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‘More than just play dough’—a preliminary assessment of the contribution of child care to the Australian economy

Jay Martin¹

Child Care Policy and Planning Branch, Department of Family and Community Services

1. Introduction

High quality child care contributes to society through promoting children’s growth and development. It can be particularly helpful in assisting disadvantaged children to overcome some of the barriers they might face. It also helps parents to better respond to the needs of their children by offering periods of respite, as well as the opportunity to combine parenting with other responsibilities.

In addition, child care makes a substantial contribution to the national economy. It does so not only by producing a service that others buy, but also by supporting parents, particularly those with young children, to participate in society in a range of ways. For the vast majority of parents currently using child care, participation involves work. In this way, the value of the sector is not only what it produces, but also what it supports others to produce.

In 2002 in Australia, around half of all children in the 0 to 11 age group used care, a total of around 1.5 million children (Australian Bureau of Statistics (ABS) 2003). The skills and experience of the parents of these children obviously represent a considerable economic and social resource to the community, much of which would be unavailable to employers for substantial periods of time if child care was not available. Therefore, one of the major contributions that child care makes is to enable the ‘nation’s pool of talented and skilled parents to engage in the formal economy’, as MCubed noted in 2002. This places it among the essential infrastructure of a society, such as transportation, telecommunications or education, without which a range of economic activities would not be possible.

Taking account of the above, expenditure on child care could be considered as an enabler of economic capacity rather than merely a social outlay, and a prudent investment in creating economic opportunities and activity (Smart Start 1999). This paper attempts to quantify the value of this activity.

2. Measuring the value of child care

Detailed methodologies for the derivations of all figures in this paper are presented under the 'Methodological notes' section. This section outlines some of the high level theoretical decisions made regarding how an assessment of the value of child care could, and should, be carried out.

When considering the value of the child care sector, and the return that is generated from government investment in care, the ideal benchmark for comparison would be what would have happened in the absence of government funding of child care. Were the change from this benchmark to be measured, we would know who would not otherwise have worked, and what hours would not otherwise have been worked. This could be said to be the value attributable to government funding. This is not what this paper has attempted to do, because of the large number of assumptions that would have had to be made, and the fact that data to base these assumptions on are not currently available.

Instead, this paper starts with the assumption that the total value of the income able to be attributed to child care use is the sum of the income earned by child care users. While there are numerous qualifications to this assumption, it is still a rather simplistic foundation. However, a number of papers have chosen a similar starting point (for example, MCubed 2002; Anstie et al. 1988) as it, nonetheless, provides a place to begin.

There are a number of problems with this starting point. In practice, there are a number of substitution effects at play. First, if parents using child care no longer worked, other workers who did not need child care could step in and take their place. Second, in the absence of formal child care, many parents would be able to make alternative arrangements for care. Third, if parents did not have access to formal approved care, they may use informal care (neighbours, relatives) instead. This paper does not attempt to measure the magnitude of these effects, and in doing so will overestimate the income and value attributable to the formal child care sector.

However, there are offsetting issues. In the past 10 years, there have been large shifts away from informal towards formal care.² We have also witnessed large increases in the workforce participation rates of older women, which have been growing more than four times as fast as those of women of child-bearing age.³ While it is true to say that child care users substitute for other workers, formal child care also allows others who would otherwise have been informal carers to work. The value of this should also be taken into account when estimating the value of child care although, again, it has not been included here. This omission biases these estimates downwards.

The value of the income earned by the parents does not end with them, but rather has flow-on multiplier effects throughout the economy. Including induced effects, as most other studies have done,⁴ would increase the estimated value of the income supported by child care substantially. However, multipliers were not used here.⁵

This paper only considers child care in approved child care services, for which Child Care Benefit would be payable. This effectively excludes all children who are cared for informally. ABS figures from 2002 suggest that one-third of all children aged 0–11 are cared for informally, whether solely or in combination with formal care.⁶ By only considering a part of the industry, this paper effectively underestimates the total value and contribution of ‘child care’ to the economy. However, this paper aims to establish the contribution of the ‘formal’ child care industry to the economy, rather than the less formal arrangements that will always be made. While informal care can attract some Australian Government support, it is a relatively small amount and it is excluded here.⁷

Many parents who use formal child care also use other, unpaid forms of care or flexible work arrangements and, thus, their entire income cannot be attributed to their formal child care use.⁸ This paper discounts the total value of the income to account for this, although only an estimate of the actual magnitude of this effect can be made.

A number of assumptions also needed to be made to compensate for data that are not available. Data may subsequently become available that expose errors in these assumptions; some readers may consider the assumptions made here to be either too generous or overly conservative. Given the need to make some assumptions and to provide a measure of transparency, justifications for most of the figures used here are provided in the ‘Methodological notes’ section.

In addition to directly supporting parents to work, child care makes a number of less easily quantified contributions to the Australian economy and society in both the short and long-term. These are summarised below. While also of significant value to the community, this paper does not analyse these contributions in any detail, nor attempt to estimate their value. In doing so, however, it is acknowledged that this study will undervalue the full contribution and value of child care to Australian society and the economy.

First, child care contributes to the value of the future workforce through promoting the social and intellectual development of the children who use high quality care.⁹ There is evidence that high quality child care can improve outcomes for children in later life, particularly those from disadvantaged backgrounds. For this reason, child care will also have a positive effect on the economy through enhancing the future productivity of many of the children who attend high quality programs.¹⁰ Second, high quality child care as early intervention in children’s lives makes a further economic contribution by reducing the amount of resources which may be required in other areas, such as in the health, legal or welfare areas, if it prevents or lessens any possible future dealings children may have with these services in later life (for example, Yoshikawa 1995).

Child care also enhances labour force productivity, as it allows employees to work without having to worry about whether their children are being appropriately cared

for. Parents with access to formal care are also less likely to need unscheduled time away from work to deal with breakdowns in care arrangements or attend to minor problems their children encounter (Smart Start 1999).

By allowing parents—principally mothers—to curtail their time out of the workforce following the birth of a child, child care also reduces the income foregone to raise children. Through facilitating continuity of workforce participation, it allows parents to maintain access to opportunities for promotion, as well as higher levels of superannuation accumulation. Child care also allows parents to undertake further education and training, which also increase earning capacity in the long-term. In this way, current child care use not only supports parents to earn now, but also to earn more in the future.

Child care supports parents to participate in a host of activities other than work or activities that lead to work. Parents can also receive Australian Government assistance to use child care for non-work related reasons, including to undertake activities that can be difficult with small children, such as shopping, socialising or community activities. Thus, child care offers an avenue for parents to remain engaged with the community, as well as an opportunity for respite. The fact that child care allows individual's preferences to be borne out—in that parents who choose to work or undertake other activities are more able to do so—also has a value, both to the individuals and society as a whole.

In attempting to quantify the value of the outside work which child care supports, the value of the domestic work that non-working parents may undertake—including child care at home—is ignored. The implication of this exclusion is that only paid employment has 'value' to a household. In fact, home-based work, such as cooking and cleaning, also has value to the household where it is produced, although it is not generally remunerated.¹¹ Thus, the value attributable to child care should properly be discounted by the value of child care that is, in effect, no longer produced in the home. This has not been attempted here.¹²

Importantly, this paper should be understood to provide an average, rather than a marginal, assessment of returns to child care expenditure. An average assessment says something about the value of a total investment. However, it cannot be used to assert that additional investment will return additional benefits—or conversely that cutting spending will cost money. A marginal assessment would be necessary to make any such judgements.

3. The contribution of child care to the Australian economy— calculation

What do we spend on child care?

Australian Government expenditure on child care in 2001–02 was \$1646 million.¹³ The vast majority of this \$1316 million was used for Child Care Benefit (CCB), which is a benefit based on a family's income and child care use to assist parents with the cost of their child care.¹⁴ All families who pay to use formal child care are eligible to receive at least a minimum rate of CCB. Of the remaining expenditure, around \$178 million funded a range of child care support programs, including those that provide targeted assistance for families with special needs, those that support quality, and those that facilitate the provision of child care in areas where the market alone would not deliver services. As well, \$131 million was allocated to FaCS and Centrelink to administer the program.

Total Australian Government expenditure on child care (2001–02)
—\$1646 million

The value of the child care industry

As at June 2001, there were 10 050 child care services operating in Australia.¹⁵ Of these, the majority were outside of school hours services (5407), followed by private long day operators (2750) and community long day care services (1323). There were 408 family day care schemes (63 in-home care services are included in this total), 111 occasional care services and 51 other types of service.

To put a value on the total income of these child care businesses, this paper used a variety of available ABS survey data as well as a number of assumptions (see Methodological note (1) for details). Taking account of Australian Government funding, which accounts for half of the total income of the child care sector, the data and assumptions point to an estimated value of \$3030 million a year in direct income to the sector.¹⁶

Total direct income/expenditure of the child care sector (2001–02)
—estimated: \$3030 million

Value of direct employment

In 2002, an estimated 89 400 paid workers provided child care in Australian Government-funded child care services.¹⁷ An extra 4300 people assisted these services on an unpaid basis, as volunteers, work experience students, parents and trainees. About half of paid staff worked 30 or more hours a week (59 per cent in private long day care centres and 50 per cent in community based long day care centres), and around 14 per cent worked more than 40 hours per week, reflecting the relatively high incidence of part-time and casual employment in the industry.

Using a number of assumptions (outlined in Methodological note (2)), including an average wage for 2001–02 of \$18 599, the total labour cost for the industry is estimated at \$2000 million, and the total income tax payable by child care workers is estimated at \$296 million.¹⁸

Total income of child care workers (2001–02)

—estimated: \$2000 million

Total direct income tax paid (2001–02)

—estimated: \$296 million

Value of indirect income supported

The child care sector not only directly employs staff, it also supports parents who wish to work. To quantify the value of the workforce participation of these parents, data were collected on their actual incomes. A number of assumptions had to be made to compensate for data that was not available (outlined in Methodological note (3)). These assumptions included that it was only the income of the secondary earner in a partnered relationship that was attributable to child care use, and that the entire income of these parents could not be directly attributed to formal child care use, as this would often be supplemented by informal, unpaid care. The total value of the earnings attributed to formal child care use was reduced to account for this.

Using these data and set of assumptions, the value of the income of working parents who use formal child care was estimated at a total of \$8911 million in 2001–02. Using average tax rates calculated for the relevant incomes, it was further estimated that these parents pay around \$1319 million in income taxes each year.

Total indirect income supported by child care (2001–02)

—estimated: \$8911 million

Income taxation revenue supported by child care (2001–02)

—estimated: \$1319 million

Savings to government outlays

Not only do parents who use child care to work generate income and pay taxes, working parents are also eligible for less in terms of the government benefits and allowances available to assist families with children.

Using actual family incomes along with a set of assumptions (detailed at Methodological note (4)), which included that some working parents may still have been eligible for some Parenting Payment for parts of a year, calculations were applied to derive the value of the main payments which working parents may have foregone, being Family Tax Benefit (FTB) Parts A and B and Parenting Payment

(Partnered and Single). The value of the FTB foregone is estimated at \$750 million, and that of Parenting Payment at \$699 million. This gives a total of \$1449 million in government benefit outlays saved due to child care use.

Savings to government outlays (2001–02)
—estimated: \$1449 million

4. Total contribution of child care to the Australian economy

Against total Australian Government expenditure of \$1646 million in 2001–02 on child care, the annual value of the child care sector to the Australian economy, as defined and presented here, is estimated as follows:¹⁹

- ▶ total economic activity: \$11 941 million
- ▶ total income taxation generated: \$1615 million
- ▶ total value to consolidated revenue—the Government’s ‘bottom line’: \$3064 million.

In terms of the return, which the Government gets on its investment in child care, these figures lead to estimates that:

- ▶ every dollar spent on child care returns total economic benefits of \$8.11
- ▶ every dollar spent on child care directly and indirectly supports earnings of \$5.63
- ▶ a dollar spent on child care returns \$1.86 directly to the Government’s bottom line, in the form of increased taxation and reduced government outlays.

These figures are not dissimilar to the results of many international studies. Returns to the government budget, per dollar spent, have variously been estimated at \$1.56 in San Antonio, Texas; \$1.50 to \$3.00 for the United States in total; \$1.54 in North Carolina; and \$2.00 in Canada.²⁰ A 1988 assessment for Australia found a return of around \$1.55 per dollar.²¹ The differences in methodologies used, as well as the fundamental differences in the taxation, social security and child care systems in Australia and North America, mean that the figures cannot be directly compared. However, they demonstrate a clear pattern—spending on child care has consistently been shown to more than pay for itself, as it has in this paper.

While parents spend money on child care, it can be seen that they also have a substantial net gain for this investment. Specifically:

- ▶ for every private dollar spent on child care, parents are at least \$2.86 better off in disposable income terms, after accounting for income tax liabilities, government benefits foregone, and the private costs of child care which they meet.

5. Conclusion

High quality child care contributes to society in a myriad of ways. One aspect of this is the contribution the child care system makes to the economy. As an industry, it produces products and services that others buy, as well as supporting the workforce participation of large numbers of parents. In this way, it is a part of the essential infrastructure that supports the economic activity of our society.

Here, it is estimated that the return on the Australian Government investment in child care is substantial. The estimates presented here put this return at eight times the value of the expenditure allocated to it. These benefits far outweigh the private returns for parents on their own child care expenditure, although at around \$3 of disposable income for every private dollar spent, these returns are also considerable. The returns to the Government's 'bottom line', in terms of increased taxation revenue and reduced social assistance outlays alone, are estimated at \$1.86 per dollar spent—that is, child care pays for itself nearly two times over, before any of its other advantages for children and families are even considered.

These figures show the way in which expenditure on child care could be considered an investment in productive activity, rather than just a social outlay. Child care has a host of additional benefits that have not been possible to quantify here. These further add to the returns that government, the economy and society in general achieve from funding child care.

Methodological notes

(1) Child care industry—total value

In 1999–2000, the ABS quantified the value of total expenditure in the community services sector in general, as well as sub-components of this sector. This survey put the value of the child care industry to Australia’s economy at \$1061 million.²² However, this figure is an underestimate, since the data on which the figure is based only consider subset services for which the main business is providing child care. For this reason, some local government, state/territory government and school based services are excluded, as are certain services operated by charitable or other organisations whose primary business is not child care (where the child care service is not run as a separate entity).

The same ABS survey indicates that, in 1999–2000, the Government provided a total of 43.7 per cent of the operating income of the sample of services (\$463.1 million), with income from direct service provision totalling 53.9 per cent (or \$572.8 million)²³ — the remaining 2.4 per cent were derived from other miscellaneous means.²⁴ This tallies with data available through the ABS Household Expenditure Survey (HES) for 1998–99, from which can be derived the estimate that parents spent \$1129 million in this year on formal child care,²⁵ meaning that government expenditure of \$898 million²⁶ would have represented around 44.3 per cent of child care sector funding.

