	*Frequent computer usage*(a)(b) %	*Internet access*(b) %
Couple with children	67.4	60.1	23.1
One-parent	42.8	35.8	11.0
Couple without children	32.8	26.8	12.8
Lone-person	19.4	14.8	6.9
Other	51.0	42.6	22.0
All households	**44.6**	**38.1**	**15.9**

(a) Used a computer at least once a week.
(b) Proportion of all households in each category.

Source: Household Use of Information Technology 1998, (Cat. no. 8146.0).

Income

Although a small basic computer can be obtained fairly cheaply, additional equipment, including software, and the on-going costs of internet access can be expensive. Consequently, households with higher incomes are more likely to have a computer and internet access. In 1998, 15% of households with a gross annual income of $14,000 or less had a computer, and 4% had internet access, rising to 74% and 36% respectively for those with incomes over $66,000. For households with a computer but without internet access, only 18% of those with a gross annual income up to $14,000 intended acquiring internet access in the next 12 months, compared with 40% among those with income over $66,000.

The proportion of households without a computer who identified cost as the main barrier to acquiring one, declined from 31% in February 1996 to 26% in February 1998, partly attributable to the fall in computer prices which occurred in this period.

Home computer usage and internet access, by age and sex, 1998

Age group (years)	*Frequent computer usage(a)* Males %	Females %	Persons %	*Accessed internet from home(b)* Males %	Females %	Persons %
Children						
5–9	39.3	35.9	37.6	2.5	1.4	2.0
10–14	62.8	59.8	61.4	13.2	10.6	11.9
15–17	66.5	64.5	65.5	17.9	15.4	16.7
Adults						
18–24	40.8	38.1	39.5	16.2	10.4	13.3
25–39	36.6	34.1	35.3	15.1	9.4	12.2
40–54	38.8	32.2	35.5	14.1	6.7	10.4
55 and over	13.3	8.0	10.6	4.1	1.4	2.7
All persons	**36.5**	**31.7**	**34.1**	**11.7**	**6.9**	**9.3**

(a) People who used a computer at least once a week, as a proportion of all people in each age group.
(b) People who used a computer at least once a week and also accessed the internet, of all people in each age group.

Source: Household Use of Information Technology, 1998 (Cat. no. 8146.0).

Type of family

Differences in home computer usage among family types indicates that the presence of children is a key determinant in their decision to acquire a computer or internet access. In 1998, 67% of all couple households with children had a computer in their home, 60% frequently used a computer at home, and 23% had internet access. For one-parent families, these proportions were lower (43%, 36% and 11% respectively). However, computer ownership and usage was lower still for couples without children and for lone-person families.

Children and adults

The 1998 PSM questionnaires asked which members of the household frequently used a computer, and whether these people also accessed the internet. As children get older, their use of a home computer and the internet increases. In 1998, 38% of 5–9 year olds frequently used a computer at home, and 2% also accessed the internet; for 15–17 year olds, the proportions increased to 66% and 17%. These patterns were evident both for boys and for girls.

In contrast, adult use of a home computer and the internet declined with age, gradually for those aged between 18 and 54, and then more sharply after that. In 1998, the proportion of those aged between 18 and 54 who used a home computer at least once a week varied between 35% and 40%, while only 11% of those aged 55 and over frequently used a computer. Home internet access in the 12 months to November 1998 also declined in the older age group.

These patterns of computer usage suggest that adult usage may be related to the presence of children at home and to participation in the labour force. On the other hand, many of those aged 55 and over may have had little exposure to information technology and may feel less comfortable using a computer.

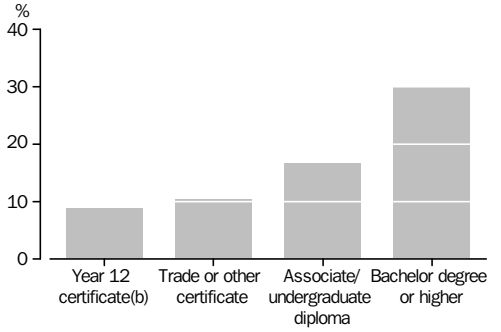
Type of home computer usage(a), 1998

	Males	Females
	%	%
Used computer for games(b)	62.7	49.9
Used computer for study(b)	53.0	55.9
Used home computer for work(c)	72.9	65.9

(a) Of those who frequently used a computer.
(b) Refers to persons aged 5 years and over.
(c) Refers to employed persons over 18 years.

