

Australia's ageing yet diverse population



Australia is one of the many countries experiencing falling fertility in the context of increasing life expectancy – and thus an ageing population. Other important changes include shifts in the transition from a virtually mono-cultural society to one of the most culturally diverse societies in the world. This article focuses on the changing demographic face of Australia, its age structure and cultural diversity, and explores the implications of these trends for future older Australians and their families.

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Never far from the surface of national consciousness, the issue of Australia's population size and composition is again in the news. The concept of "populate or perish" loomed large after World War II in response to two issues: fears that Australia would be incapable of defending its borders from attack; and the need for unskilled labour. Now it is again receiving considerable public scrutiny.

Those in favour of a large increase in the population size often argue that population growth is essential for economic growth, although security of Australia's borders is also discussed (for example, Katter 2002). On the other hand, opponents of a larger population include those who focus on the increased degradation that would occur to Australia's fragile natural environment, increased congestion in Sydney and Melbourne where most immigrants settle, and the undermining of social cohesion that might occur if immigration levels are increased to very high levels (for example, Jones 1997).

In relation to population composition, many of the past debates have focused on the backgrounds of immigrants. Examples include the controversies surrounding the Immigration Restriction Act (or "White Australia Policy") and the associated dictation test that was introduced to retain the Anglo-Celtic profile of the population, the surge of European migrants with non-English-speaking backgrounds after World War II, and the struggle of generations of opponents of the "White Australia Policy" to see it abolished (in the early 1970s).

More recently, the discussion on Australia's population composition has taken a new direction – one that was hardly mentioned at all in the 1975 National Population Inquiry (McDonald and Kippen 1999a). This concerns the growing number and proportion of older people – the so-called "ageing of the population" – that many other developed countries are also now facing.

This article outlines the changing size and structure of Australia's population, the components of population growth and ageing, and projections for the next 100 years. Considerable attention is given to the implications that such population trends have for families.

Population growth and its components

Australia's population has increased nearly five-fold since the beginning of the 20th century, from 3.77 million to 18.77 million at the time of the 2001 Census (ABS 2003a). The highest population growth occurred after World War II and the lowest occurred in the 1930s, coinciding with the Great Depression. Two-thirds of Australia's population growth in the 20th century can be attributed to natural increase – that is, to the excess of births over deaths (ABS 2001). However, fertility and mortality rates have undergone significant changes, while the other key factor, net overseas migration, has fluctuated substantially.

Although the total fertility rate has also varied over time, it has fallen from a peak of 3.55 births



per woman in 1961 to a very low level of 1.75 in 2002, considerably lower than replacement level (2.06). While the fertility rate stabilised in the late 1970s and 1980s to around 1.9, in the 1990s the rate fell in small progressive steps as increasing proportions of couples restricted their family size to one or two children, or people remained permanently childless. Further increases in the rate of childlessness are projected for women in their early childbearing years (ABS 2003; Merlo and Rowland 2000).

While the fertility rate in Australia is at an all-time low level, life expectancy is at an all time high, having increased by slightly more than 20 years since 1901. Boys and girls born at the beginning of the 20th century could expect to live for 55 and 59 years respectively, while those born today can expect to live for 77 and 82 years respectively. However, life expectancy is around 20 years lower for Aboriginal and Torres Strait Islander peoples (ABS 2001a; ABS 2003a).

The improvements in life expectancy, particularly prior to the 1970s, can be largely explained by falls in the mortality rates of children – especially in the first year of life – and to a lesser extent, of mothers in childbirth. However, life expectancy of those over 50 years old did not improve very much until the 1970s and 1980s, when a reduction in deaths

from heart disease and stroke occurred (ABS 2003a; Hugo 2001).

While natural increase represents the main component of Australia's growth rate, immigrants have played a significant role in terms of both absolute numbers and the number of children born to immigrants after their arrival. Annual net overseas migration has fluctuated widely, but net immigration has averaged around 80,000 to 90,000 per annum since 1950 (McDonald 2002).

The changing demographic face of Australia

The above components of population growth – fertility, life expectancy and immigration – have had an important impact on the age structure, sex ratio among older people, and cultural diversity of Australia's population. Furthermore, with changes in the source countries of immigrants over the years, the cultural mix of people in different age groups has varied.