As government expenditure for 2001–02 is known, at \$1646 million, if the proportion of total child care sector income which this represented remained the same as for the HES and ABS Community Services Sector surveys, at around 44 per cent, the value of the industry in 2002 could be up to \$3741 million. However, total government child care funding increased with the introduction of CCB in July 2000. While fees have also risen, it is likely that there has been some increase in the overall proportion of fees met by the government since 1999. For this reason, this paper uses an estimate of 50 per cent for the proportion of the total child care funding expenditure met by government, giving a total income of \$3292 million for the child care industry. This can be verified once the ABS Community Services Sector survey and the HES are repeated. These are due to occur in 2004.

(2) Value of direct employment

In 2002, the FaCS Child Care Census²⁷ showed that a total of 89 400 paid workers were employed for the reference week of the census. In 1999, the ABS estimated the average labour cost per employee at \$17 000 per annum²⁸ (in part reflecting the relatively high incidence of part-time and casual employment in the industry). Uplifting this figure to account for inflation, this would give a total wage bill for the industry of around \$1663 million for 2001–02. This figure represents just over half of the total income of the industry (55.66 per cent of \$2988 million).

However, it is known that in 1999, labour costs accounted for around 66 per cent of the total income (or just under 70 per cent of all expenses).²⁹ As labour costs are a large proportion of child care industry expenses, this may be a more reasonable

estimate of the proportion of income used for labour. The fact that the census only counts staff in a reference week also means that it understates the total number of people employed during the year, which would explain a low total wage figure, where this is derived by multiplying the number of staff working in that week with the average wage cost per employee over a year. For this reason, this paper derives a total wage bill for the industry by assuming that labour costs account for the same proportion of total child care industry income as they did in 1999, that is 66 per cent. This can be confirmed in the next ABS Community Services Sector survey, due in 2004.

Uplifting the 1999 known average child care income to account for Consumer Price Index change produces an average annual income of \$18 599 in 2001–02. The average tax rate applicable for this personal income in 2001–02 was 14.8 per cent.

(3) Value of indirect income supported

The methodology here starts with the assumption that the total value of the income supported by child care is the sum of the income earned by the secondary earner in a couple family, or the sole parent, when they use child care. This paper then discounts the total value of this by one-third. This recognises that many parents who use formal child care may also use other, unpaid forms of care or flexible work arrangements and, thus, their entire income cannot be attributed to their formal child care use. The figure of one-third was used as approximately one-third of children using formal care also use informal care (ABS 2002).

Data were collected on the numbers of maximum rate, minimum rate, partial rate and lump sum CCB parents, by single or partnered status, along with final estimated incomes for CCB lump sum and partial rate recipients. All data relate to the 2001–02 financial year.

A number of assumptions had to be made to compensate for data that was not available. These were that:

- ▶ Half of the maximum rate recipients used child care for study, training or other activities which did not generate income, and they therefore had no private income attributable to child care use. This assumption is premised on the following—to receive maximum rate, the sole parent or both members of a couple needed to have a combined yearly income of less than \$29 857, or one partner has to receive an income support payment. Due to data limitations, it is not possible to know the actual incomes of maximum rate recipients, as those receiving an income support payment are not required to provide an income estimate. However, given that the income levels are relatively low, for a couple family it is likely that a number of maximum rate recipients are not deriving income from their child care use, but are using it to facilitate study and/or training. (The exception is sole parents receiving Parenting Payment Single, who can receive some payment, and hence maximum rate of CCB, with incomes of around \$30 000 per annum. Again, however, they are not required to report their

actual incomes to receive CCB.) For these reasons, it is assumed a large proportion of maximum rate recipients principally use child care to support study or training (or respite), rather than work, as otherwise their incomes would be too high to receive the maximum rate.

- ▶ For the remainder of recipients on the maximum rate of CCB, their total private income for FTB/CCB purposes was \$9 600 per annum (\$200 per week for 48 weeks). For the same reasons given above, the actual income earned by maximum rate recipients will tend to be quite low. This is an estimate of earnings from a part-time position at an entry level wage rate.
- ▶ For partnered parents, the secondary earner contributed 35 per cent of the total household income, and it was this earner whose workforce participation was supported by child care.
- ▶ All minimum rate single parent CCB recipients earned at least \$88 344 per annum—the minimum income to receive the minimum rate of CCB for one child, and all minimum rate partnered CCB recipients had combined incomes of at least \$132 516 (1.5 times the CCB minimum rate threshold for one child), giving a secondary earner's income of \$46 381 per annum. In practice, many families will have higher incomes than this, but many families claiming only the minimum rate of CCB are not required to provide income estimates and for this reason it is not possible to know what their actual incomes are.
- ▶ 10 per cent of the child care used by non-maximum rate payment recipients was for non-work related purposes, such as parental respite or for the benefit of the child, and as such no income was derived from this use. This is based on Centrelink administrative data which indicates around 90 per cent of all child care use is for work related purposes. Work related care, in this context, includes activities other than working, such as study/training. However, when families have an income which makes them eligible for less than the maximum rate of CCB, it is assumed that most are using care to participate economically.
- ▶ The 27 200 recipients whose income and/or marital status were 'unknown', were distributed typically.

To estimate the income taxation revenue from the total income, the average tax rate applicable to the incomes derived was applied and weighted for the presence of couple and single families. The final average tax rate derived in this way was 14.8 per cent for all parents.

(4) Savings to government outlays

All rates and thresholds for FTB and Parenting Payment relate to 1 July 2001.

The assumptions used to calculate the savings were as follows:

- ▶ The secondary earner's share of the family income was 35 per cent.

- ▶ For FTB Part B, partnered parents who used non-outside of school hours care (OSHC) had children under five and were therefore eligible for the higher rate of FTB Part B, while those who used OSHC only received just the lower rate of FTB Part B, payable where only children over five years old are present.
- ▶ All maximum rate partnered CCB payment recipients would be eligible for Parenting Payment Partnered and would not be eligible to receive FTB Part B.
- ▶ For FTB Part A, only people in the partial rate or lump sum categories would be eligible for more FTB Part A if their workforce participation decreased, as other recipients would continue to receive either the base rate or maximum rates of payment, or have no FTB Part A entitlement.
- ▶ FTB Part A families have an average of 1.8 children each, all aged under 13 years (the average family size is based on Centrelink administrative data).
- ▶ An average taper rate of 15 per cent applies for FTB Part A, as only some of the parents' additional earnings would be affected by the 30 per cent taper for the payment.
- ▶ Parenting Payment savings could be discounted by one-third, as not all child care parents would have worked for an entire year and therefore some parents would have been eligible to receive some Parenting Payment at some time during the year.
- ▶ The workforce participation rates of the primary earners would not change if the workforce participation of the secondary earner changed.
- ▶ All payment recipients meet the residency requirements of family assistance and social security payments, and the assets test for Parenting Payment.

(5) Return on investment

General note: all figures are net of the value of the original government investment—that is, this was subtracted before the returns on this investment were calculated.

- ▶ Total economic activity—defined as total (direct and induced) value of the industry plus the indirect income supported.
- ▶ Total income taxation generated—defined as income taxation revenue from child care workers plus income taxation revenue generated from total income of child care parents.
- ▶ Total value to government 'bottom line'—total value to consolidated revenue, defined as total direct and indirect taxation revenue plus savings in government outlays.
- ▶ Returns in economic benefits of each dollar of child care—defined as indirect and direct income generation, increased taxation revenue and reduced government outlays, net of original government investment.

- ▶ Total earnings supported by child care—sum of direct (child care) and indirect (parental) earnings.
- ▶ Contribution to the Government’s ‘bottom line’—value of total income taxation revenue plus reduced government outlays.
- ▶ Net parental gain for child care investment—total gain in parents’ disposable income for each dollar spent on child care, net of the value of the parents’ private contribution to child care, taxation liabilities and the value of any entitlement to government benefits or allowances foregone.

Endnotes

- ¹ The contribution of other members of the Child Care Benefits Branch to data collection and analysis, and helpful comments on earlier drafts, is gratefully acknowledged. Two anonymous referees also provided thorough and thoughtful comments. Responsibility for any errors remains entirely my own.
- ² In 1993, 38 per cent of children used informal care, and 19 per cent used formal care. By 2002, the proportion of all children using formal care had risen by 6 percentage points to 25 per cent, and the number in informal care had dropped by 5 percentage points to 33 per cent (ABS 2002).
- ³ In 1989, the labour force participation rate of women aged 55 to 59 was 32.7 per cent. By 1998, this had risen to 43.4 per cent—an increase of more than 10 percentage points, or around one-third. By comparison, the labour force participation of women of child-bearing age—25 to 34, rose from 64.7 per cent to 69 per cent, a change of around 4.3 percentage points, or 7 per cent (ABS 1999).
- ⁴ See the selected resource list referenced above for examples.
- ⁵ Earlier versions of this paper did include some multiplier effects. Following helpful discussions with Ross Chapman (Centre for International Economics), I am convinced that a multiplier should only be applied where it can be ascertained certainly that the income would not otherwise have been earned at all. I have removed multiplier effects from this analysis for this reason.
- ⁶ Child care use figures in this paragraph derive from the ABS (2003) Child Care Survey 2002.
- ⁷ Nearly 90 per cent of families using informal care do not pay to do so (ABS 2003), and support for informal care is limited to the minimum rate of CCB (43 cents an hour in 2001–02).
- ⁸ Anstie et al. (1988) also note this as an issue, also noting that the lack of data available to them at the time led to a great deal of difficulty in making reasonable estimates of its impact.

- ⁹ The quality of the care a child receives while in child care is fundamental to the degree of benefit they can obtain from it. In Australia, quality of child care is assured through a quality assurance process, in which all approved long day care services, family day care homes and outside school hours care services are required to participate to be eligible to receive Australian Government funds.
- ¹⁰ Karoly et al. (1998) studied an enriched preschool program in the United States, finding that participants' earnings at age 27 years were 60 per cent higher than those of a control group.
- ¹¹ This issue has received detailed attention in a number of publications, such as Ironmonger (1996). Ironmonger discusses a number of methods by which the value of home-based work, currently excluded from the national accounts, could be calculated. Child care is given particular attention.
- ¹² MCubed (2002) note similar methodological issues, and have a similar conclusion—'the net benefit of working mothers to the economy is the difference between the market value of the work in which they engage and the value of home production. However, existing economic models do not count "informal" activities (for example, work for which money is not paid). As a result, this report ignores the implicit economic trade-offs between employed and stay-at-home parents'.
- ¹³ Figures in this paragraph are federal Budget expenditure figures for 2001–02, sourced from the FaCS *Annual report 2001–02*.
- ¹⁴ CCB is a means tested payment that helps families with the cost of child care. The amount a family receives depends on their family income. Low-income earners—with incomes under \$29 857 per annum (all rates and thresholds refer to 2001–02 financial year)—get the maximum rate, which was \$129 per week for one child in full-time approved care. High-income earners—those earning over around \$86 000 per annum (more for families with more than one child)—are entitled to the minimum rate of \$21.70 for each child in full-time approved care. There are higher maximum rates for each child when a family has more than one child in child care. In recognition of the value of high quality child care for children's development, learning and socialisation, CCB also supports care for non-work related purposes, to a maximum of 20 hours a week for each child.
- ¹⁵ Centrelink administrative data.
- ¹⁶ Earlier versions of this paper included the value of a multiplier in this figure. See endnote 6.
- ¹⁷ All figures in this paragraph derive from the 2002 Child Care Census, conducted by FaCS. They depict the situation as at the reference week during which the census was undertaken.

- ¹⁸ A host of other taxes are also generated, including payroll taxes, stamp duties and goods and services tax. Only income taxation is considered here, as the other imposts principally accrue to state and territory governments.
- ¹⁹ See Methodological note (5) for details of definitions and calculations.
- ²⁰ In Smart Start (1999); Cornell (2002); Rohacek & Russell (1996); and Cleveland & Krashinsky (1998) respectively.
- ²¹ Anstie et al. 1988, p. 27. Note that the figures involved—a fiscal benefit of \$296.4 million against program costs of \$190 million—were a fraction of those for 2001–02.
- ²² ABS (2000), *Community Services, 1999–2000*.
- ²³ By way of comparison, a 1991 national survey in Canada found that parent fees accounted for between 55 per cent and 65 per cent of the revenue of centre based services, depending on the province (Canadian Child Day Care Federation and Canadian Day Care Advocacy Association (CCDCF and CDCAA) 1992 in Doherty et al. 1995). Doherty et al. estimate that the proportion of parent contributions has probably risen since then. In the United States, families are estimated to meet around 60 per cent of the total cost of child care. (MCubed 2002).
- ²⁴ ABS (2000), *Community Services, 1999–2000*.
- ²⁵ ABS (2000), *Household Expenditure Survey, 1998–99*.
- ²⁶ FaCS expenditure data.
- ²⁷ All figures in this paragraph derive from the *2002 Census of Child Care Services*, conducted by FaCS.
- ²⁸ ABS (2000), *Community Services, 1999–2000*.
- ²⁹ ABS (2000), *Community Services, 1999–2000*.

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Addressing mental health problems as a strategy to promote employment: an overview of interventions and approaches

Peter Butterworth^a and Helen Berry^b

^a *Centre for Mental Health Research, The Australian National University.*

^b *National Centre for Epidemiology and Population Health, The Australian National University.*

1. Introduction

There is growing recognition in the Australian community of the widespread prevalence and consequences of mental illness. Poor mental health can have a devastating impact on the lives of individuals, resulting in loss of quality of life, as well as having adverse effects on family functioning, parenting effectiveness and child development. There is also growing recognition of the economic consequences of mental illness.

This paper outlines why it is particularly important to consider mental health in the current social policy context, and provides evidence of the extent to which mental health problems are a barrier to greater levels of social and economic participation. The main aim of this paper, however, is to review and examine the effectiveness of interventions that take account of, and seek to address, common mental health problems as a strategy to promote employment. That is, investigating whether interventions that address anxiety and depression are effective in promoting employment amongst income support recipients. We outline a framework to classify different types of interventions and briefly describe interventions that are relevant to the Australian social policy context.

Mental health problems

There are many types of mental health problems, each with different characteristics and effects. Our focus is on the high prevalence, common mental health problems such as anxiety and depression. Goldberg and Gournay (1997) categorised disorders on the basis of characteristics such as prevalence, associated disability, response to treatment and likelihood of spontaneous remission. They identified the common mental health problems as a discrete category with these features—they are treatable; they are likely to result in disability; and they do not usually receive specialist treatment. Given this combination of features, we consider that there may be important economic and social gains from considering common mental health problems in the design and delivery of social welfare programs.