Source: *Household Use of Information Technology, 1998* (Cat. no. 8146.0).

Home usage of internet(a), by level of educational attainment, 1998



(a) Of those aged 18 years and over who frequently used a computer.
(b) Includes those with a Year 12 certificate or equivalent.

Source: *Household Use of Information Technology, 1998* (Cat. no. 8146.0).

Male/female differences

In every age group, males were more likely than females to use home computers. In 1998, 37% of all males and 32% of all females aged 5 and over used a home computer at least once a week, and among adults aged 18 and over, 14% of men and 8% of women used a home computer daily. Part of the difference might relate to how much time they had available. In February–May 1998, 20% of women aged 15 years and over, and 16% of men in the same age range reported 'no time' as the reason why they did not use an existing home computer.

Males in every age group were more likely than females to access the internet from their home computer, although differences are more marked for adults. In 1998, 12% of males accessed the internet from home, compared to 7% of females.

Males were also more interested in using their home computer for games than for study, whereas the reverse was true for females. In 1998, 63% of males aged over 5 years who frequently used a home computer played computer games on it and 53% used their computer for study purposes, compared to 50% and 56% respectively for females.

Men were more likely than women to engage in work-related activities on their home computer. In 1998, 73% of employed men aged 18 and over who frequently used a home computer used it for work-related activities, compared to 66% of employed women.

Level of education

The higher their level of educational attainment, the greater the likelihood that adult members of the household would be internet users. In 1998, 9% of Year 12 certificate holders had used the internet at home, 10% of those with a trade or other certificate, 17% of those with an associate or undergraduate diploma, and 30% of those with a bachelor degree.

State, Territory and region

Differences in the socio-economic profile of people living in the different States and Territories (age, sex, income, households with children, and education levels of household members) may be among the reasons why the proportion of households with computers and internet access was not uniform throughout Australia. For example, in 1998, the ACT, which has a relatively young and well educated population, had the highest proportion of households who owned or were buying a computer (66%), and the highest proportion of households with internet access (28%). Tasmania, on the other hand, with a relatively older population, recorded the lowest levels of computer ownership (36%) and internet access (10%).

The ongoing deregulation of the Australian telecommunications industry has aroused community concerns in regional areas of Australia about the level of services to inland and sparsely populated areas. These concerns have been reflected in the accompanying debate[3] over the Universal Service Obligation (USO) (see box). Since 1994, when statistics on household ownership and usage of computers were first collected by the ABS, the proportion of households with computers and access to the internet has been higher in the eight capital cities than in other regions. In 1998, 48% of capital city households had a computer, and 19% of their members accessed the internet from home, compared with 38% and 11% respectively, for households outside of the capital cities.

Households with computers and internet access, by State and region, 1998

	With computers	Internet access
	%	%
State/Territory		
New South Wales	44.3	17.7
Victoria	46.8	15.1
Queensland	43.2	15.1
South Australia	42.9	13.1
Western Australia	43.2	14.6
Tasmania	35.5	10.4
Northern Territory	44.7	16.1
Australian Capital Territory	66.1	28.2
Region		
Capital city households	48.2	19.0
Other households	38.4	10.6

Source: Household Use of Information Technology, 1998 (Cat. no. 8146.0).

The Universal Service Obligation

This is defined in the *Telecommunications Act 1997.* Under current arrangements, it obliges Telstra to ensure that standard telephone services and pay phones are reasonably accessible to all people in Australia on an equitable basis, wherever they reside or carry on business. The Government has announced its intention to include a digital data capability in the USO. This would effectively make a 64 kbit/sec. digital data capability available, on demand, throughout Australia.[3]

Tele-workers

Tele-workers are employees who have: a home computer; a formal agreement with their employer to work at home; and have a home modem which enables them to access their employer's computer.