Age structure

The fall in fertility rates and the significant improvement in life expectancy have inevitably resulted in an "ageing" of the population both in absolute and relative terms. The median age of the total population increased by 12 years, from 22.6 in 1901 to 35.9 years

in 2002. That is, half the people in Australia were older than 22.6 years at the start of the 20th century and half were older than 35.9 years in 2002.

The ageing of the population is captured in the changing shape of the so-called “age-sex pyramid” presented in Figure 1 for the years 1911, 1961 and 2002. The picture for 1911 resembles a pyramid comprising relatively many children and relatively few elderly people. In 1961, there was a swell in the population aged under 15, representing most of the post-war “baby boomers”, defined by the ABS as residents born in Australia or overseas between 1946 and 1965 inclusive (ABS 2003b). By the end of 2002, this group was between 36 and 56 years old.

net overseas migration. Figure 2 depicts the changing proportions of the population aged under 15 years and 65 or over (here called “older people”) since 1901, and the proportions in these age groups that are projected for the next 100 years. Under the three scenarios, the representation of children under 15 years in the total population is projected to fall from 20 per cent in 2002 to around 12–15 per cent by 2051, and the growth in numbers of children aged under 15 years is projected to be much slower than the overall population growth.

By contrast, the size of the population aged 65 years and over is projected to continue to grow at a pace faster than that for the total population, so that by

Whatever the pace of change in population ageing, the projections suggest that the nature of consumption and demands for services will change, with health and aged care services increasing, and those geared towards children declining.

Despite their low fertility relative to their parents, they are such a large group that their offspring likewise represent a large group (Jackson 2001; McDonald 2002) – a trend which, along with increased life expectancy, has resulted in an age-sex profile that no longer resembles a pyramid.

Figure 1 also depicts the age-sex structure for 2051, as projected by the ABS (2003c) on the basis of a set of specified assumptions regarding the total fertility rate, life expectancy and net overseas migration (see Figure 1 for details). Under these assumptions, the age-sex structure in 2051 would bear no resemblance at all to a pyramid.

This projection is but one of a series developed by the ABS and others (for example, Booth and Tickle 2003; McDonald and Kippen 1999a). Projections simply present outcomes if certain combinations of trends in fertility rates, life expectancy and immigration occur, and are thus very useful in helping to shape policy.

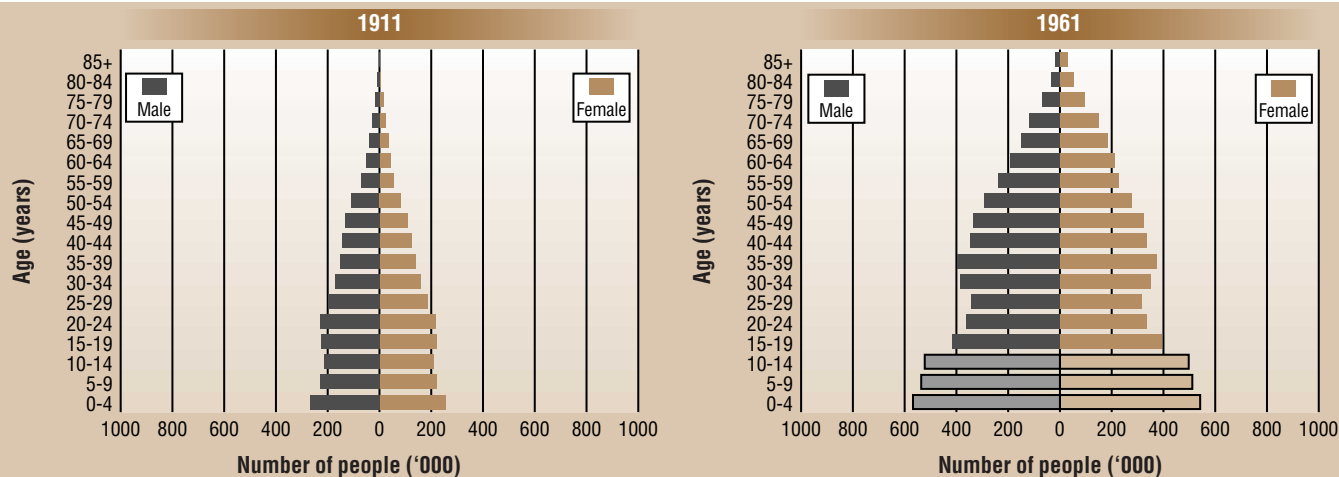
The ABS (2003c) outlines two other “main” sets of projections based on different combinations of assumptions relating to fertility, life expectancy and