Anxiety and depression are widespread in the Australian community. Analysis of the National Survey of Mental Health and Wellbeing found that around 10 per cent of working-age Australians had an anxiety disorder and 8 per cent a depressive disorder in the previous 12 months (Butterworth 2003a). Anxiety disorders include social phobia, agoraphobia, panic disorder, generalised anxiety disorder, obsessive-compulsive disorder and post-traumatic stress disorder. Affective or depressive disorders include major depressive episode, dysthymia, mania, hypomania and bipolar affective disorder. The interventions and approaches we outline are also applicable to people who experience sub-clinical levels of mental health problems or psychological distress (that is, symptoms that are debilitating but do not reach the criteria for recognition as a clinical disorder).

Mental health problems and disability

The common mental health problems are sometimes considered less severe than the low prevalence ‘major’ mental disorders such as schizophrenia. However, the consequences of common mental health problems can be just as severe and disabling. Up to 20 per cent of adult Australians experience a mental disorder within a 12-month period (Andrews, Hall, Teesson & Henderson 1999) and mental illness is the leading cause of non-fatal disease burden in Australia (Mathers, Vos & Stevenson 1999). That is, mental illness is responsible for the greatest level of disability or impairment in the Australian community—over twice that associated with either cardiovascular or musculoskeletal disorders. The profile of mental illness in the community is distinct from that of other disabling conditions. Whereas the prevalence of most forms of disability increase with age, mental disorders are most prevalent in young adulthood, and less prevalent with increasing age (Henderson, Andrews & Hall 2000). Thus, the onset and impact of these disorders co-occurs with significant life stages such as the transition from adolescence to adulthood (with potentially long-term effects on educational attainment and early labour force experiences), family formation, child rearing, and career development.

Having a common mental disorder such as anxiety or depression can, therefore, impact on a person’s participation in work. For those people currently in employment, the cost of depression through absenteeism and loss of productivity is estimated to be \$3.5 billion per year (www.worcproject.com.au). Appropriate interventions and assistance can reduce this burden. Studies show that evidence-based treatment for people with depression can lead to better employment outcomes (for example, Smith, Rost, Nutting, Libby, Elliott & Pyne 2002). It may also be cost effective to provide treatment for employees with depression, with the costs of treatment considered to be less than the gains achieved through increased productivity (see Wang, Simon & Kessler 2003). The Work Outcomes Research and Cost-Benefit (WORC) Project, conducted by the University of Queensland in collaboration with Harvard University, is an Australian project examining the benefits of employers screening and treating depression in the workplace. The goal of treating previously undiagnosed depression is to

improve employee wellbeing, and reduce the cost to employers of absenteeism, staff turnover, and decreased productivity. The WORC Project is seeking to recruit employers to quantify the costs and benefits of screening and treating depression.

Similar to such interventions focusing on people currently in the workforce, improving the recognition and assistance provided for income support recipients with depression or anxiety disorders could maximise employment outcomes and increase economic and social participation. We argue that addressing mental health problems is particularly critical in the current social policy context where there are growing concerns about welfare dependency, the effects of structural ageing on the population, and the policy priority to maximise participation and productivity amongst people of working-age (for example, Commonwealth of Australia 2002; Department of Family and Community Services 2002).

Income support receipt and mental health

Extensive psychological research has shown that unemployment adversely affects mental health (for example, review by Dooley, Fielding & Levi 1996; recent papers by Dooley, 2003; Fryer & Fagen, 2003; review of longitudinal studies by Murphy & Athanasou 1999). This is recognised in economic and social policy literature (for example, Flatau, Galea & Ray 2000), including in a recent review in this journal (Ganley 2003). From a practical perspective, Croft (2002) reported that the prevalence of mental health problems among people who are unemployed has significant policy and service delivery implications for the assessment processes and programs delivered by Centrelink, Job Network members and other service delivery organisations. These are, however, complex issues and it must also be recognised that, for some people, poor mental health may be the primary reason for their unemployment and that in some circumstances employment itself may have adverse effects on mental health (see Ganley 2003).

We are not only concerned with unemployment but also other categories of welfare recipients. There is considerable evidence of the poor mental health of lone parents (for example, Hope, Power & Rodgers 1999). Ganley (2003) reviewed research on the mental health of women looking after children at home. Butterworth (2003a; 2003b) reported analysis of the Australian Bureau of Statistics National Survey of Mental Health and Wellbeing to estimate the prevalence of common mental disorders among Australian welfare recipients. He found that, whereas around 19 per cent of working-age Australians not reliant on welfare payments had experienced a common mental disorder (including anxiety, affective and substance-use disorders) in the previous 12 months, the corresponding figure for income support recipients was 31 per cent. Those identified as unemployed (34 per cent) and lone mothers (45 per cent) had particularly elevated levels of disorders.

While alarming, the increased prevalence of mental health problems among welfare recipients is not unexpected. Established risk factors for poor mental health include unemployment, poverty, low socio-economic status, and sole

parenthood (Dohrenwend, Levav, Shrout, Schwartz, et al. 1992; Hope et al. 1999; Kessler, House & Turner 1987; Sturm & Gresenz 2002). Clearly, many of these factors overlap with welfare receipt.

International welfare research has examined the prevalence of common mental health problems among welfare recipients, demonstrating results consistent with the Australian research. American welfare recipients demonstrate significantly poorer mental health than non-recipients, with estimates that between 35 and 60 per cent of recipients experience a clinical disorder or substantial symptoms (Coiro 2001; Danziger, Corcoran, Danziger, Heflin et al. 2000; Derr, Hill & Pavetti 2000; Kalil, Born, Kunz & Caudill 2001; Kalil, Schweingruber & Seefeldt 2001; Lennon, Blome & English 2001). The findings are not restricted to English-speaking countries, with the prevalence of mental disorders among recipients of a French income support payment more than five times the rate in the general Parisian population (Kovess, Gysens, Poinard, Chanoit & Labarte 1999).

In summary, many welfare recipients experience poor mental health. Mental health problems are a major cause of disability and are therefore likely to make (re)employment difficult. Much research shows that mental health problems decrease the likelihood of later employment (Danziger et al. 2000; Kessler & Frank 1997; Lennon et al. 2001). Derr et al. (2000) discuss several ways in which depression can affect a person's ability to work. These include a direct adverse effect on work behaviour, the episodic or irregular nature of the disorder limiting employment options; the side-effects of medication; the likelihood of limited work history or educational achievement; and the stigma associated with mental illness (which prevents treatment seeking and also creates employer reluctance to hire). There is also evidence from intervention research demonstrating that efforts to address mental health problems amongst the unemployed can facilitate the transition into work.

Interventions to address mental health

Interventions to address mental health problems may, therefore, be an effective approach to promote employment. Australian Government agencies already deliver services with an employment or participation focus to people with mental health problems (for example, the Personal Support Programme, disability employment assistance, vocational rehabilitation, the role of specialist Centrelink officers such as psychologists and social workers, and other programs for people who are homeless or at-risk youth). However, these services are generally targeted to those with low prevalence disorders, focus more on Disability Support Pension recipients than those in receipt of other forms of welfare payment, and do not have the coverage to assist very large numbers of clients. Thus, it remains untested whether assisting those with common mental health problems in the broader welfare population would have a positive effect on wellbeing and participation outcomes.

The United States Surgeon-General's report (Department of Health and Human Services 1999) identifies two main categories of interventions—psychosocial and pharmacological. A variety of different forms of psychotherapy exist, with interventions able to be delivered individually, or to couples, families and other groups. Group interventions have the benefit of being more cost efficient. Other relevant approaches (see the World Health Report 2001) include psychosocial rehabilitation (improving individual competencies and skills, with a focus on client empowerment and reduction in stigma and discrimination) and vocational rehabilitation.

Other interventions may also have a positive impact on mental health. For example, Jorm, Christensen, Griffiths and Rodgers (2002) identify a range of lifestyle and complementary treatments for depression with proven scientific efficacy. Effective treatments include St John's wort, physical exercise, acupuncture, massage and yoga.

The World Health Organization report *Mental health: new understanding, new hope* (WHO 2001) notes that mental health is influenced by a combination of (and interaction between) biological, psychological and social factors. The magnitude of mental health problems and their multifactorial aetiology necessitate a public health response—that is, responding to mental health needs at the population level. This includes strategies to address lifestyle and risk factors, promote stable family environments, increase social cohesion, and support positive development across the life course. Such an approach emphasises the importance of creating intersectoral links, including considering social policy issues such as housing, income support, employment, disability services, macro- and micro-economic policies, education, and criminal justice issues.

Categorising interventions for welfare recipients

As is clear even from this brief overview, there are many different responses to mental health issues. There are equally many ways to categorise these interventions. For example, the *National Action Plan for Promotion, Prevention and Early Intervention for Mental Health* (Commonwealth Department of Health and Aged Care 2000) defined a spectrum of mental health interventions reflecting prevention, treatment and continuing care.

We have adopted the typology described by Dooley and Catalano (2000), which is based on two dimensions—the timing and the level of the intervention. The timing dimension has four stages. The first, proactive primary prevention, involves steps to prevent exposure to the risk factor. The second stage, reactive primary prevention, is analogous to inoculation. It involves strategies that attempt to increase people's ability to cope with risk factors. The third stage is secondary prevention. This includes interventions that target early symptoms with the aim of preventing further progression of the disorder. Finally, the tertiary prevention stage consists of efforts to manage the disorder.

The second dimension is the level at which the intervention is targeted. Dooley and Catalano (2000) note the importance of considering the broader social structures and physical environment around the individual. There is a continuum along which interventions lie, from those that specifically target the individual through to those that target families, communities, organisations or nations. For simplicity, they dichotomise this to micro-level interventions that target the individual or family; and macro-level interventions targeting higher-order levels, though it is important to recognise that there are not strict boundaries about these levels.

Table 1, adapted from Dooley and Catalano (2000), presents the matrix of eight intervention categories created by the combination of these two dimensions. The intervention typology provides a context in which to consider interventions, encouraging a holistic approach to service delivery and policy development. We consider this table is very useful for the current analysis. It also provides a framework by which we can analyse interventions. This promotes assessment of the purpose and aims of interventions, and how they could fit within a social welfare or employment context. This helps us to evaluate and determine the appropriateness of proposed mental health interventions and approaches in the social policy context. Not all of the categories in the model are directly relevant to the social policy context, but for the sake of completeness, we will present information on the types of interventions under all headings. Further, all categories of interventions need to be considered to ensure a holistic approach to addressing the mental health needs of the Australian community, including income support recipients.

In the remainder of this paper, we will describe the activities and interventions that fit within each table cell. We start by considering the cells that describe interventions at the macro-level—that is, interventions targeted at the community or population.

Table 1 Typology of interventions and examples (adapted from Dooley & Catalano, 2000)

Stage (Timing and purpose of intervention)	Intervention level (where program is targeted)	
	Micro Individual or family	Macro Broader
1. Proactive primary prevention Preventing welfare reliance/ unemployment	Avoidance Education, training Early intervention (childhood and family)	Environmental Economic and workplace policies
2. Reactive primary prevention Preventing mental health symptoms that arise from welfare receipt	Ecological coping Coping skills and abilities Job-search skills Social skills and networks	Ecological enabling Social services—social welfare, health care, employment services Social capital
3. Secondary prevention Early intervention for those demonstrating early symptoms	Early detection/treatment Crisis intervention & support Counselling	Population health promotion Mental health promotion Mental health literacy Screening
4. Tertiary prevention Managing the disease	Medical care Medical and professional assistance Workplace support	Medical enabling Arrangements to support individual care—self-help groups, community attitudes about mental health and welfare receipt

2. Macro-level interventions

Proactive primary prevention—the environmental level

The first stage of macro-level interventions, proactive primary prevention, is characterised by activities such as setting economic, health and workforce policy and related areas of social policy. These issues are relevant to any consideration of mental health because health outcomes are heavily influenced by the socio-economic environment (Hawe & Shiell 2000). For example, absolute levels of individual income and relative deprivation (Marmot 2001) play a significant role in influencing outcomes (Baum 2000; Lynch, Due, Muntaner & Smith 2000; Wilkinson 2000).

Reactive primary prevention—ecological enabling

The second stage of macro-level interventions, reactive primary prevention, includes providing social services such as social welfare, health care and employment services, and activities aimed at strengthening communities, especially communities in need. It includes mental illness prevention activities, which are designed to remove risks and barriers to wellness (Waring, Hazell, Hazell & Adams 2000). Three areas of research are particularly relevant—social exclusion, social capital (McKenzie, Whitley & Weich 2002), and mental health promotion.

Social exclusion refers to a cluster of socio-demographic factors, such as poverty and deprivation, together with the associated inability of people experiencing such factors to access the full range of community resources that would otherwise be available. Dewilde (2003) has defined it in terms of the ‘political economy’ of the life course and, thus, as a dynamic, life-long process. Certain ecological level factors promote the likelihood of people experiencing social exclusion, such as living in remote locations (Alston, 2002) or belonging to an ethnic minority (Boydell, van Os, McKenzie, Allardyce et al. 2001). Like those living in poverty, people with mental health problems also find themselves over-represented in all areas of social exclusion (Baum 2000; Bonner, Barr & Hoskins 2002).

In Australia, the effects of exclusion are apparent in economic terms and across all forms of social participation, including contact with family and friends (Baum 2000). This is especially challenging for income support recipients with mental health problems for two reasons—because those living in deprived areas have elevated mental health service needs (Abas, Vanderpyl, Robinson & Crampton 2003; Alston 2002), together with the least access to services (Herrman 2001); and because contact with friends can reduce the risk of developing mental health problems and assist recovery (Prince, Harwood, Thomas & Mann 1998). Thus, social exclusion, mental health and income support receipt reinforce each other; the very individuals who most need access to the benefits of participation are the least likely to achieve access.

A substantial body of research details the beneficial effects on health and employment of living in communities that are rich in social capital. While this research is fraught with theoretical and methodological difficulties, and there is vigorous debate about the concept (Hawe & Shiell 2000; Henderson & Whiteford 2003; Lynch et al. 2000; Whitehead & Diderichsen 2001), there is broad consensus that social capital includes two core concepts (Putnam 2000, p21). One has to do with **participating** in the community, the networks of association that participating generates, and the quality of relationships within and between those networks. The other is the **social cohesion** that results from participating in the community—that is, the extent to which community networks bring people together and the nature of the resulting group behaviour. Social cohesion is evident in community-level phenomena such as social trust (trust in strangers), generalised reciprocity (‘the kindness of strangers’), cooperation, organisation, information sharing and other pro-social norms (for example, Portes 1998).

High levels of social capital are associated with physical health benefits and lower mortality (Kawachi, Kennedy, Lochner & Prothrow-Stith 1997; Skrabski, Kopp & Kawachi 2003) and mental health benefits (McKenzie et al. 2002; Sartorius 2003). The link between mental health and some elements of social cohesion are of particular interest because they relate to community-level wellbeing and also directly to individual outcomes. For example, in Australia, those who report higher levels of social trust also report fewer symptoms of psychological distress (Berry & Rickwood 2000). Falling levels of social trust over three generations of Australians have been linked to rising levels of psychological distress (Berry & Rodgers 2003).