Electronic commerce

In this review, *electronic commerce ('e-commerce')* refers to the use of the internet or other on-line facilities to order or pay for goods or services.

Home computers and work-related activities

In 1998, 2.3 million people reported using a home computer for work-related activities. This included employees taking work home, employees working from home ('tele-workers') and the self-employed. The introduction of the modem and the internet have increased opportunities to use home computers for work-related activities. With a home computer, modem and the internet, people can access their work computer and external data bases, and can communicate cheaply and efficiently with any number of other parties, at any time or location. In 1998, 386,000 people (5% of employed persons) accessed their employer's computer from a home modem, and 293,000 (4% of employed persons) were tele-workers. Male tele-workers substantially outnumbered females, both absolutely (210,000 men and 82,000 women) and as a proportion of the number of employed men and women (4% and 2% respectively).

Private use of the internet for electronic commerce

Although increasing, the number of private individuals using the internet to pay bills or transfer funds was still small when compared to the numbers who use other forms of electronic commerce ('e-commerce'). In the three months preceding February 1998, 44,000 adults, or 0.3% of people aged 18 years and over, used the internet to pay bills or transfer funds. In the three months preceding November 1998, this number rose to 112,000, or approximately 1% of adults. In comparison, 4.8 million (36%) adults paid bills or transferred funds by phone, 8.2 million (61%) via electronic funds transfer at point of sale (EFTPOS), and 9.3 million (68%) via automatic teller machines (ATMs).

Substantially more adults used the internet to purchase goods or services for private use than for paying bills or transferring funds. In 1998, approximately 286,000 adults, or 7% of adult home internet users, used their internet access to make one or more private purchases. Of these on-line purchasers, 83% paid on-line and 64% purchased from foreign web sites – two developments which have long-term implications for local business, government revenue and Australia's balance of payments.

There were, however, substantially more people expressing an interest in internet-based e-commerce than were actually engaged in these activities. In November 1998, 31% of men and 24% of women reported an interest in internet-based shopping, and 39% and 37%, respectively, in internet-based banking.

In part, the difference between interest in, and practice of, internet-based shopping, reflected the fact that by November 1998, only

19% of households had internet access. It has also been argued that the current volume of internet commerce (and internet adoption) would be greater but for people's concerns about consumer protection[4] – that is, the security of their financial transactions when paying by credit or charge card; securing redress and compensation for defective goods and inferior services; response times (i.e. the length of time from placing an order to delivery); and confidentiality (fears that personal information will be accessible by, or provided to, third parties).

Endnotes

1 Honour Fiona August 1996, *The Net Starter Guide, Australia's guide to getting on the internet*, Next Publishing Pty Ltd.

2 U.S. Department of Commerce, National Telecommunications and Information Administration 1998, *Falling through the net II: New data on the digital divide,* U.S. Department of Commerce, National Telecommunications and Information Administration*,* Washington D.C.

3 Australian Communications Authority August 1998, *Digital Data Enquiry, Public Inquiry under Section 486(1) of the Telecommunications Act 1997*, Report to the Minister for Communications, the Information Economy and the Arts, ACA, Melbourne.

4 The Parliament of the Commonwealth of Australia Joint Committee of Public Accounts and Audit 1998, *Report 360, Internet Commerce: To buy or not to buy?*, May 1998, AGPS, Canberra.

International

Caution

Statistics presented in this chapter have been reproduced from international statistical compendia. National statistical systems differ from country to country and therefore caution should be exercised when comparing international data. Details of national differences can be found in the country notes in the source publications.