2021 older people will have outnumbered those under the age of 15 years. By 2051 older people will represent 27–30 per cent of the population. Similarly, the ABS projects that the increase in the number of people aged 85 and over will be faster than the increase of the overall population, and that the gap in the life expectancy of men and women will continue to narrow.

However, Booth and Tickle (2003) project that life expectancies of men and women are substantially higher than “official” estimates, and thus underestimate the size of the future older population, especially the number of women aged 65 and over, and the number of both men and women aged 85 and over. They also maintain that the gap in the life expectancies of men and women will narrow at a much slower pace than the pace projected by the ABS.

To what extent can immigration prevent or slow down population ageing? McDonald and Kippen (1999b) present empirical evidence suggesting that net overseas migration of around 80,000 per year plays an important role in slowing down population ageing, and given current fertility and life expectancy trends, this level of migration will be necessary to

Figure 1 Age and sex structure of Australia's population, observed (1911, 1961, 2002) and projected (2051)



Notes: The “baby boom” population (born in 1946–1966) is highlighted. The 2051 age-sex structure is based on the ABS series B projection where: total fertility rate = 1.60 births per woman from 2011; net overseas migration = 100,000 from 2005–2006; life expectancy = 84.2 and 87.7 for men and women from 2050–2051.

prevent spiraling population decline. However, their analysis suggests that increases in net overseas migration beyond this level become increasingly ineffective and inefficient in deterring population ageing in terms of change in population relative to reduction in percentage of population aged 65 years and over in a long-term perspective. (It should be remembered that immigrants age as well and the authors demonstrated that the higher fertility among immigrants has little impact on the population ageing.) On the other hand, the effects on population ageing of fertility and life expectancy trends in the next few years will be considerable but mostly delayed for 25 years given the relatively younger age structure of the migrant population. McDonald and Kippen thus conclude that substantial population ageing will inevitably occur over the next few decades.

Whatever the pace of change in population ageing, the projections suggest that the nature of consumption and demands for services will change, with health and aged care services increasing, and those geared towards children declining.

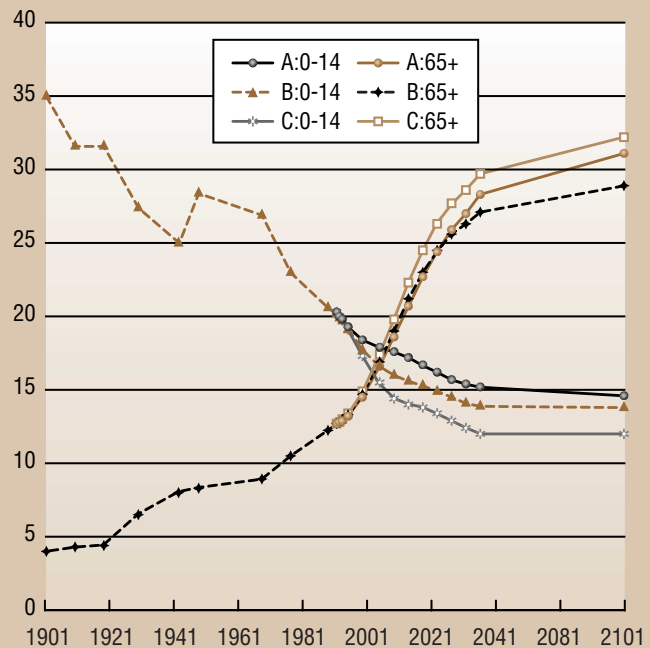
An important question relating to these trends is whether or not there will remain a sufficient labour supply to support the elderly, taking into account the fact that the proportional representation of the other main dependent group (those too young to work) is shrinking. However, the ratio of the labour force to total dependents oversimplifies the issue. For instance, technological advances may improve labour productivity (McDonald and Kippen 1999a), and even if they were the same size, one of the two main dependent groups – the elderly and the young – might put more pressure on the public purse than the other. Regarding this issue, the Australian Government's *Intergenerational Report* (released with the 2002–03 Budget) estimates that the net costs to the Government of an ageing population will increase.