Access to social capital assists in finding employment (Aguilera 2002; Caulkins & Peters 2002), including self-employment (Abell 1996). A recent Australian study of the relationship between social capital, employment status (in full-time paid work, part-time paid work, or not in paid work) and job search strategy (Stone, Matthew & Hughes 2003) conceptualised social capital using two approaches. The first was a sociological approach, in which social capital was defined as a series of key concepts, such as networks, trust and reciprocity. The second, more psychological approach, classified participants into ‘social capital types’, including the ‘social capital poor’. Networks of association and the cohesion they produce (that is, social capital) were unevenly distributed in society, with those in most need having fewest resources.

Some concepts, such as social trust and breadth of institutional ties, were important in finding and being in paid employment, and the ‘social capital poor’ were the most disadvantaged both in terms of being in paid employment and also in terms of job search strategy.

Different types and levels of social capital operate in indirect and, sometimes, counter-intuitive ways. Social capital does not always deliver public benefits, or deliver benefits equally to all community members (Foley & Edwards 1998). In some circumstances, social capital promotes economic growth, while in others it discourages growth (Woolcock 1998). Equally, high levels of social capital are sometimes associated with positive outcomes in mental health, sometimes negative (Caughy, O’Campo & Muntaner 2003). In sum, social capital, like social exclusion, is not shared evenly or randomly among all members of a community, and deficits in social capital are focused on the vulnerable. Some people’s lives can be marked by compounding problems (Robertson & Donnermeyer 1997) both in terms of social exclusion and access to social capital.

Ecological enabling can thus be an effective mechanism for limiting the likely impact of environmental risk factors, both for mental health problems in general and for the interaction between mental health problems and the requirement for income support in particular. However, such mechanisms are not always available or effective. When people have been exposed to mental health risk factors, it becomes necessary to take action to reduce the impact of these factors and to minimise the likelihood of further harm. At this point, secondary prevention becomes necessary, which is the third stage in the model. With respect to the macro-level of analysis, this involves population health promotion.

Secondary prevention—population health promotion

Population health promotion focuses on improving health outcomes by changing behaviour, reducing risks and enhancing protective factors. Mental health promotion is an umbrella term (Herrman 2001) that includes such activities as public education and awareness raising campaigns; preventive screening (Hickie, Davenport & Ricci 2002; Mechanic 1999; Scott, Thorne & Horn 2002); awareness raising among health professionals (Harris, Harris, Lee & Powell Davies 1999); community capacity building and other community-level interventions.

The growing recognition of the need for mental health promotion belies a historical lack of recognition, due in part to considerable confusion about what mental illness is (Herrman 2001). This confusion arises partly because mental health has been considered less important than physical health (Hickie 2002; Thornton & Tuck 2000). A further complication for mental health promotion is that, like social exclusion and social capital, mental health problems are unevenly distributed in terms of socio-demographic factors, life events and personal characteristics (Braidwood 2000; Herrman 2001).

Mental health promotion must address the factors that may influence the course of mental health (Herrman 2001). These include making sure communities themselves are health promoting (Baum & Palmer 2002; Herrman 2001) and that people experiencing special mental health needs have ‘somewhere to live, something to do [and] someone to love’ (Bonner et al. 2002); ensuring people have the general skills required to participate in the life of the community; and ensuring people have the specific skills of mental health—resilience and the ability to ‘... think and learn, ... and live with their own emotions and the reactions of others’ (Herrman 2001). The most important of these categories is the first (Herrman 2001)—that is, building healthy and health-promoting communities (Hawe, King, Noort, Jordens et al. 2000; Robinson & Pennebaker 2002).

Two further issues emerge in mental health promotion (Reppucci, Woolard & Fried 1999). One is less emphasis on ad hoc, simple, one-off interventions, and more on larger, multi-dimensional, multi-level approaches based on theory. The other issue emerging in mental health promotion is greater accommodation of diversity, particularly among those who belong to multiple socially excluded groups. In attempting to take account of diversity, it is worth acknowledging that neither income support recipients (Butterworth 2003b) nor people with mental health problems (Song & Singer 2001) form one homogenous group. It is interesting to note, therefore, that there are empirical approaches to profiling that are effective with welfare (Yoshikawa & Seidman 2001) and mental health issues (Rubin & Panzano 2002). Thus, it would be possible to conduct sound statistical analyses of people in receipt of income support, or experiencing common mental health problems, or both, to come to a more sophisticated understanding of the types of people that are in these categories, and what their needs are.

With respect to addressing diversity, a range of delivery strategies is necessary (Braidwood 2000; Hawe 2000; Reppucci et al. 1999), including taking interventions into multiple settings (Licata, Gillham & Campbell 2002; Secker & Membrey 2003), particularly community health care settings (Baum, Kalucy, Lawless, Barton et al. 1998).

Interventions seem to work best when several approaches are used in concert (Taylor, Lam, Roppel & Barter 1984) and successful interventions typically employ top-down and bottom-up activities (Skutle, Iversen & Bergan 2002). A range of information (Rogers 2002) and service delivery mechanisms are also required, such as innovation and experimentation in the use of technology (Farrell & McKinnon

2003; Mechanic 1999; Starling, Rosina, Nunn & Dossetor 2003); telephone counselling and crisis interventions; and the use of entertainment and information media (Anderson 2003; Taylor et al. 1984). In addition, researchers have noted the imperative for people with special mental health needs to have a say in mental health promotion activities (Herrman 2001; Hickie 2002), including negotiating service level and provision arrangements (Crane-Ross, Roth & Lauber 2000).

Tertiary prevention—medical enabling

The final stage of macro intervention involves activities that ensure that organisational arrangements are in place to support the provision of individual care. These could include putting in place systems and mechanisms to support self-help groups, providing organisational mechanisms for changing community attitudes about mental health and welfare receipt, or ensuring appropriate programs are in place to address the mental health needs of income support recipients.

3. Interventions and approaches at the micro-level

Despite evidence of the high prevalence of mental health problems among income support recipients and the extent to which this acts as a barrier to participation, there are very few interventions that specifically target people's mental health needs as a strategy to facilitate employment (Creed, Machin & Hicks 1999; Harris, Lum, Rose, Morrow et al. 2002; Proudfoot, Gray, Carson, Guest et al. 1999). In a review of over 50 European examples of good practice in interventions focusing on mental health and employment, Ozamiz, Gumplmaier and Lehtinen (2001) noted that few had the explicit primary goal of improving mental health and wellbeing as a strategy to promote employment, although many programs reported improvements in wellbeing and psychological functioning as an unintended or secondary consequence. With few exceptions, it was only programs targeted to people with low prevalence psychiatric disorders that had the primary goal of addressing mental health problems. However, Ozamiz et al. (2001) concluded that early intervention and preventative activities with a focus on mental health were highly cost effective, and recommended more emphasis be placed on such projects in the future.

In the following sections, we review interventions that focus on the individual (micro-level interventions) that are potentially applicable to the Australian social policy context. Again, we utilise Table 1 as a framework and consider interventions within each stage of intervention (each cell of Table 1) in turn.

Proactive primary prevention—avoidance

Proactive primary prevention initiatives include early intervention, family/ childhood programs, and quality education. Such approaches are often so distant from the actual experience of unemployment or welfare dependence that it

difficult to recognise or quantify their impact. However, if the health and social costs of unemployment and welfare dependence were included in cost/benefit analyses of such economic policies and options, the development of interventions to address these issues would be taken more seriously (for example, Dooley & Catalano 1999; Harris, Webster, Harris & Lee 1998; Harris and Morrow 2001). Similarly, analysis of the long-term health and social benefits of proactive primary prevention strategies need to be considered when assessing their cost effectiveness. For example, the Australian Society for Health Research (Access Economics 2003) recently produced a report discussing methodologies to quantify the impact of health interventions and demonstrated stunning returns on investment in health research and development.

Reactive primary prevention—ecological coping

The aim of stage-two micro-level interventions, reactive primary prevention, is to intervene immediately after, or in anticipation of a stressor. This may involve strategies targeting recently redundant workers, young people making the transition from study into employment, or those with caring responsibilities for children, the frail aged or people with a disability. This stage of intervention is most directly applicable to this review, encompassing programs and services that are readily situated within a social welfare or employment context. As such, we provide detailed discussion of these interventions.

The interventions grouped under this heading promote the personal and social resources or capacities that have been shown to attenuate or moderate the distressing effects associated with unemployment or welfare receipt. Research has investigated the effect of personal and psychological characteristics, coping strategies, and cognitive style on the health of people who are unemployed. Turner, Kessler and House (1991) examined how social support, self-concept, and cognitive coping processes moderate the effects of unemployment on mental health. Unemployed people who had access to a confidant, were integrated into informal social networks, had high self-esteem, and/or who avoided self-denigrating thoughts experienced less adverse psychological (and physical) outcomes than did those without these characteristics.

In addition, research in the United States has found that the association between welfare receipt and depression may be moderated by a person's sense of mastery (Danziger et al. 2001); exposure to significant life traumas (Coiro 2001; Danziger et al. 2000); sense of burden or indebtedness (Danziger, Carlson & Henley 2001); hopelessness (Petterson & Friel 2001); and lack of social support (Kalil, Born et al. 2001).

On the basis of this type of information, interventions can be designed that target the characteristics that may be the causal factors, moderators or mediators of the relationship between unemployment (or welfare receipt) and health.

Caveats

We emphasise that the types of interventions we are discussing do not provide a solution to the problems of unemployment or welfare dependence. We have sympathy with criticisms of interventions that focus on the psychological barriers of those who are unemployed, without acknowledging that unemployment is socially-determined, and requires a social solution (for example, Fryer 1999). That is, a comprehensive response to the problems associated with welfare dependence must address underlying structural and societal causes (and draw on approaches and strategies from all cells of the typology described in Table 1). From this perspective, interventions seeking to promote coping, resilience and enhance job search skills, but which fail to address the underlying issues responsible for unemployment, can be considered harmful. Indeed, they may raise expectations in a situation in which repeated failure is likely—a key risk factor for hopelessness and depression. Further, the focus of such psychological interventions on the individual potentially locates responsibility for the cause of the problem entirely with the individual and not broader society. The psychological approach alone also fails to take account of the demand side or broader economic policies. While building personal capacity and resources may promote employability at the individual level, it does not increase job availability and potentially involves churning misery (see discussion by Fryer 1999). It also does not take account of variables such as the economic cycle, different needs within different communities, or the different needs and experiences of different types of job seekers (see Dooley & Catalano 2000; Fryer 1999).

However, like researchers such as Creed (1998), Dooley and Catalano (2000) and Harris et al. (1998), we consider that psychological interventions have a role in the employment context, by promoting the health and wellbeing of welfare recipients, facilitating employment outcomes, and reducing social exclusion and isolation. Addressing mental health problems through social policy initiatives complements the health system approach (WHO 2001). It must, however, be placed within a context that recognises its limitations and advocates for broader and more wide-ranging solutions to the issue of health inequalities and more expansive discussion about the nature of work.

The sub-sections that follow provide a reasonably extensive discussion of five different interventions under the reactive primary prevention heading that have proven effectiveness and are, in our opinion, worth further consideration and evaluation in the social policy context. These include interventions based on cognitive behaviour therapy (CBT), improving self-efficacy, providing social support, adopting multiple-methods, and improving mental health literacy.

Changing explanatory style—cognitive behaviour therapy

Cognitive behaviour therapy targeted at people who are unemployed is one example of an employment-focused intervention that incorporates psychological principles and practices. Morrow, Harris and Harris (1999) provide an overview of

CBT in an employment context. Cognitive behaviour therapy teaches more adaptive, less negative ways of thinking about oneself, the world and the future. It emphasises the importance of cognitive processes, by demonstrating that people's thoughts determine their perceptions of, and feelings towards life events, and this determines behaviour.

Cognitive behaviour therapy has long-term benefits as it teaches strategies and techniques that improve coping abilities, and is relevant for people who do not exhibit clinical levels of mental health problems and for children. While CBT is generally delivered one-on-one in clinical practice, it can be delivered in group settings and use alternative modes of delivery (for example, via computers and self-help books).

Creed and Machin developed a CBT program for unemployed youth to improve their mental health and psychological functioning, and to help them develop skills to better deal with future problems. Evaluation showed that, immediately after the program, participants had improved levels of wellbeing, decreased psychological distress, improved self-esteem, and improved levels of coping (Creed et al. 1999). More importantly, these benefits were maintained four months later, suggesting the program did provide participants with strategies that helped them to deal with the stressors associated with unemployment. However, participation in the program did not have any effect on employment outcomes.

Proudfoot and colleagues in the United Kingdom provide another example of the use of CBT in an employment context, this time with unemployed professionals (Proudfoot, Guest, Carson, Dunn et al. 1997; Proudfoot et al. 1999). Compared to a control group, the CBT group demonstrated greater improvements in dealing with distress, and higher self-esteem, job seeking self-efficacy, life satisfaction and motivation for work. Again, most of these differences were maintained over a three- to four-month period. This study demonstrated substantial improvement in employment outcomes, with 49 per cent of the CBT group employed compared to 28 per cent of the control group.

There have been, however, some less successful implementations of CBT (for example, Harris et al. 2002; Machin & Creed 2003), perhaps due to inadequate implementation of the CBT intervention. Interventions for very disadvantaged groups (such as those in the study by Harris) may need to be more individually tailored, conducted at a slower pace, or include more behavioural, concrete activities.

To improve cost effectiveness, CBT can be delivered using self-help approaches, such as through books and manuals or by computers (Bower 2002). Proudfoot, Goldberg, Mass, Everitt et al. (2003) demonstrated the effectiveness of a computerised CBT interactive multimedia program within a general practitioner (GP) context compared to usual treatment (see Christensen & Griffiths 2002, for an Australian example). It is possible with very disadvantaged groups that facilitated self-help (Kupshik & Fisher 1999), whereby someone (not necessarily a

professional) assists by working through the self-help materials with the participant, could overcome some of the limitations of this approach with very disadvantaged groups.

Targeting self-efficacy and mastery

The JOBS Program is another preventative intervention designed to promote coping skills and address the mental health needs of people who are unemployed (Caplan, Vinokur & Price 1997). This intervention aims to improve participants' job search strategies and build job search skills. The training seeks to increase job search self-efficacy (participants' belief in their capacity to succeed in searching for a job); sense of mastery and control; and ability to resist demoralisation in the face of failure (inoculation against adversity). Large-scale evaluations of the JOBS Program have been conducted in the United States.