Population composition

Country	Reference year	Total population	0–14 years	15–64 years	65 years and over
		'000	%	%	%
Australia	**1996**	**18 311**	**21.4**	**66.6**	**12.0**
Canada	1996	29 680	20.3	67.6	12.1
China(a)	1996	1 232 083	26.1	67.6	6.2
France	1996	58 333	19.2	65.4	15.4
Greece	1996	10 490	16.4	67.2	16.4
Hong Kong	1996	6 191	19.1	70.9	10.1
Indonesia	1996	200 453	32.5	63.1	4.4
Italy	1996	57 226	14.8	68.9	16.4
Japan	1996	125 351	15.9	69.4	14.7
Korea (Republic of)	1996	45 314	22.8	71.4	5.8
Malaysia	1996	20 581	37.6	58.5	3.9
New Zealand	1996	3 602	23.2	65.4	11.4
Papua New Guinea	1996	4 400	39.4	57.7	3.0
Singapore	1996	3 384	22.6	71.0	6.5
Sweden	1996	8 819	18.9	63.9	17.1
United Kingdom	1996	58 144	19.3	65.0	15.8
United States of America	1996	269 444	22.1	65.4	12.5
Viet Nam	1996	75 181	36.5	58.6	5.0

(a) Excludes Hong Kong and Taiwan.

Source: World Health Organisation *World Health Statistics Annual 1996*; ABS, *Population by Age and Sex, Australian States and Territories* (Cat. no. 3201.0).

Population growth

Country	Reference year	Annual average growth rate	Reference year	Annual rate of natural increase(a)	Crude birth rate(a)	Crude death rate(a)	Reference year	Total fertility rate
		%		no.	no.	no.		no.
Australia	**1990–96**	**1.2**	**1995**	**7.3**	**14.2**	**6.9**	**1995**	**1.8**
Canada	1990–96	1.3	1996	5.3	12.5	7.2	1994	1.7
China(b)	1990–96	1.1	1990–95	11.1	18.3	7.2	1990–95	1.9
France	1990–96	0.5	1996	3.4	12.6	9.2	1995	1.7
Greece	1990–96	0.5	1996	0.1	9.7	9.6	1995	1.3
Hong Kong	1990–96	1.7	1996	5.2	10.2	5.1	1995	1.2
Indonesia	1990–96	1.5	1990–95	16.2	24.6	8.4	1990–95	2.9
Italy	1990–96	–0.1	1995	–0.5	9.2	9.7	1994	1.2
Japan	1990–96	0.3	1996	2.4	9.6	7.1	1995	1.4
Korea (Republic of)	1990–96	1.0	1995	10.3	15.6	5.3	1995	1.7
Malaysia	1990–96	2.5	1990–95	23.6	28.7	5.1	1990–95	3.6
New Zealand	1990–96	1.0	1995	8.4	16.3	7.9	1994	2.0
Papua New Guinea	1990–96	2.9	1990–95	22.7	33.4	10.7	1990–95	5.1
Singapore	1990–96	2.0	1996	10.9	16.0	5.1	1996	1.7
Sweden	1990–96	0.5	1996	0.1	10.8	10.6	1994	1.9
United Kingdom	1990–96	0.4	1996	1.6	12.5	10.9	1995	1.7
United States of America	1990–96	1.1	1995	6.0	14.8	8.8	1994	2.0
Viet Nam	1990–96	2.1	1990–95	20.9	28.9	7.9	1990–95	3.4

(a) Per 1,000 population.
(b) Excludes Hong Kong and Taiwan.

Source: United Nations *1996 Demographic Yearbook*.

Population projections(a)