The "working age" population is traditionally defined as 15–64 years, although in practice many of those aged 15–19 years remain in education, and workforce participation rates fall considerably after

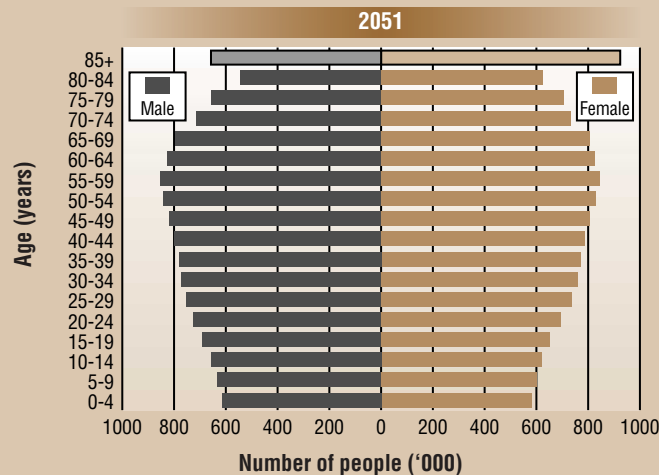
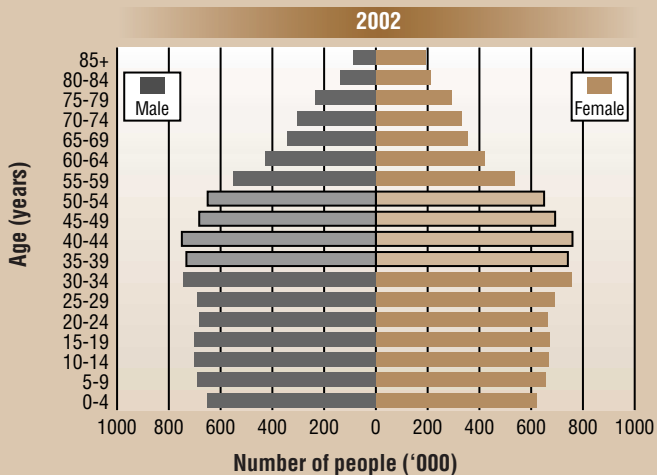
age 55. While the proportion of the population of working age is currently growing (61 per cent in 1901; 64 per cent in 1976; and 67 per cent in 2002), according to ABS projections, it will begin shrinking between 2011 and 2021 and return to around 60 per cent by 2040 (ABS 2003b; Access Economics 2001).

Largely as a function of the slowdown in labour force growth, the Australian Government's *Intergenerational Report* projects that the average growth in real GDP will fall from 3.1 per cent in the 2000s to

Figure 2 Proportion of population aged under 15 and aged 65 years or over based on three alternative sets of assumptions



Source: ABS (1997), *Australian Demographic Trends 1997*, Catalogue No. 3102.0
 ABS (2003), *Population Projections Australia 2002-2101*, Catalogue No. 3222.0
 Assumptions of ABS population projection series:
 Series A: total fertility rate = 1.8 births per women from 2011, net overseas migration = 125,000 from 2005-06, life expectancy = 92.2 and 95.0 for men and women from 2050-51
 Series B: total fertility rate = 1.60 births per women from 2011, net overseas migration = 100,000 from 2005-06, life expectancy = 84.2 and 87.7 for men and women from 2050-51
 Series C: total fertility rate = 1.40 births per women from 2011, net overseas migration = 70,000 from 2005-06, life expectancy = 84.2 and 87.7 for men and women from 2050-51



Source: ABS (1997), *Australian Demographic Trends 1997*, Catalogue No. 3102.0.
 ABS (2003), *Population Projections Australia 2002-2101*, Catalogue No. 3222.0.

1.9 per cent in the 2030s. Thus, the Government has been developing policies to encourage labour force participation, particularly amongst older Australians (Access Economics 2001).