At one- and four-month follow-up periods, unemployed program participants had more confidence in their job search abilities, greater self-efficacy, and lower levels of depression than those in the control group (Caplan, Vinokur, Price & van Ryn 1989). Program participants also demonstrated superior employment outcomes. After four months, 54 per cent had found employment compared to 29 per cent of the control group. Further, participants had obtained superior quality jobs (for example, higher earnings, more consistent with career goals, more satisfaction). In a two-and-a-half year follow-up, participants reported less time out of work, fewer work transitions, and continued greater earnings (Vinokur, Price & Caplan 1991). The program was highly cost effective, with the individuals' increased earnings and tax returns significantly exceeding costs. The financial benefits of program participation were estimated to increase substantially across the life span (Vinokur, van Ryn, Garmlich & Price 1991).

Social support

Within the unemployment literature there is evidence that social ties, such as contact with friends and family (Bolton & Oatley 1987; Kasl & Cobb 1979), reduce the effects of unemployment on psychological wellbeing. A number of employment interventions, therefore, have been designed to improve social support as a strategy to promote positive mental health. Trials have included support group interventions, one-to-one support, and strategies to enhance natural networks. In one study, Harris, Brown and Robinson (1999) assessed the effect of 'befriending' on depressed women in a disadvantaged urban setting in the United Kingdom. Female volunteers acted as a friend for the depressed 'patients'. Results showed that women participating in the intervention demonstrated significantly greater rates of remission from depression. CRS Australia has recently considered the applicability of this type of approach to the Australian social policy context (Peart 2003).

Among Australian examples is a small-group mentoring program established for redundant BHP workers in the Newcastle area (Pond, Shevels, Sutton, Traynor, Cotter & Taggart 2002). Small groups of men met weekly. The groups were activity-focused and group members decided the activities or projects that they would undertake. The self-directed nature of the group promoted a sense of empowerment. The outcomes from the program, which has not been rigorously evaluated, seem positive and suggest that participation may have enhanced job search activities, participation in employment, voluntary work, psychological wellbeing, and levels of social interaction.

Multi-method approach

While we have outlined a number of interventions based on different approaches, it should be recognised that all of the programs employed multiple interventions. While the JOBS Program emphasised self-efficacy, it also focused on social support and problem solving skills. The CBT intervention of Creed et al. (1999) also boosted self-efficacy and self-management, while the program implemented by Harris et al. (2002) in south-western Sydney included elements of memory training, assertiveness training, and relaxation and meditation techniques.

Building understanding, managing expectations, promoting empowerment

Providing accurate information is an important component of mental health promotion. Jorm (2000) used the term 'mental health literacy' to describe the knowledge and beliefs about mental disorders that aid recognition, management or prevention. Strategies to improve mental health literacy include not only the broad community education campaigns described under the macro-level, but also individual education courses, such as the Mental Health First Aid program (Kitchener & Jorm 2002).

Improving the mental health literacy of people who are unemployed or receiving income support may help them understand their experiences and better manage their symptoms. Increased knowledge improves the individual's sense of control and empowerment. Pond et al. (2002) noted that, more than any other session, redundant BHP workers valued information sessions on the experience of retrenchment and strategies to cope with redundancy. This was likely because such information normalised participants' experiences, making them aware that their feelings and responses to redundancy were not unique.

Kieselbach (1999) notes that one initiative used in Germany to assist people who are unemployed is to provide brochures containing information on the relationship between unemployment and health for both health professionals and people facing unemployment. Similarly, one element of the Unemployment and Health Project conducted by Harris and colleagues in western Sydney involved seminars and presentations by local GPs on the health effects of unemployment.

Summary

We have outlined a number of interventions and approaches within the reactive primary prevention stage. We believe these provide an important starting point for the development of social policy interventions that seek to address common mental health problems as a way of promoting employment. All of the approaches have a sound theoretical basis and have evidence supporting their effectiveness. Work needs to be undertaken, however, to adapt the approaches to the Australian social policy context and to evaluate their effectiveness (including cost effectiveness) and applicability to different groups of income support recipients. We now move on to consider the remaining stages of micro-level interventions—secondary and tertiary prevention.

Secondary prevention—early detection and treatment

The interventions classified under secondary prevention are those that target early management of symptoms. To some extent, the interventions listed in the previous section may also be applicable here. However, our focus is on interventions for people with demonstrated mental disorders, and on methods to improve the identification of those requiring assistance.

Identification is critical for the delivery of appropriate assistance to income support recipients with mental health needs. Identification can include informal processes which rely on the insight, knowledge and awareness of customer service staff (whether in Centrelink or employment or social welfare agencies) to notice characteristics and behaviours indicative of mental health problems (Derr, Douglass & Pavetti 2001; Derr, et al. 2000), and formal screening and assessment processes. There are two aspects of formal identification. Screening involves a short set of questions used to detect individuals likely to have mental health problems. Screening tools are inexpensive and easy to administer, do not necessarily require professional expertise to deliver or score, and are often used in medical and community settings to identify ‘at risk’ clients. Those identified via screening are referred for more detailed professional assessment. Formal screening approaches have been introduced to welfare offices in the United States (Derr et al. 2000), with over 24 states screening all recipients for mental health problems and 26 states using formal screening tools (Department of Health and Human Services 2002).

In Australia, a number of assessment processes (such as the Job Seeker Classification Instrument) are used in Centrelink to identify at-risk job seekers for specialist follow-up, but these are not specifically designed to identify clients with mental disorders. Current processes largely rely on self-disclosure (Croft 2002; Eardley, Abello & MacDonald 2001) and, therefore, depend on self-awareness and willingness to provide such personal information. As a result, many people with mental health problems are not identified and do not receive appropriate assistance. The United States experience has been similar (Danziger & Seefeldt 2002). However, the introduction of formal screening does not necessarily

overcome this limitation, as disclosure is still dependent on the environment, with trust being a critical dimension. Rosman, MaCarthy and Wollverton (2001), for example, argue that screening tests may not be effective unless they are conducted within an established relationship, in which the goals of the screening are evident and meaningful to the participant (such as identifying barriers, strengths and support needs) and the participant believes that this will result in appropriate services being provided.

There may be concern that increasing mental health literacy and improving the identification of income support recipients with mental health problems will increase demand for services. While this may be the case, increasing recognition of mental health problems is consistent with the goals of the *National Mental Health Plan* and increased demand for mental health services by people in receipt of income support could potentially be managed by current initiatives, such as those in primary care (see next section). It would, however, also be appropriate to consider the adequacy and the potential need to increase the capacity of existing employment focused programs.

Tertiary prevention—medical care

Tertiary prevention interventions are the responsibility of the health portfolio. An effective tertiary prevention strategy, however, could involve promoting targeted referral of welfare recipients to medical professionals. In part, such referral depends on identification (mental health literacy, screening and assessment), as discussed in the previous section. The work of Harris and colleagues included efforts to promote linkages and partnerships with GPs and other mental health professionals.

The Better Outcomes in Mental Health Care initiative introduced by the Australian Government is improving the delivery of mental health services by GPs. Harris and colleagues (for example, Morrow et al. 1999) have recognised that GPs manage most of the mental health problems associated with unemployment and have, therefore, sought to improve the quality of service GPs provide, including helping GPs to promote employment and reduce the negative health impact of unemployment.

Comino, Harris, Chey, Manicavasgar et al. (2000) found that GPs treated depression and anxiety among unemployed patients differently from their employed patients, and were less likely to refer unemployed patients to self-help groups, and twice as likely to prescribe pharmacological treatments. Unemployed patients with symptoms were less satisfied with the treatment they received from their GPs than employed patients, and wanted more opportunity for discussion and more explanation about medications. There seems to be a mismatch of expectations between the GP and patients, perhaps reflecting a negative bias by GPs towards unemployed patients. In qualitative research (Harris, Silove, Kehag, Barratt et al. 1996), GPs reported that unemployed patients expected

pharmacological responses and considered many unemployed patients lacked the financial, social and personal resources to benefit from more active strategies. The project conducted by Harris included ongoing training and support for GPs, raising their knowledge and awareness of unemployment issues.

Similar options exist in European countries. For example, in Norway and Denmark, people who are unemployed are encouraged to undertake regular health check-ups to promote the early recognition, detection and prevention of disorders (for example, Ozamiz et al. 2001; Ytterdahl 1999). Further, as one response to welfare reform in the United States, several states have moved to better integrate mental health services and employment programs (Derr et al. 2001; Lennon et al. 2001). One option is for payment recipients to be linked or referred to existing community mental health services. Another is for employment programs to provide funding to expand mental health services or to actively incorporate short-term mental health counselling services (Derr et al. 2000).

4. Conclusions

In this paper we have sought to provide an overview of strategies and interventions available to improve the mental health of people receiving welfare payments (or others who are not in the labour force) and which could be implemented in, or are relevant to, the social policy context.

Initially, we provided a brief overview of why this topic is important. We noted that the consequences of common mental disorders, such as anxiety disorders and depression, are generally under-estimated despite the fact that mental illness is the leading cause of disability or impairment in Australia. We also noted that Australian and international data show that the rates of mental disorders and sub-clinical psychological distress are significantly greater among welfare recipients than the rest of the population. The experience of mental illness is likely to limit income support recipients' opportunities for social and economic participation and present a barrier to their (re)employment.

To assist in mapping the range of approaches available, we presented a framework in which to categorise interventions. This framework was based on the timing (relative to the stage of the disorder) and the level (targeted to individuals/families or at the broader community) of the intervention. This approach emphasised the need not to exclusively focus at the level of the individual. Interventions which target the individual may improve their wellbeing and their coping skills and resilience and may assist them into a job, but do nothing about the underlying social and economic causes of unemployment or welfare dependence and may be counter-productive. Thus, in the review we stressed the importance of the broader context, such as macro-level policies and strategies that can potentially improve the environment so as to promote better mental

health and reduce unemployment and welfare dependency. In particular, efforts to address the mental health barriers of income support recipients need to acknowledge and address the social exclusion that many welfare recipients may experience, and the lack of social capital within their communities. Further, we demonstrated the benefits of considering income support recipients through mental health promotion.

At the individual or micro-level, we identified a number of possible approaches that may be applicable to the Australian social policy context. Options to improve coping skills and resilience include addressing cognitive style through CBT, enhancing self-efficacy, and improving social support. We also discussed the benefits of increasing welfare recipients' awareness and knowledge about mental health problems, including the relationship with unemployment or welfare dependency. Increasing mental health literacy is equally important for customer service staff in Centrelink and welfare agencies, as it is a basis for identifying clients with mental health barriers, and knowing how best to respond (for example, referral to appropriate services). Informal identification processes can be supplemented by formal approaches based on the use of screening tools. Finally, we noted the importance of considering the pathways into, and improving the relevance of, existing services in the primary and specialist medical context, or specialised employment programs to better meet the mental health needs of people receiving income support payments.

The framework provided by the intervention typology is an important tool for social policy design. It facilitates the development of comprehensive and multi-faceted solutions to social problems. It promotes the identification of gaps in existing and proposed policy and service delivery responses. It also illustrates the importance of cross-disciplinary cooperation and the role of different professionals in developing comprehensive approaches to address such social problems (for example, social policy analysts, psychologists, psychiatrists, epidemiologists, behavioural medicine, economics, public health—see Dooley & Catalano 2000).

The challenge, however, is to design, implement and evaluate policy responses that fit with the Australian social welfare context. Clearly, we would support the adoption of a range of different and complementary interventions from across the intervention typology. In addition, collaboration and partnership (with researchers, practitioners, a range of government agencies, and the non-government organisation and private service sectors) is vital. Interventions need to be based on sound theories and a solid evidence base to ensure that the assistance provided to income support recipients will be effective and will result in long-term benefits and the achievement of positive outcomes (Creed, Machin & Nicholls 1998). Governance and planning is also critical. The design, implementation and management of pilots, trials and programs are critical to ensuring that program aims (addressing mental health barriers to promote employment outcomes) are actually assessed. Further, comprehensive and robust

evaluation methodology is also essential. While it may seem overwhelming, much has already been done (as outlined in this report) and the Department of Family and Community Services has recently conducted a number of relevant trials (promoting mental health literacy, providing psychological counselling, and delivering support and information via the Internet).

This paper has presented a brief overview of possible social policy responses to address the mental health problems experienced by many income support recipients, but it has significant limitations. The scope of the project was restricted to common mental health problems. As such, it did not consider low prevalence disorders, substance misuse, or the issue of co-morbidity (of either other mental health problems or physical disabilities). It is also not an exhaustive review, and only provides examples of programs rather than a complete listing of all research. Finally, it does not provide specific details of different approaches that could be implemented or what customer groups would most benefit.

Despite these limitations, we hope that this overview captures our enthusiasm about the possibilities in this area. We consider that mental health will become an increasingly important focus of welfare, employment and broader social policy in the future. Recent progress on the WORC Project (discussed earlier) serves to confirm the importance of our efforts in the welfare domain. In the context of our project, the WORC Project—with its aim of treating depression within the workplace—represents the ultimate early intervention program, by addressing mental health problems before they lead to job loss and welfare receipt. Further, if it is cost effective to address the burden of common mental disorders in the workplace, it is surely also important to consider the effect of mental health barriers among recipients of income support for whom mental illness is more prevalent and presents a barrier to employment. We suggest that there is a need to assess the cost effectiveness of implementing the types of interventions reviewed in this paper as a strategy to improve the social and economic outcomes achieved by welfare recipients.

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Education, work and fertility: a HILDA survey based analysis

Habtemariam Tesfagiorghis¹

Research and Data Management Branch, Department of Family and Community Services

1. Introduction

The issue of work and family balance is high on the Australian policy agenda. The issues of fertility, family support, and balancing family and work responsibilities are being given prominence, as demonstrated by the significant measures announced in the May 2004–05 Federal Budget. Research and information is needed in this important area to inform policy debate and development.

Concomitant with fertility decline since the 1960s, there has been increasing female participation in education and the labour market. Over this period, in Australia there has been strong attachment to the labour market by women of childbearing and rearing ages (McDonald 2001a, p. 17). Increasing levels of female education are associated with increasing labour force participation. Education, *ceteris paribus*, is expected to lower fertility, as increasing educational duration leads to postponement of age at first marriage and age at first birth, and education may embody fertility behaviour that lowers fertility. If educated women did not compensate delayed births at later ages, then fertility would be lower.

Bratti's (2003, p. 30) study of Italy found that education raises the job attachment of women, highly educated women work in the period surrounding a birth event, and that education causes fertility postponement. According to Bratti (2002, pp. 27–8), early withdrawal of highly educated women from the labour market 'is costly both in terms of current opportunity costs (that is, wages) and future accumulation of human capital'.

The fact that, in general, the proportion of women with children is higher among those that do not work than those who work, and among those who work part-time than full-time, reflect the difficulty that women face in combining work and family responsibilities (Sleebos 2003, Figures 11 and 12). The type of jobs held by mothers is also important for decisions to have children, as part-time jobs generally allow women greater opportunities to combine work and family responsibilities (Sleebos 2003, p. 24). McDonald (2001a, p. 18) observes that:

... while the evidence is somewhat mixed, the balance of evidence is that countries in which there is little opportunity to work part-time have lower fertility rates because the choice between work and family is too stark.