Country	Population			Median age			0–14 years			65 years and over		
	2000	*2020*	*2050*	*2000*	*2020*	*2050*	*2000*	*2020*	*2050*	*2000*	*2020*	*2050*
	million	million	million	years	years	years	%	%	%	%	%	%
Australia(b)	**18.8**	**22.9**	**25.3**	**35.1**	**38.8**	**41.1**	**21.0**	**19.4**	**18.3**	**11.9**	**15.9**	**22.3**
Canada	30.7	35.3	36.4	36.9	41.5	43.2	19.3	17.3	17.5	12.6	18.1	24.5
China(c)	1 276.3	1 448.8	1 516.7	30.0	36.9	40.3	24.9	19.6	18.7	6.7	10.8	19.2
France	59.1	60.3	58.4	37.8	43.2	44.5	18.3	16.4	17.1	16.2	20.8	26.4
Greece	10.6	10.2	9.0	39.3	45.4	47.9	15.3	14.3	15.3	17.8	21.6	30.4
Hong Kong	6.4	6.5	5.6	36.5	45.9	50.7	17.2	13.5	14.1	11.1	18.4	32.3
Indonesia	212.6	263.8	318.3	24.7	31.4	37.7	30.7	23.5	20.1	4.7	7.0	15.8
Italy	57.2	53.2	42.1	39.9	48.7	53.5	14.2	11.7	12.4	17.7	23.6	35.7
Japan	126.4	123.8	109.5	40.8	46.4	47.5	15.1	14.2	15.8	16.5	25.4	30.4
Korea (Republic of)	46.9	51.9	52.1	31.5	39.8	42.9	21.3	17.6	17.5	6.7	11.8	23.1
Malaysia	22.3	29.8	38.1	22.5	29.6	37.8	35.2	24.7	19.8	4.1	7.0	15.0
New Zealand	3.8	4.6	5.3	33.4	36.8	40.3	23.0	20.4	18.7	11.3	14.5	20.4
Papua New Guinea	4.8	7.0	9.6	20.5	24.1	34.1	38.7	32.1	22.4	3.0	4.0	9.7
Singapore	3.6	4.1	4.2	34.3	41.8	43.1	22.6	16.8	17.1	7.1	15.6	23.6
Sweden	8.9	9.4	9.6	39.0	41.9	41.9	19.0	17.8	17.9	16.7	21.0	23.2
United Kingdom	58.3	59.3	58.7	38.0	41.9	42.0	18.9	17.5	18.0	15.8	19.1	23.2
United States of America	277.8	322.3	347.5	35.8	38.4	40.5	21.4	19.7	18.7	12.4	16.3	21.2
Viet Nam	80.5	104.2	129.8	22.6	30.2	38.1	34.3	23.9	19.6	5.2	6.0	16.1

(a) Medium-variant projection.
(b) United Nations projections for Australia may not agree with ABS projections owing to differences in assumptions and methodology.
(c) Excludes Hong Kong and Taiwan.

Source: United Nations *World Population Prospects: The 1996 Revision*.

Health status

Country	Reference year	Infant mortality rate(a)	Reference year	Life expectancy at birth	
				Males	Females
		no.		years	years
Australia	**1995**	**5.7**	**1994**	**75.0**	**80.9**
Canada	1994	6.3	1992	74.6	80.9
China(b)	1990–95	44.4	1990	66.9	70.5
France	1996	4.9	1993	73.3	81.4
Greece	1996	8.1	1995	75.0	80.2
Hong Kong	1995	4.6	1995	76.0	81.5
Indonesia	1990–95	58.1	1990–95	61.0	64.5
Italy	1995	6.1	1993	74.1	80.5
Japan	1995	4.3	1995	76.4	82.9
Korea (Republic of)	1990–95	11.0	1991	67.7	75.7
Malaysia	1990–95	13.0	1990–95	68.7	73.0
New Zealand	1995	6.7	1992–94	73.4	79.1
Papua New Guinea	1990–95	68.3	1990–95	55.2	56.7
Singapore	1996	3.8	1996	74.4	78.9
Sweden	1996	3.5	1994	76.1	81.4
United Kingdom	1996	6.1	1995	74.1	79.3
United States of America	1995	7.5	1994	72.4	79.0
Viet Nam	1990–95	42.0	1979	63.7	67.9

(a) Per 1,000 live births.
(b) Excludes Hong Kong and Taiwan.

Source: United Nations *1996 Demographic Yearbook*.