Cultural diversity and ageing

As Jackson (2001) notes, the extent of population ageing varies for different ethnic groups, including Aboriginal and Torres Strait Islander peoples and people born overseas.

In the 2001 Census, 2.2 per cent of the population were identified as Indigenous – more than three times that in the 1971 Census. This increase derives not only from natural increase, but also from such factors as an increased propensity to acknowledge this status and improvements in census enumeration procedures (ABS 2003b). Given the relatively low life expectancy and high fertility rate of Aboriginal and Torres Strait Islander peoples compared with the total population, the former have a young age profile: 39.3 per cent were under the age of 15, compared with 20.8 per cent of the total Australian population (ABS 2003a)

Thus, although only 2.2 per cent of the population were identified as Indigenous in the 2001 Census, the latter group represented 4.1 per cent of the total population aged under 15 years, 1.9 per cent of those aged 15 to 64, and only 0.5 per cent of those aged 65 years or older.

Jackson (2001) warns that the marginalisation of Indigenous people will increase if the needs for resources of a youthful population are not recognised in the context of an ageing population. At the same time, the ABS notes that the number of older Indigenous people is increasing rapidly, thereby increasing the need for services for this segment of the population (many of whom live in highly disadvantaged areas).

Like the Indigenous population, some of the overseas-born sub-populations have a relatively young age profile, while others have a relatively old age profile – trends that result from the different waves of immigrants from different countries over the years. The Australian population has changed dramatically in terms of cultural background since World War II, from an almost exclusively Anglo-Celtic background to one of the most ethnically diverse countries in the world.

For example, around three quarters of settlers who arrived between 1959 and 1970 came from only seven countries – the United Kingdom, Ireland, Italy, Yugoslavia, Greece, Germany, and the Netherlands. By contrast, the most common birthplaces of settlers arriving in the 1990s were New Zealand, followed by the United Kingdom, Hong Kong, China, Viet Nam, the Philippines and India, and they accounted for around half of the settlers who arrived in the period (DIMA 2001).

Given the changes in main source countries over the years, coupled with a tendency for most immigrants to be relatively young on arrival, immigrants from different countries are differentially represented

in older and younger age groups. According to the 2001 Census, 6 per cent of the overseas-born aged 65 or over and 18 per cent aged under 45 were born in Hong Kong, China, Viet Nam, the Philippines or Malaysia. The median ages for these groups ranged from 33 (for those from Hong Kong) to 40 (for those from China). On the other hand, 36 per cent of the overseas-born aged 65 or over and only 20 per cent of those under 45 years old were from the United Kingdom and Ireland, while 21 per cent aged 65 or over and only 4 per cent aged under 45 were from the Southern and South-Eastern European countries of Italy, Greece, Croatia and Yugoslavia. Indeed, the median ages of those born in Italy and Greece were 62 and 59 years respectively in 2001, while those for Croatia and Yugoslavia were 54 and 49 respectively.



Among the immigrants who are now 65 years or older, many of the women have difficulty communicating effectively in English because they stayed home to raise their family, while the men often learned English in their workplace (Hugo 1998, cited in Jackson 2001). Thus, aged care services need to cater for language and other culture-specific needs of these sub-groups entering old age. But as Paice (2002) points out, while some cultures adjust more readily to the “mainstream culture” than others, subsequent cohorts of immigrants are less likely to experience difficulties in communicating in English when they enter old age, given the growing emphasis on “skilled migration”. (See Thomas on older immigrants elsewhere in this edition.)

Regional diversity

Differences in Australia's states and territories in fertility and mortality rates, and also in internal and international migration, have resulted in quite different trends in the size and profile of people living in these areas. South Australia and Tasmania have the highest concentration of people aged 65 and over (14.8 per cent and 14.0 per cent respectively) while the Northern Territory had the youngest age profile (only 3.9 per cent were 65 and over).

Thus, markedly different projections have been made regarding the age profile of populations in some of these states/territories. According to ABS projections (Series B), natural decline (excess of deaths over births) will be experienced first in Tasmania (between 2021 and 2026) and South Australia (between 2026 and 2031), but not within the next 50 years in the Northern Territory. By 2051, the proportions of the population aged 65 years and older in Tasmania and South Australia will be more than twice that of the Northern Territory (32–34 per cent and 31–34 per cent for Tasmania and South Australia respectively compared with 12–14 per cent for the Northern Territory).