Provision of child care is also important for women with children to have lifetime labour market careers so as to support their career development and on-the-job training (Gustafsson & Stafford 1994, p. 335).

It is thus hypothesised here that both education and labour force participation combine to lower fertility. The Household, Income and Labour Dynamics in Australia (HILDA) survey, provides an excellent source of information on fertility, particularly since the 2001 Census does not contain a question on total number of children a woman ever had. Thus, the HILDA survey, with its rich demographic and socio-economic data, provides a good opportunity to explore the associations of education and work with fertility.

This research—based on primary analysis of the 2001 HILDA survey Wave 1 dataset, Release 2.0—aims to contribute to an understanding of work and family balance issues for working-age women through examination of the following questions and issues:

- ▶ Does women's educational and labour force participation lower fertility?
- ▶ Do the number and age of resident young children in the household affect mothers' labour force participation, and vice versa?
- ▶ Does fertility lower labour force participation?

The analyses in this paper comprise the following:

- ▶ Education and fertility—the analyses include age left school and fertility; highest educational level and fertility; and time since completing full-time education and fertility. These fertility differences are analysed, controlling for differences in age composition.
- ▶ Work and fertility—these include labour force status and fertility; the effect of labour force status and educational level on fertility; occupation and fertility; employment status according to number of hours worked per week and fertility; and actual and preferred hours of work and fertility.
- ▶ Ages and number of own resident children and labour force status—this deals with two aspects of the relationship. First, it answers the question if women worked full-time, do they have resident young children, say aged 0–4 years, and how many? Would the answer differ if women worked part-time or did not work at all? Second, it answers the question of whether labour force participation rates for women vary by whether they have no resident children, have one child, or at least two children of a given age.
- ▶ Fertility and labour force participation—this will examine the association between the number of children ever born and women's labour force status according to age group of women.

The main results are presented in '7. Summary'; and key issues, challenges and implications raised in the findings are highlighted in '8. Conclusion'.

2. Data and methods

Public knowledge and discussion on fertility is based on period/current fertility, which is the fertility experienced by different cohorts of women that gave birth in a particular year/period. It is usually measured by age-specific fertility rates and/or period total fertility rate (TFR). The period TFR, derived by summing the age-specific fertility rates, is a synthetic measure that gives the average number of children a woman would bear in her lifetime. The TFR in 2002 is 1.75 children per woman. Unlike current fertility, cohort fertility is the fertility experienced by a particular cohort of women—birth cohort, age cohort or marriage cohort—during their reproductive life. The completed cohort fertility is measured by completed fertility rate, which is also known as cohort TFR.

Instead, the analysis here is based on a measure of lifetime fertility—that is, the number of children ever born by a woman, which the HILDA survey collected. The measure used is the mean number of children ever born (MCEB)/average parity, which is calculated by dividing the total number of children ever born to women of a given age group by the total number of women in the given age group. For the purpose of comparative fertility studies, MCEB figures are provided by age group and overall for the whole age range. Thus, what is measured is fertility of age cohorts, as given by the mean number of children for that age cohort. The average numbers of children for women with completed fertility—those aged 40 years and over—are equivalent to completed fertility rate.

In addition, adjusted MCEB figures (labelled ‘adjusted’ in the tables in this paper) are given. Adjusted MCEB is a measure calculated to control for the effect of age composition differences on fertility. This is done by assuming that each category of a variable of interest has the same standard age distribution—in this case, as the age distribution of total women in the HILDA survey. Thus, any fertility effect that remains after controlling for age composition can be attributed to the variable of interest. The sum of the products of MCEB, and the corresponding standard population over the age range, provide an adjusted MCEB.

The HILDA survey data on number of children ever born are subject to sampling errors, misreporting and parity not stated (unstated number of children born). The HILDA survey is a nationally representative longitudinal survey of 7682 households, which administered household interviews and person interviews of all persons aged 15 years and over within the selected households. A guide to the calculation of standard errors is given in a HILDA survey technical document (Horn 2004). The results here are based on population-weighted figures and associated standard errors are not given. In the analysis cells, a small number of cases are combined with similar categories to produce meaningful results. The data on number of children ever born usually suffer from parity not stated. This was the case in Australian censuses, except the 1996 Census (McDonald 1998, p. 7).

The HILDA survey reporting on number of children ever born is complete. The reason is the use of better trained interviewers in the HILDA survey than the self-completion questionnaire used in the censuses. Further, the MCEB figures for comparable age groups from the HILDA survey is consistent with 1996 Census and Australian Bureau of Statistics (ABS) birth registration data (Tesfaghiorghis 2004b).

Thus, the quality of the MCEB data from the HILDA survey are reliable and cell sizes for most tabulation categories are large enough to warrant differential fertility analysis by education and work.

This is exploratory research based on a descriptive analysis. As such, it will attempt to identify the key issues in the work and family balance by a preliminary investigation of the factors involved and their associations. Thus, the question of causal relationship is not addressed here. The methods include analysis of MCEB using cross-tabulations, graphs, and application of standardisation to control for age composition effects on fertility. Analyses of the historical trends in completed fertility and a multivariate analysis of the factors influencing fertility are the subjects of another paper (Tesfaghiorghis 2004b).

3. Education and fertility

The analyses look at the association between fertility, age left school, highest educational level, and time since completing full-time education.

Age left school and fertility

The more young women stay longer in school at a higher rate, the more it is expected to lead to fertility postponement. A higher proportion of women are staying in school longer. Fifty-one per cent of women left school at ages 16 or younger in the 2001 HILDA survey compared to 71 per cent in the 1986 Census. Fifty-four per cent of the 15–19 year-olds in the 2001 HILDA survey were still at school compared to 44 per cent in the 1986 Census. This is also consistent with increasing school retention rates for young women, as national retention rates of secondary school students doubled from 35 per cent in 1980 to 77 per cent in 1992, with higher rates observed for females than males (AIHW 2003a, p. 272–3).

The analysis of HILDA survey fertility data shows that the age at which a woman leaves school is negatively associated with fertility. For example, among women aged 30–34 years those who left school at 18 years or older had lower mean numbers of children (1.0 child on average), than those who left at 15 years or younger (1.98 children)—table not shown. The corresponding figures for those aged 45–49 years were 1.94 and 2.59 children, respectively. The results show the MCEB by age consistently declines with increasing ages of leaving school, which may be partly to do with an orientation towards work and career rather than motherhood. Overall, after controlling for differences in age composition, women aged 15–64 years and who left school at age 18 or older had 1.60 children compared to 2.25 children for those who left school at 15 years or younger.

Highest education level and fertility

Table 1 presents MCEB according to age group and highest educational level of women. It also includes other descriptive measures (see last four rows of table) such as overall reported MCEB for women aged 15–64 years and adjusted MCEB (adjusted for differences in age composition) by educational level, per cent of total women, and mean age of women according to educational level.

Table 1 shows a number of interesting results:

- ▶ First, while increasing education lowers fertility, within a given educational level fertility increases with age. For example, for women with postgraduate degrees the MCEB increases from virtually zero or little fertility among young women aged less than 30 years to 1.68 children for those aged 45–49 years.
- ▶ Second, women with post-secondary qualifications had lower fertility than those with less education at every age. For example, women aged 30–34 years who had Year 11 or lower education had, on average, 1.94 children, compared to 1.23 children for those with advanced diploma/diploma, 0.82 children for those with bachelor degrees, and 0.76 children for those with postgraduate degrees.
- ▶ Third, the fact that education lowers fertility needs qualification. For women with completed fertility, education lowers fertility, as the MCEB decreases with increasing education. The completed fertility of postgraduates aged 40 years and over is on average about one child fewer than those with Year 11 or lower education. However, it is worth pointing out that the fertility of younger cohorts is incomplete, as it does not reflect completed fertility rate (lifetime TFR). So for these young cohorts, education does delay fertility but may not lower their completed fertility rate.
- ▶ Fourth, though women of all educational levels who had completed their fertility had achieved replacement fertility level (2.06 children per woman) or above, those with postgraduate degrees and those with bachelor degrees aged 40–49 years had not achieved it.
- ▶ Finally, those with Year 12 education had lower fertility than those with certificates at every age. It may be that certificate is not a higher qualification than Year 12, or those who stay on to Year 12 may not be interested in childbearing, or other factors may be relevant.

The mean age figures show that women with postgraduate degrees, followed by those with Year 11 or lower education and those with certificates I & II were the oldest, while those with Year 12 were the youngest. After controlling for the effects of age composition, the adjusted results support the decline of fertility with increasing education. Women with postgraduate degrees had the lowest overall mean number of children (1.1 children), while those with Year 11/below had the highest fertility (2.0 children). The latter accounted for 37.0 per cent of women aged 15–64 years, while the former accounted for 6.5 per cent.

Table 1 Mean number of children ever born by age group and educational level and summary measures by educational level—2001 HILDA survey

Age group	Postgraduate ^(a)	Bachelor	Diploma ^(b)	Cert. III & IV	Cert. I & II ^(c)	Year 12	Year 11 ^(d)
15–24	0.00	0.02	0.02	0.19	0.25	0.07	0.20
25–29	0.32	0.24	0.59	0.92	1.00	0.64	1.57
30–34	0.76	0.82	1.23	1.65	1.69	1.38	1.94
35–39	1.59	1.77	1.85	2.13	2.61	1.80	2.37
40–44	1.59	1.81	2.13	2.12	2.47	2.00	2.58
45–49	1.68	1.87	2.18	2.25	2.14	2.27	2.61
50–64	1.94	2.28	2.61	2.62	2.55	2.31	2.91
MCEB – reported ^(e)	1.37	1.16	1.60	1.68	1.87	1.02	2.00
MCEB – adjusted ^(f)	1.12	1.27	1.51	1.67	1.76	1.46	1.96
% women	6.49	13.42	8.71	9.96	11.44	12.96	37.02
Mean age	41.39	36.67	38.87	37.81	39.02	31.24	39.31

(a) Comprises doctorate, masters, graduate diploma/certificates. Those with doctorates or masters had the lowest fertility and account for about 2 per cent of all women.

(b) Comprises advanced diploma, diploma.

(c) Includes women with certificate not defined.

(d) Year 11/below also includes women with undetermined educational level.

(e) MCEB – reported = MCEB to women of a given educational level aged 15–64 years, calculated by dividing the total number of children born to the total number of women in the given educational level.

(f) MCEB – adjusted = MCEB to women aged 15–64 years in the given educational level, after controlling for differences in age composition.

Source: Primary analysis of 2001 HILDA survey Wave 1 dataset, Release 2.0.

Time since full-time education and fertility

Of all women aged 15–64 years, 15 per cent left full-time education less than five years ago—about 10 per cent each 5–9, 10–14 and 15–19 years ago, and 53 per cent 20 or more years ago. The results on the association between time since completing full-time education and fertility show that the shorter the duration since completing full-time education, the lower the fertility. Women are not only postponing childbearing while pursuing full-time education, but are also postponing childbearing for up to 10 years of completing full-time education, reflecting the time needed to build careers and relationships. Young women aged less than 30 years and who left full-time education less than 10 years ago had zero or negligible fertility (table not shown). This is supported by the ABS trends in age-specific fertility rates, which consistently show declining fertility trends for young women under 30 years and a recent stabilisation or a small increase for those aged over 30 years (ABS 2003, Table 2.8). Women aged 25–34 years and who left full-time education 10–14 years ago had on average borne 1.0 child, compared to 0.4 children for those who left 5–9 years ago.

4. Work and fertility

This section will examine fertility differences by labour force status, educational level, and labour force status; and occupation of main job, number of hours worked, and actual and preferred work hours. Of all women aged 15–64 years, 66 per cent participated in the labour force (33 per cent worked full-time and 29 per cent part-time, and 4 per cent were unemployed). Twelve per cent had marginal attachment to the labour force and 22 per cent were not in the labour force (see note (a), Table 2).

Labour force status and fertility

Fertility varies by labour force status. At every age, women employed full-time had the lowest MCEB. Full-time workers aged less than 30 years had negligible fertility. This is also true for part-time workers aged less than 25 years. Part-time employment is associated with lower fertility. While part-time employed women had the second lowest MCEB by age group, those not in the labour force had the highest fertility. Women aged 20–44 years who were marginally attached to the labour force had a higher mean number of children than those not marginally attached to the labour force at every age but the 30–34 age group. Young unemployed women had higher MCEB than part-time employees but had a similar fertility level at older ages. The unemployed looking for full-time work, and those looking for part-time work, each comprising about 2 per cent of all women aged 15–64 years, had different fertility levels but were combined together because of small numbers. The former had similar fertility to full-time employees, while the latter had similar fertility to those not in the labour force.

The adjusted results show that the overall MCEB to women aged 15–64 years was 1.23 children for those employed full-time, 1.68 children for part-time workers, and 1.71 for the unemployed. By contrast, it was 2.09 children for those marginally attached to the labour force and 2.03 for those not attached to the labour force.

The results in Table 2 clearly show that labour force participation is associated with lower fertility, particularly full-time employment. The relevance of this finding is that women who participate in the labour force have difficulty in combining family and work responsibilities.

The association between educational level, labour force status and fertility is presented in Table 3. The results show that for women who had the same level of education, their fertility varies according to their labour force status. For example, the MCEB to women with postgraduate degrees increases from 1.1 children for those employed full-time to 1.6 children for those employed part-time, and about 2.0 children for those not in the labour force. Given the same level of education, labour force participation tends to lower fertility. The exception is Year 11 or lower education.

Those employed full-time are better educated; 46 per cent had diploma or higher degrees versus 28 per cent for those employed part-time and 18 per cent for those not in the labour force. Further, a higher proportion of highly educated women were in employment, particularly in full-time work, relative to those with lower educational levels. For example, 54 per cent of all women with postgraduate degrees worked full-time and 30 per cent worked part-time. These were 50 per cent and 28 per cent for those with bachelor degrees, and 18 per cent and 27 per cent for those with Year 11 or lower education. Nevertheless, even after controlling for educational differences, the results show that employment, particularly full-time, is still associated with lower fertility.

Table 2 Mean number of children ever born by age group and labour force status, and summary measures by labour force status—2001 HILDA survey

Age group	Employed		Unemployed	Not in the labour force	
	Full-time	Part-time		Marginally attached ^(a)	Not marginally attached ^(b)
15–19	0.00	0.00	0.06	0.04	0.05
20–24	0.03	0.10	0.59	1.11	0.65
25–29	0.16	0.99	1.15	1.96	1.59
30–34	0.64	1.54	1.78	1.95	2.27
35–39	1.53	2.26	1.60	2.74	2.35
40–44	1.77	2.37	2.36	2.84	2.51
45–64	2.22	2.52	2.54	2.63	2.84
MCEB – reported	1.20	1.63	1.23	1.83	2.28
MCEB – adjusted	1.23	1.68	1.71	2.09	2.03
% women	33.08	29.02	4.05	11.86	21.99
Mean age	37.31	36.34	30.94	34.00	43.95

(a) Persons not in the labour force are considered to be **marginally attached** to the labour force if they want to work and are actively looking for work but not available to start work in the reference week; or want to work and are not actively looking for work but are available to start work within four weeks.