Standardised death rates(a) for selected causes of death

Country	Reference year	Malignant neoplasms (cancer)	Ischaemic heart disease	Cerebro-vascular disease (stroke)	Motor vehicle traffic accidents	Suicide and self-inflicted injury(b)	All causes
		no.	no.	no.	no.	no.	no.
Australia	**1994**	**126.2**	**95.8**	**37.2**	**10.0**	**11.2**	**440.6**
Canada	1995	126.1	81.4	26.2	9.8	11.6	428.8
China (rural)(c)	1994	111.9	26.5	110.2	13.8	25.8	698.7
China (urban)(c)	1994	119.4	57.6	125.0	10.1	5.9	594.7
France	1994	130.8	33.2	26.7	12.9	15.8	423.9
Greece	1995	109.4	57.5	69.2	19.8	2.7	449.0
Hong Kong	1994	125.9	40.0	39.8	4.5	10.3	392.9
Indonesia	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Italy	1993	133.7	55.0	48.5	12.4	5.8	450.0
Japan	1994	106.2	21.7	44.5	8.9	12.2	364.0
Korea (Republic of)(d)	1995	123.1	14.6	90.9	36.2	9.8	585.8
Malaysia	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
New Zealand	1993	142.2	119.7	44.0	16.8	11.7	509.9
Papua New Guinea	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Singapore	1995	130.8	96.7	57.0	7.6	12.0	517.7
Sweden	1995	106.6	94.1	34.7	4.9	11.8	408.6
United Kingdom	1995	137.1	112.2	43.1	5.6	6.2	495.8
United States of America	1994	130.8	96.1	28.4	14.9	10.3	521.9
Viet Nam	..	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.

(a) Standardised death rates are the overall death rates per 100,000 population that would have prevailed in a standard population if it had experienced at each age the death rates of the population being studied. The standard population used in this table is the World Health Organisation world standard population. Standardised death rates for Australia presented in the Health chapter of this publication or elsewhere in ABS publications are not comparable owing to the use of a different standard population and different reference periods.

(b) It is generally acknowledged that suicides are under-reported as a cause of death. The degree of under-reporting varies from country to country, partly for social and cultural reasons, but also because of differences in legal requirements and administrative procedures in arriving at a verdict of suicide.

(c) Excludes Hong Kong and Taiwan.

(d) Causes of death have been coded to the tenth edition of the International Classification of Diseases (ICD10). For all other countries, causes of death have been coded to the ninth edition (ICD9).

Source: World Health Organisation *World Health Statistics Annual 1996;* World Health Organisation *World Health Statistics Annual 1995*.

Health services and expenditure

Country	Reference year	Health expenditure as % of GDP	Health expenditure per capita at PPP(a)	Reference year	Doctors per 1,000 population	Reference year	Acute hospital beds per 1 000 population
		%	$US '000		no.		no.
Australia	**1997**	**8.3**	**1.8**	**1996**	**2.5**	**1996**	**4.1**
Canada	1997	9.3	2.1	1996	2.1	1993	3.6
China(b)	..	n.a.	n.a.	..	n.a.	..	n.a.
France	1997	9.9	2.1	1996	2.9	1996	4.5
Greece	1997	7.1	1.0	1995	3.9	1992	3.9
Hong Kong	..	n.a.	n.a.	..	n.a.	..	n.a.
Indonesia	..	n.a.	n.a.	..	n.a.	..	n.a.
Italy	1997	7.6	1.6	1996	5.5	1995	5.1
Japan	1997	7.3	1.7	1994	1.8	..	n.a.
Korea (Republic of)	1997	4.0	0.6	1995	1.1	1996	4.0
Malaysia	..	n.a.	n.a.	..	n.a.	..	n.a.
New Zealand	1997	7.6	1.4	1996	2.1	1991	7.1
Papua New Guinea	..	n.a.	n.a.	..	n.a.	..	n.a.
Singapore	..	n.a.	n.a.	..	n.a.	..	n.a.
Sweden	1997	8.6	1.7	1996	3.1	1996	2.8
United Kingdom	1997	6.7	1.3	1994	1.6	1996	2.0
United States of America	1997	14.0	4.1	1996	2.6	1995	3.4
Viet Nam	..	n.a.	n.a.	..	n.a.	..	n.a.

(a) PPP (purchasing power parities) are the rates of currency conversion which eliminate the differences in price levels between countries.
(b) Excludes Hong Kong and Taiwan.