Thus, the social and economic implications associated with population decline and high concentrations of older people are clearly pressing

increasing emphasis on targeting young skilled migrants with sound language skills, and the labour market outcomes of recently arrived migrants have improved (Bridge 2001; Ruddock 2000).

These life course trends indicate that future cohorts of older people will be characterised by considerable diversity in backgrounds, workforce experience, and opportunities for familial support. Some of these factors are likely to have conflicting effects on the financial viability and opportunities for support for future older Australians.

The following discussion outlines some of the implications of these trends for the financial well-being of older people, their living arrangements, opportunities for familial support, and likely contributions from them.

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matters for South Australia and Tasmania. In addition, McDonald and Kippen (1999a) point out that there are higher concentrations of older people living in declining country areas where services are being withdrawn and in coastal areas.

Older Australians and their families

In order to understand the implications of these trends for future older Australians and their families, we need to take into account the family-related experiences of those entering old age.

Australia's changing population profile has taken place amidst a number of interacting changes occurring within the family unit itself. Since the 1970s, young adult children have increasingly remained dependent on their parents, couples are delaying marriage, and marriage rates have fallen. While rates of divorce have fluctuated in recent years, cohabitation has become increasingly prevalent but is now more likely to end in separation and less likely to end in marriage than in the past. There has also been a rise in the proportion of adults living without partners, partly as a result of divorce and the breakup of cohabitating relationships, and, as noted earlier, increasing proportions of couples are having few if any children. Women are also having their first child at an increasingly older age (de Vaus, forthcoming).

Work patterns have also changed dramatically over the last few decades. Women have increasingly remained in the workforce, although this trend has recently leveled out for those aged 20–45 years. By contrast, the labour force participation of men aged 50 or more years fell and then leveled out (ABS, *Labour Force*, various years).

Furthermore, migrants have lower labour force participation rates for all age groups except 45–54 years, with those born outside the main English-speaking countries having persistently high unemployment rates (Bridge 2001). Nevertheless, as noted above, the Australian Government has placed

Financial wellbeing: a mixed picture

Whiteford and Bond (2000) point out that many competing factors will influence the financial circumstances of future older Australians. Trends suggesting a favourable financial outlook for future older people include higher real salaries, more widespread superannuation coverage, greater housing wealth, and increasing labour force participation of women.

Furthermore, according to Access Economics (2001), if increasing proportions of older people extend their work life to help meet future labour supply needs, then personal financial risks linked with early retirement will be avoided.

On the other hand, Whiteford and Bond (2000) also note trends entailing adverse financial effects – for example, increasing wage inequalities, the large number of men who are already “early retirees”, and the increasing number of sole-parent families. These authors point out that:

- older women who are divorced, separated, or who have never married, tend to have lower incomes and fewer assets after retirement than couples or men;
- the trend for families to have fewer children may be more than offset by the higher costs of supporting these children through tertiary education; while
- the trend for women to have babies later in life often disrupts their careers and delays the asset-building process (although it should be noted that women who have had children at younger ages are also likely to have experienced associated career disruption and delays in asset building).

A relatively high proportion of people from non-English-speaking backgrounds will have limited financial resources given their relatively low labour force participation rates. However, their adult children appear to be more committed than other adult children to helping their parents financially, and

may thus help to shoulder the burden if they can (Batrouney and Stone 1998).

Living arrangements and general support for older people

Families are by far the most significant sources of care for the elderly, with women in particular providing such care (Wolcott 1997). According to the Australian Institute of Health and Welfare (AIHW 2000) spouses predominate as principal carers for the elderly. Different demographic trends will have opposing effects on the level of care provided by spouses and other family members. If health permits, opportunities for spousal support for some people will increase, given the narrowing gap between men's and women's life expectancies. But as Jackson (1998) points out, the combination of those who are single through divorce and the widowed population will result in the proportion of older people living alone increasing as the baby boomers enter old age.