(b) Persons not in the labour force are **not marginally attached** if they do not want to work; or want to work but are not actively looking for work and are not available to start work within four weeks (Freidin et al. 2004).

Source: Primary analysis of 2001 HILDA survey Wave 1 dataset, Release 2.0.

Table 3 Mean number of children ever born by highest educational level and labour force status—2001 HILDA survey

Educational level	Employed		Not in labour force	
	Full-time	Part-time	Marginally attached	Not attached
Postgraduate	1.06	1.65	1.87	2.01
Bachelor	0.88	1.42	1.58	1.61
Diploma	1.14	1.74	2.02	2.46
Certificates III & IV	1.16	1.87	1.96	2.23
Certificates I & II	1.31	2.09	2.16	2.30
Year 12	0.72	0.90	1.42	1.71
Year 11/below	1.86	1.77	1.85	2.48

Source: Primary analysis of HILDA survey Wave 1 dataset, Release 2.0.

The observed fertility differences by labour force status and educational level may reflect the choices and constraints working women face. The issue of choice is that women who have a career orientation, high level occupation and work full-time are less likely to have children or find it hard to pursue a career. They would have lower fertility. However, highly educated Italian women were found to have higher marital fertility because they were more likely to work and able to purchase external private child care with their incomes (Bratti 2003, pp. 15–17). The issue of constraint is that the higher the numbers of children women have, the harder they find it to combine work and fertility.

Occupation and fertility

The association between the occupation of main job and fertility is examined in Table 4. The table sets out the MCEB by age group and occupation of main job, and overall reported and adjusted MCEB by occupation. When account is taken of the significant age differences, the adjusted results show that fertility was high among cleaners, factory workers and other labourers. It was also relatively high for intermediate workers, advanced clerical and service workers, and elementary sales and service workers. Fertility was lowest among the science, business and information professionals. Health and education professionals and associate professionals, and tradespersons had lower fertility. Further, these overall results are supported by completed fertility rates for women aged 45–64 years. Completed fertility rates ranged from a low of 1.85 children for science, business and information professionals to 2.4 children for intermediate workers and elementary sales and service workers, and a high of 2.62 children for cleaners, factory workers and other labourers.

Table 4 Mean number of children ever born according to occupation of main job and age group—2001 HILDA survey

Occupation	MCEB by age				Overall	
	15–24	25–34	35–44	45–64	Reported	Adjusted
Managers & administrators	0.20	0.92	1.71	2.24	1.74	1.40
Science, business & information professionals	0.00	0.26	1.57	1.85	0.89	1.05
Health, education & other professionals	0.02	0.57	1.90	2.30	1.44	1.35
Tradespersons & related workers	0.05	0.69	1.67	2.26	1.14	1.32
Advanced clerical & service workers	0.00	0.91	2.47	2.24	1.77	1.53
Intermediate sales/service & production workers	0.05	0.93	2.09	2.40	1.42	1.52
Elementary sales & related workers	0.02	0.82	2.10	2.40	1.02	1.48
Cleaners, factory & other labourers	0.08	1.21	2.13	2.62	1.84	1.73

Source: Primary analysis of 2001 HILDA survey Wave 1 dataset, Release 2.0.

The results appear to indicate that professional occupations are associated with lower fertility, while lower level occupations are associated with higher fertility. These occupational fertility differences could also be due to differences in educational composition of occupations.² Those in lower level occupations generally have lower education levels, while those in higher level occupations have higher educational qualifications. It is also possible that those with higher levels of fertility choose different occupations to those with lower fertility, rather than occupation influencing fertility.

The observed fertility differences by labour force status and occupation type may arise because couples make labour supply decisions based on their characteristics or circumstances, which are aimed at optimising family outcomes, rather than maximising income. It could also be that women's fertility is constrained by, or facilitated by, the hours and working conditions in their industry or occupations.

Fertility by number of hours worked

Of all employed women aged 15–64 years, 28 per cent worked 20 hours or fewer per week, 19 per cent for 21–34 hours, 32 per cent for 35–40 hours, and 21 per cent for 41 hours or more. Those who worked for 20 hours or fewer were younger, followed by those who worked for 35–40 hours, while those who worked for 21–34 hours were older followed by those who worked 41 hours or more (see last row of Table 5).

As is seen in Table 5, the numbers of hours worked per week are associated with fertility. The MCEB by age was lower for those who worked long hours, particularly 41 hours or more. Of those who worked shorter hours, those who worked for 20 hours or less had higher fertility.

It is clear from Table 5 that working more hours are associated with lower fertility. However, this is not a causal relationship. It could be that women with high fertility chose to work fewer hours to care for their children and family, or women have chosen to work full-time and long hours over having a high number of children. The data appear to suggest that women with a high number of children are working part-time to care for children and other personal/family responsibilities (table not shown).

Table 5 Mean number of children ever born by age group and number of hours worked per week, and summary measures by hours worked—2001 HILDA survey

Age group	Number of hours worked per week			
	20 hrs or less	21–34 hrs	35–40 hrs	41 hrs+
15–19	0.00	0.03	0.00	0.00
20–24	0.06	0.18	0.04	0.01
25–29	1.15	0.74	0.18	0.12
30–34	1.78	1.25	0.70	0.54
35–39	2.39	2.08	1.65	1.40
40–44	2.49	2.23	1.81	1.73
45–64	2.59	2.45	2.30	2.12
MCEB – reported	1.53	1.78	1.17	1.23
MCEB – adjusted	1.77	1.57	1.28	1.16
% women	28.07	18.64	32.14	21.15
Mean age	34.16	39.62	36.30	38.83

Source: Primary analysis of 2001 HILDA survey Wave 1 dataset, Release 2.0.

Fertility by number of actual and preferred weekly work hours

Of all employed women, 27 per cent preferred to work fewer hours, 56 per cent preferred the same hours, and 17 per cent preferred more hours. Those who preferred to work fewer hours were older, while those who preferred to work more hours were younger.

The results in Table 6 show that the mean number of children born by actual hours worked and preferred hours were lower for those women who preferred to work more hours and higher for those who preferred to work fewer hours. However, for those who worked 41 hours or more, those who preferred the same number of working hours had higher fertility than those who preferred fewer hours.

However, an examination of mean number of children born both by age group and preferred work hours shows that older women who preferred to work more hours had higher fertility than those who preferred the same or fewer work hours. When the differences in age composition were controlled, those who preferred to work more hours had higher fertility (1.62 children), and those who preferred fewer hours had lower fertility (1.29 children)—see ‘adjusted’ in Table 6. This is because older women who preferred to work more hours have grown up children that do not constrain their labour force participation.

The distribution of women by actual and preferred hours (second panel of Table 6) shows that a relatively high proportion of those who worked shorter hours preferred to work more, while those who worked longer hours preferred to work fewer or about the same hours. For example, of those who worked 20 hours or less, 59 per cent preferred to work the same hours and 36 per cent preferred to work more. By contrast, 58 per cent of those who worked 41 hours or more preferred fewer hours and 39 per cent preferred the same hours.

Table 6 Mean number of children ever born by actual and preferred work hours, and distribution of women according to actual and preferred work hours—2001 HILDA survey

Hours worked Per week	Prefer to work		
	Fewer hours	About the same	More hours
20 hrs or less	1.65	1.62	1.36
21–34 hrs	2.08	1.89	1.34
35–40 hrs	1.53	1.03	0.83
41 hrs or more	1.20	1.33	0.68
MCEB – reported	1.45	1.42	1.26
MCEB – adjusted	1.31	1.48	1.65
Mean age	39.73	36.80	32.42
% distribution^(a)			
Hours worked	Fewer hours	About the same	More hours
20 hrs or less	5.5	58.9	35.6
21–34 hrs	15.5	61.8	22.7
35–40 hrs	31.9	60.2	7.9
41 hrs or more	58.0	39.4	2.6
Total	27.0	55.7	17.3

(a) Row ‘% distribution’ for categories of preferred work hours adds up to 100 per cent.

Source: Primary analysis of 2001 HILDA survey Wave 1 dataset, Release 2.0.

5. Age and number of own resident children and labour force status

This section will examine the association between age and number of young resident children in the household and women’s labour force participation. Gustafsson and Stafford (1995, pp. 163–4) showed that the majority of mothers in the United States, Sweden and the Netherlands did not work, 58 per cent, 59 per cent and 74 per cent respectively, when the child is less than one year. In the United States, the majority of mothers returned to work, mainly full-time, after the child’s first birthday, with the employment rate increasing by child’s age. In the Netherlands, the majority of mothers stayed at home to care for their preschool children. It is only when their children reached four years that about 40 per cent of them worked, mainly short hours—that is, less than 20 hours per week. In Sweden, maternal employment rate doubled after the child’s first birth with a larger proportion working 20 to 34 hours a week.

Gustafsson and Stafford's (1994, pp. 352–4) modelling of married women's labour force participation in the United States, the Netherlands and Sweden showed that:

... the impact of children under age three is to significantly lower labour force participation, this effect is most pronounced in Sweden, where the generous parental leave program has its impact. Children aged 3–5 have a far smaller impact on participation.

Using the 1986, 1991 and 1996 Australian censuses, McDonald (2001b, pp. 17–18) found that the maternal employment rate remained low between the censuses when the youngest child is a baby (24–8 per cent), and that maternal employment increases substantially as the youngest child reached one or two years, and three or five years. Using the 1986 and 1996 Australian censuses, Gray et al's (2003, pp. 10–12) labour force status modelling found that:

... both the age and number of children has a strong and statistically significant impact upon the labour force status of both couple and lone mothers. The predicted probability of being full-time and part-time employed increases as the age of the youngest child increases.

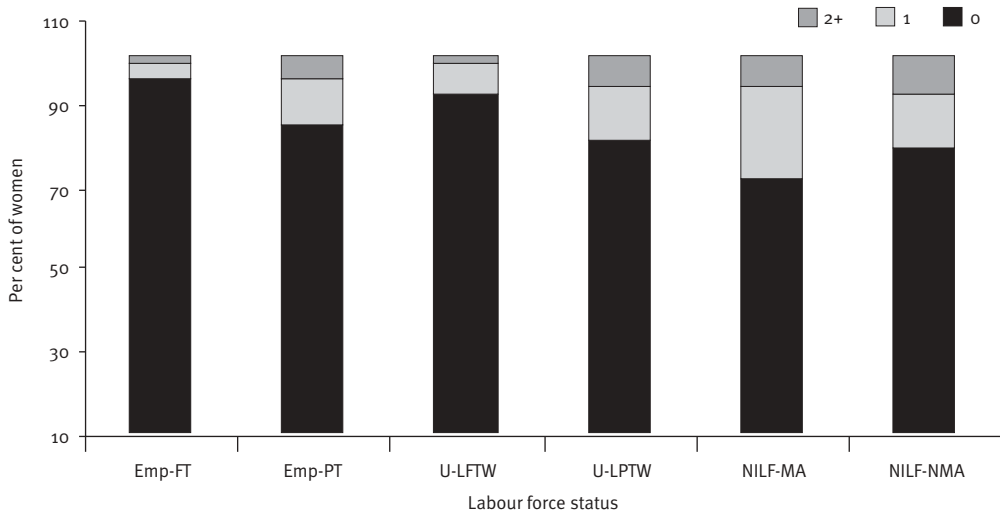
The HILDA survey will contribute to these findings by providing an insight into the association between the age and number of own resident children and detailed labour force status. The presence of own resident young children, particularly 0–4 year-olds, appears to reduce women's labour force participation. Figure 1 displays the relationship of number of own resident children aged 0–4 years to labour supply choices women make. The results are:

- ▶ If women worked full-time, 95 per cent of them had no own resident child aged 0–4 years. The pattern for unemployed women looking for full-time work (U-LPTW) is similar to those of full-time workers.
- ▶ By contrast, 28 per cent of all those marginally attached to the labour force (NILF-MA) and 22 per cent of those not marginally attached to the labour force (NILF-NMA) had at least one resident child aged 0–4 years. It was 19 per cent for the unemployed looking for part-time work (U-LPTW) and 16 per cent for part-time workers (EMP-PT).

Compared to own resident children aged 0–4 years, a higher proportion of those employed full-time had own resident children aged 0–14 years (20 per cent). This figure is even higher for those employed part-time, 40 per cent (Figure 2). Further, Figure 2 shows that 51 per cent of those marginally attached to the labour force (NILF-MA) had own resident children, with about 30 per cent having at least two children.

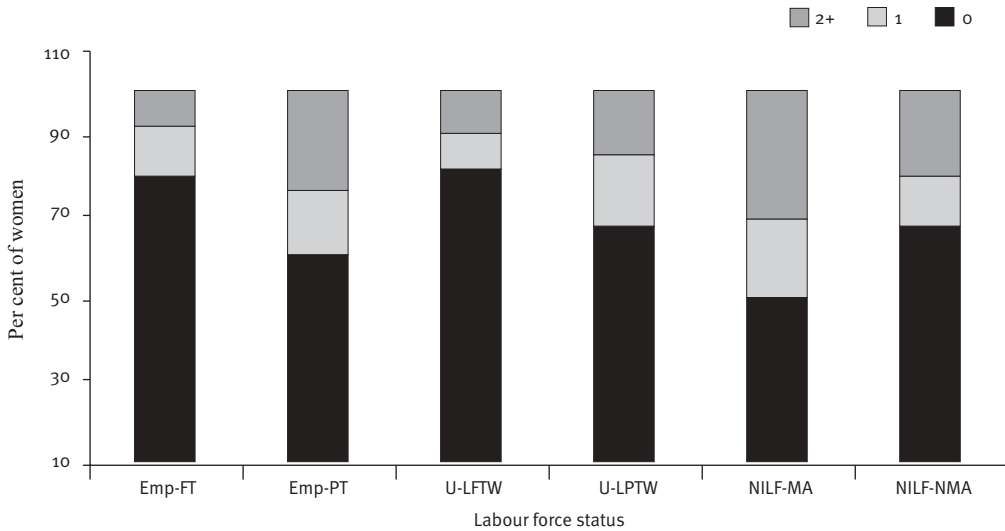
Another issue examined here is how labour force status varies according to number of own resident children aged 0–4 years. Figure 3 shows that if women have young children in the household, particularly two or more children, only a small proportion worked full-time. However, the proportion working part-time remained stable at a high level, irrespective of whether women have no children, one child or more than one child in the household—29 per cent, 32 per cent and 28 per cent, respectively.