Source: Organisation for Economic Co-operation and Development 1998, *OECD Health Data 98: a comparative analysis of 29 countries,* Paris: OECD.

Labour force

Country	Reference year	Economically active population(a)	Participation rate of persons aged 15 and over(a)		
			Total	Men	Women(b)
		'000	%	%	%
Australia	**1997**	**9 220.4**	**63.3**	**73.2**	**53.7**
Canada	1997	15 354.1	64.8	72.5	57.4
China(c)	1990	647 244.7	79.2	85.0	73.0
France	1997	26 403.7	55.0	62.3	48.1
Greece	1997	4 292.7	49.2	63.1	36.7
Hong Kong	1997	3 216.0	61.8	75.7	48.0
Indonesia	1997	89 602.8	66.3	83.4	49.9
Italy	1996	22 849.0	47.6	61.6	34.6
Japan	1997	67 870.0	63.7	77.8	50.4
Korea (Republic of)	1997	21 604.0	62.2	75.6	49.5
Malaysia	1997	8 569.2	39.6	51.1	27.5
New Zealand	1997	1 814.4	62.5	71.2	54.3
Papua New Guinea	..	n.a.	n.a.	n.a.	n.a.
Singapore	1997	1 876.0	64.2	78.3	51.1
Sweden	1997	4 264.0	76.8	79.1	74.5
United Kingdom	1997	28 715.9	62.6	71.7	53.9
United States of America	1997	136 297.0	67.1	75.0	59.8
Viet Nam	1989	29 525.5	77.2	81.5	73.6

(a) For most countries data are presented for the economically active population aged 15 and over. However, the age range varies for some countries: Malaysia — 15–64; Sweden — 16–64; UK, USA — 16 and over. Definitions also vary in terms of the inclusion or exclusion of certain other segments of the population such as the armed forces.
(b) Participation rates for women are frequently not comparable internationally since, in many countries, relatively large numbers of women assist on farms or in other family enterprises without pay. There are differences between countries in the criteria used to count economically active workers.
(c) Excludes Hong Kong and Taiwan.

Source: International Labour Office, *Year Book of Labour Statistics, 1998*.

Employment and unemployment(a)

Country	Reference year	Employment '000	Reference year	Unemployment '000	Unemployment rate %
Australia	**1997**	**8 394.1**	**1997**	**791.1**	**8.6**
Canada	1997	13 940.6	1997	1 413.5	9.2
China(b)(c)	1997	696 000.0	1997	5 768.0	3.0
France	1997	22 430.0	1997	3 192.0	12.4
Greece	1996	3 871.9	1997	440.4	10.3
Hong Kong	1997	3 144.7	1997	71.3	2.2
Indonesia	1997	87 050.0	1996	3 624.8	4.0
Italy	1997	20 087.0	1997	2 805.0	12.3
Japan	1997	65 570.0	1997	2 300.0	3.4
Korea (Republic of)	1997	21 048.0	1996	425.0	2.0
Malaysia	1997	8 569.2	1997	216.4	2.5
New Zealand	1997	1 693.3	1997	120.9	6.7
Papua New Guinea	..	n.a.	..	n.a.	n.a.
Singapore	1997	1 830.5	1997	45.5	2.4
Sweden	1996	3 963.0	1996	347.0	8.0
United Kingdom	1997	26 681.6	1997	2 034.2	7.1
United States of America	1997	129 558.0	1997	6 739.0	4.9
Viet Nam	1994	33 664.0	..	n.a.	n.a.

(a) For most countries the employed and unemployed populations are aged 15 and over. However, the age range varies for some countries: China and Viet Nam— Not specified; Greece — 14 and over; Indonesia — 10 and over; Malaysia — 15–64; Sweden — 16–64; UK and USA — 16 and over. Definitions also vary in terms of the inclusion or exclusion of certain other segments of the population such as the armed forces.
(b) Employment relates to total economy; unemployment relates to urban areas only.
(c) Excludes Hong Kong and Taiwan.

Source: International Labour Office, *Year Book of Labour Statistics, 1998;* International Labour Office, *Year Book of Labour Statistics, 1997*.

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