After a spouse, adult children are the next major form of support for the elderly (McDonald and Kippen 1999a; Millward 1998), and ageing parents from non-English-speaking backgrounds are more likely than other ageing parents to live with their children and thus receive everyday support – a trend that is likely to continue if the stated intentions of children are realized (Batrouney and Stone 1998).

Once again, different demographic trends have opposing effects on opportunities for support from their children.

Contributions of older people

While a great deal of research and policy has tended to focus on social, physical and financial difficulties that older people may face, there has been a growing emphasis on the need to acknowledge the positive potential experiences of older people (Bishop 2000; Rowland 2003). Thus the notion of a *Third Age* was coined, starting with the development of “universities” or learning programs run by and for older people (called *Universities of the Third Age*), and now being considered more generally as a post-retirement-age period of personal achievement and fulfilment (Rowland 2003).



While older people continue to increase in both absolute and relative terms in the coming decades, it is important that the needs of young families, including those of families with different cultural backgrounds, not be overlooked by policy makers as “grey power” increasingly occupies centre stage.

First, McDonald and Kippen (1999a) report that, over the next few decades, the chances of older people having surviving children will be greater than for current or all previous generations of older people, but increases in family breakdown can lead to loss of opportunities for such support. Research by Millward (1998) suggests that divorced people, along with those who have remarried, are less likely than other parents to receive any kind of support from their adult children – a trend that is particularly likely for fathers. In addition, Rowland (2003) points out that, with the global economy, many parents will remain “functionally childless” as their children pursue jobs overseas.

Further down the track, current increases in childlessness and restrictions on family size mean that there will be few if any children to provide or share the load when those of childbearing age today reach old age. Given that childlessness increases the chances of placement in institutional care in old age (Rowland 1998), these different forces may well increase the demand for such care.

Although older people are more likely to have disabilities than younger people (AIHW 2000), Rowland (2003) points out that only a small proportion of people aged 65 and over have “profound” handicaps (defined as those who always require personal assistance or supervision with self-care, mobility and communication). He uses the experience of profound handicaps as a proxy for the *Fourth Age*, characterised by “true dependency and decrepitude” (p. 244). In 1998, 35.6 per cent of those aged 80 years and over had a profound disability, compared with 5.7 per cent of those aged 65–74 years.

Various studies suggest that people in their 60s and early 70s tend to be in good health and to lead productive lives (see articles by de Vaus, Gray and Stanton, and by Qu and Weston in this edition of *Family Matters*) and are likely to provide more practical support to their families than they receive (McDonald and Kippen 1999a; Millward 1998). Thus for several years, the “baby boomers” who will begin to turn 65 in 2011 will represent a large group of “older” potential contributors to their families

and communities. However, their contributions to their families may be affected by other factors such as extended labour force participation.

Conclusion

The above-mentioned research into intergenerational exchange highlights the continuing importance of families as providers (and receivers) of support. The ability of families to play a pivotal role in enabling Australia to meet the challenges of its ageing population will require the development of strong partnerships between government, business, various levels of the community, and families.



This partnership will need to be directed not only at supporting the frail elderly, but also at facilitating “healthy and active ageing” well before and after the age of 65, thereby enhancing the chances of older people experiencing that potentially productive, enjoyable and fulfilling period in life called the *Third Age*.

Finally, as Mackay (2001) says: “We are beginning to acknowledge the implications [of the shift in the age distribution] for older people, but we seem reluctant to imagine what it will be like for the children born into a society where, by the middle of this century, 25 per cent of the population will be over the age of 65.”

While older people continue to increase in both absolute and relative terms in the coming decades, it is important that the needs of young families, including those of families with different cultural backgrounds, not be overlooked by policy makers as “grey power” increasingly occupies centre stage.

References

- ABS (various years), *Labour Force Australia*, Catalogue No. 6203.0, Australian Bureau of Statistics, Canberra.
- ABS (2001), *Year Book Australia 2001*, Catalogue No. 1301.0, Australian Bureau of Statistics, Canberra.
- ABS (2003a), *Census of Population and Housing, Ageing in Australia*, Catalogue No. 2048.0, Australian Bureau of Statistics, Canberra.
- ABS (2003b), *Population Projections, Australia 2002-2101*, Catalogue No. 3222.0, Australian Bureau of Statistics, Canberra.

- ABS (2003), *Births Australia*, Catalogue No. 3301.0, Australian Bureau of Statistics, Canberra.
- Access Economics (2001), *Population Ageing and the Economy*, Australian Government Department of Health and Aged Care, Canberra.
- AIHW (2000), “Disability and ageing: Australian population patterns and implications”, Australian Institute of Health and Welfare, Canberra. Online.
- Batrouney, T. & Stone, W. (1998), “Cultural diversity in family exchanges”, *Family Matters*, no. 51, pp. 13-20.
- Bishop, B. (2000), *The National Strategy for an Ageing Australia: Attitudes, Lifestyle and Community Support*, Discussion Paper, Commonwealth of Australia, Canberra.
- Booth, H. & Tickle, L. (2003), *The Future Aged: New Projections of Australia's Elderly Population*, Working Paper in Demography No. 90, Research School of Social Sciences, Australian National University, Canberra.
- Bridge, R. (2001), “Migrants in Australian labour market: Some trends and developments”, *People and Place*, vol. 9, no. 1, pp. 51-60.
- Commonwealth of Australia (2002), *Intergenerational Report 2002-2003*, 2002-2003 Budget Paper No. 5, Canberra.
- DIMA (2001), *Immigration: Federation to Century's end*, Australian Government Department of Immigration and Multicultural Affairs, Canberra.
- Hugo, G. (2001), “Centenary article: A century of population change in Australia”, in *Year book Australia 2001*, Catalogue No. 1301.0, Australian Bureau of Statistics, Canberra.
- de Vaus, D. (forthcoming), *Diversity and Change in Australian Families: A Statistical Profile*, Australian Institute of Family Studies, Melbourne.
- Jackson, N. (1998), “Demographic compression and its implications for familial self-reliance”, Paper presented at Changing Families, Challenging futures, 6th Australian Institute of Family Studies Conference, Melbourne, November.
- Jackson, N. (2001), *The Policy Maker's Guide to Population Ageing: Key Concepts and Issues*, Australian Government Department of Family and Community Services, Canberra.
- Jones, G. (1997), *An Australian Population Policy*, Research Paper 17, Department of the Parliamentary Library, Canberra.
- Katter, B. (2002), “Populate or perish still Australia's motto”, *Australian Financial Review*, 19 May.
- McDonald, P. & Kippen, R. (1999a), “Ageing: The social and demographic dimensions”, Paper presented at the Policy Implications of the Ageing of Australia's Population Conference, Melbourne, March.
- McDonald & Kippen (1999b), *The Impact of Immigration on the Ageing of Australia's Population*, Australian Government Department of Immigration, Multicultural and Indigenous Affairs, Canberra.
- McDonald, P. (2002), “Australia's population futures”, Paper presented at the DIMIA Migration Benefiting Australia Conference, Sydney, 7-8 May.
- Merlo, R. & Rowland, D. (2000), “The prevalence of childlessness in Australia”, *People and Place*, vol. 8, no. 2, pp. 21-32.
- Millward, C. (1998), *Family Relationships and Intergenerational Exchange in Later Life*, Working Paper No. 15, Australian Institute of Family Studies, Melbourne.
- Paice, J. (2002), “Living arrangements and ethnicity of Australia's older population”, Populations of New Zealand and Australia at the millennium: A joint special issue of the *Journal of Population Research and the New Zealand Population Review*, September, pp. 159-168.
- Rowland, D. (1998), “Consequences of childlessness in later life”, *Australasian Journal on Ageing*, vol. 17, no. 1, pp. 24-28.
- Rowland (2003), “An ageing population: Emergence of a new stage of life?”, in S. Khoo and P. McDonald, (eds) *The Transformation of Australia's Population: 1970-2030*, University of New South Wales Press, Sydney.
- Ruddock, P. (2000), “The public policy dimensions of population”, Paper presented at the Australian Centre for Population Research, Australian National University, 11 October.
- Whiteford, P. & Bond, K. (2000), *Trends in the Incomes and Living Standards of Older People in Australia*, Department of Family and Community Services, Canberra.
- Wolcott, I. (1997), “The influence of family relationships on later life”, *Family Matters*, no. 48, pp. 20-26.

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