Figure 1 Percentage of women by number of children aged 0–4 years and labour force status



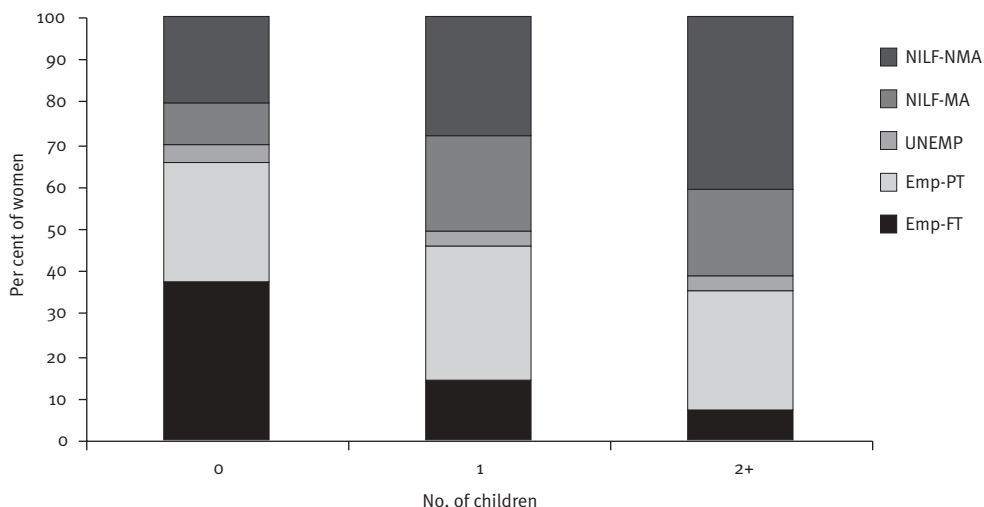
Source: HILDA 2001.

Figure 2 Percentage of women by number of children aged 0–14 years and labour force status



Source: HILDA 2001.

Figure 3 Women’s labour force status according to number of resident children 0–4 years



Source: HILDA 2001.

A further insight into the employment constraints faced by mothers of young children is gained by considering the analysis by age of youngest child. The results are presented in Table 7 and Figure 4. The HILDA survey results show that the employment rate of mothers with infants is very low (22.5 per cent), compared to 41.4 per cent when the child reached age one year and 42.6 per cent when the child is aged two years. Thereafter, mothers’ employment rates rise slowly with increasing age of their children—from 44.1 per cent when the child turns three years to about 50 per cent when the child is aged four or more years.

Table 7 Comparisons of mothers’ labour force status (%) by age of youngest child between 2001 HILDA survey and 2001 Census

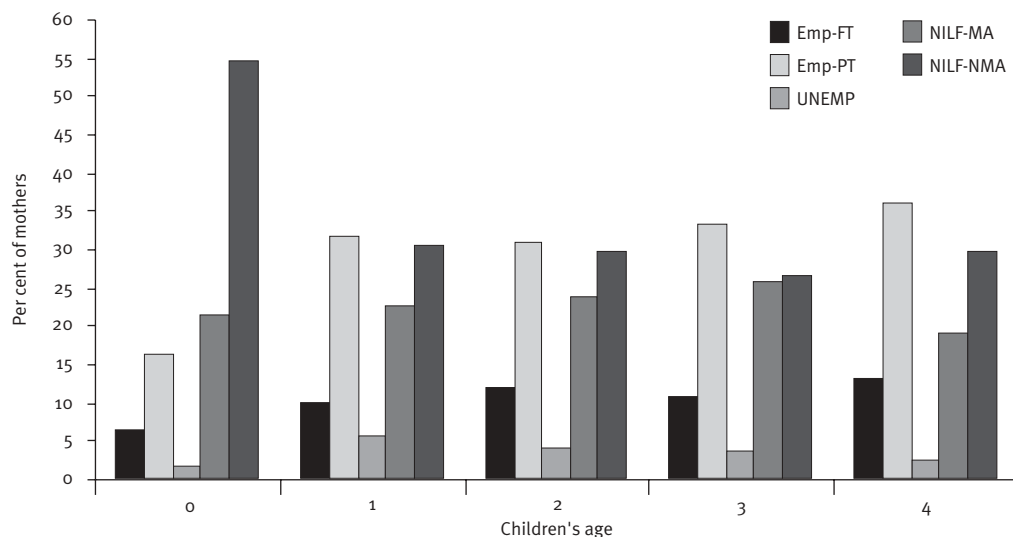
Age of child	HILDA survey 2001				Census 2001 ^(a)		
	EMP-FT	EMP-PT	Unemployed	NILF	Employed ^(b)	Unemployed	NILF
0	6.5	16.0	1.7	75.8	25.3	2.6	64.5
1	9.9	31.5	5.6	53.1	42.8	3.7	51.4
2	11.8	30.8	4.1	53.3	46.6	4.1	47.4
3	10.8	33.3	3.8	52.2	49.3	4.3	44.4
4	13.0	35.9	2.5	48.7	51.4	4.5	42.1
5	18.5	35.7	5.8	40.0	54.9	5.2	38.1
6	14.5	36.3	3.9	45.2	58.9	5.2	34.2

(a) The row percentages for Census 2001 do not add up to 100 per cent because mothers working ‘0’ hours, but did not work during the reference week, were excluded.

(b) Employed includes those who worked one hour or more.

Sources: Primary analysis of 2001 HILDA survey Wave 1 dataset, Release 2.0; and, for 2001 Census, AIHW 2003b, Table A6.3.

Figure 4 Mothers' labour force status by age of children



Source: HILDA 2001.

A salient result is that like Sweden, mothers' return to employment is dominated by part-time employment, which rose from 16 per cent when the child is aged less than one year to 32 per cent when the child is aged one year, and stabilised at about 36 per cent when children are aged 4–6 years. By contrast, the full-time employment rate remains low, rising gradually from 6.5 per cent when the child is under one year to 10–12 per cent by ages 1–3 years, and 13 per cent by age four.

The comparisons of HILDA survey results with the 2001 Census show that the pattern and magnitude of maternal employment by age of child are generally consistent. The HILDA survey results are also consistent with McDonald's (2001b, pp. 17–18) finding, though his employment figures are higher than these results.

It is not clear from these associations whether the number of young children is influencing women's labour supply decisions or whether women's labour supply decisions are influencing their fertility decisions. At this juncture, it suffices to say that there is a clear association between the number and age of children and labour force participation. However, the consistent finding that maternal employment is low when the child is less than one year, and increases with the age of child after the child's first birthday (mainly through part-time employment), is relevant to targeting family assistance by age of children and when to support mothers as they return to work.

6. Fertility and labour force participation

The preceding analysis showed that the employment rates of mothers of 0–4 year-olds is low when they have infants and steadily increases with children’s age. Besides the age of young children, it is expected that a high number of children would lower women’s labour force participation. Del Boca et al. (2003, p. 12, and Table 10) found that the number of children already present in the family has a significant negative effect on women’s participation in the labour market. The association between the number of children ever born and women’s labour force status is presented in Table 8.

Table 8 Distribution of women by number of children ever born and labour force status according to age group of women

Age group/ number of children ever born	Employed		Unemployed	Not in the labour force		% Total women
	Full-time	Part-time		Marginally attached	Not attached	
15–24						
Zero parity	29.6	35.9	7.9	13.7	12.9	90.5
1+ child	6.1	11.4	11.8	43.4	27.2	9.5
Total	27.3	33.6	8.3	16.6	14.2	1 346 632
25–34						
Zero parity	72.1	16.2	3.3	3.4	5.1	45.4
1 child	21.6	36.0	1.8	18.8	21.8	20.5
2 children	13.5	34.6	3.5	21.0	27.3	19.5
3+ children	10.9	26.2	5.2	26.7	31.0	14.7
Total	41.4	25.3	3.3	13.4	16.6	1 436 269
35–44						
Zero parity	62.5	18.1	1.8	2.6	14.9	15.0
1 child	42.6	30.6	5.4	8.1	13.4	12.9
2 children	29.4	39.0	3.2	11.0	17.4	36.1
3+ children	22.9	37.8	2.1	17.9	19.2	36.1
Total	33.7	34.4	2.9	11.9	17.2	1 476 423
45–64						
Zero parity	45.8	17.9	2.7	6.9	26.9	8.4
1 child	32.6	22.9	4.4	7.4	32.8	9.8
2 children	32.6	26.1	2.5	8.4	30.5	36.3
3+ children	26.1	26.1	2.5	8.0	37.3	45.5
Total	30.8	25.1	2.7	8.0	33.5	2 198 643

Source: Primary analysis of 2001 HILDA survey Wave 1 dataset, Release 2.0.

The salient points of Table 8 are summarised as follows:

- ▶ Within a given age group, women without children (zero parity) had higher labour force participation, mainly full-time, than women with children.
- ▶ As the number of children ever born increases, full-time employment rates decline (column 2, Table 8). This pattern also holds for part-time employment for women aged 25–34 years. But for those aged 35 years and over, part-time employment is lower for those with one child than those with two or more children.
- ▶ For women with a given number of children, labour force participation is higher at older ages. For example, in the 25–34 age group, 14 per cent of women who had two children worked full-time. This figure increased to 29 per cent for those aged 35–44 and 33 per cent for those aged 45–64. As children to these women are older, they do not affect mothers' participation, as do the children of younger women.

7. Summary

There were substantial fertility differences by education and labour force status. The younger the age of leaving school, the higher the fertility, irrespective of the current age of women. The research found that time since full-time education is an important influence on fertility, where substantial childbearing occurs on average only after 10 years of leaving full-time education. Increasing educational level is associated with lower fertility. For women that completed their fertility, it is found that education lowers fertility. For younger women, education postpones fertility but may not lower their actual fertility, as they have incomplete fertility.

Labour force participation is associated with low fertility, particularly full-time employment. Compared to those employed full-time, women employed part-time have higher fertility, particularly those who work part-time to care for children or for other personal/ family responsibilities. Those who worked full-time, particularly 41 hours or more per week, had the lowest fertility.

This analysis also found that higher education and full-time employment are associated with lower fertility. It is likely that the opportunity cost to these women will be higher in terms of lost earnings and taking time off to have children. The analysis found that women employed full-time had higher education levels than those employed part-time or in other labour force statuses.

How does labour force participation influence fertility? The analysis of the relationship between labour force status and age and number of own resident children found that most women who worked full-time or looked for full-time work had no resident children aged 0–4 years in the household. By contrast, a

significant proportion of those employed part-time and not in the labour force had children aged 0–4 years. Thus, it appears that labour force decisions women make are influencing fertility.

How does fertility relate to labour force participation? It is found that women with 0–4 year-olds have lower employment rates, particularly full-time (Figure 3). The full-time employment rate is small if they have two or more children aged 0–4 years.

When the employment rate of mothers with 0–4 year-olds is considered by age of child, it is found that maternal employment rate is low, when the child is less than one year. The maternal employment rate increases substantially with child's age after the child's first birthday. Mothers return to employment primarily through part-time employment. It is also found that a high number of children ever born, particularly for prime working-age women, are associated with lower labour force participation.

It is not clear from these associations whether the age and number of young children women have is influencing labour supply decisions or whether women's labour supply decisions are influencing their fertility decisions. It is very likely that there is reciprocal causality between fertility and labour supply decisions.

8. Conclusion

There are several conclusions from this research that raise many issues and challenges. First, it appears that women delay childbearing after completing full-time education for, on average, up to 10 years. This may indicate that young women are delaying their fertility until such time as they build their relationships and/or careers, or because they find it difficult to combine work with childbearing.

Second, those who work full-time have lower fertility, while part-time workers and those out of the labour force have higher fertility. Is this because those employed full-time are giving priority to their jobs over childbearing or because of the difficulties they face in combining work and childbearing? Women who are not in the labour force have the highest fertility, and it is likely that many of the mothers currently not in the labour force are doing so to care for their children. A significant proportion of employed women are working part-time so that they can care for their children, and these mothers have the highest fertility among part-time workers.

Third, most women who currently work full-time have no children aged 0–4 years. Of those mothers with own resident children (younger than five years), the majority were either out of the labour force or in part-time employment. Only a modest proportion of mothers with 0–4 year-olds were in full-time employment. The finding of increasing maternal labour force participation by age of children aged 0–4 years is relevant to targeting assistance to support maternal fertility and work.

McDonald (2001b, pp. 18–19) argues that policy should take into account mothers' sharp increase in labour force participation as the youngest child ages from age zero to age four. He argues that all mothers of young children, irrespective of their employment status, need a combination of income support and child care support so that the transition from home to work can be undertaken without experiencing substantial loss of benefits (McDonald 2001b, pp. 18–19).

How are these mothers of young children combining childrearing with employment? The issue of child care is not analysed here, but elsewhere (Tefsfaghiorghis 2004a) it has been shown that 84 per cent of mothers both in full-time and part-time employment with children aged 0–4 years used child care. This indicates that child care is supporting mothers to participate in paid employment.

This research has explored the associations between education, work and fertility, where both education and labour force participation combine to lower fertility. It also found that fertility and the number and age of own resident young children are associated with lower labour force participation, particularly full-time employment.

This research has not explored the issues of what can be done to support mothers to combine childbearing and rearing with work responsibilities. So what does the literature say on this?

McDonald (2000, p. 9) states that:

... obviously, among all family services, provision of childcare is highly beneficial to the employment of women and hence to a higher level of gender equity. ... Again, low expenditure on family services matches low fertility.

Gustafsson and Stafford (1994, pp. 343–4) state that the parental leave program extensions in the 1980s combined with the day care system are regarded as having created a fertility boom in Sweden in the early 1990s.

The differing design of family-friendly policies followed by countries may have different effects on family life, fertility and labour force participation (Gilbert & Voorhis 2003, pp. 55–6). For example, the 1998 policy initiative in Norway to pay cash benefits to all families with children up to three years-old if the child was not enrolled in a state subsidised day care centre resulted in higher marriage rates and fertility but lowered labour force participation (TFR = 1.85 in 2000), compared to Sweden (TFR = 1.54 in 2000) with its 'extensive provision of public day care services, which only benefit those who work' (Gilbert & Voorhis 2003, pp. 55–6).

Gilbert and Voorhis (2003, p. 56) observe that:

It is difficult to imagine a reversal of the heightened labour force participation of women. The contemporary issue for family policy is not whether to assist the transfer of labour from household to market, but how to help parents manage this shift in a way that lends adequate consideration to various desires for work and children at different stages of family life.

Beyond work related measures, family support programs that could have the potential to reverse declining trends in marriage and fertility rates by strengthening family life, could be tried from a mix of policies. These include paid childrearing leave as an alternative to day care, pension credits towards retirement for parents who stay home to care for young children, and the normalisation of part-time employment with measures that promote choices and that allow different parents to balance work and family life according to their varied preferences (Gilbert & Voorhis 2003, p. 56).

This research has only attempted to identify the key issues in work and family balance by preliminary investigation of the factors involved and their associations. The answers to the problems raised are partial at best. The next phase of the research is to undertake a multivariate analysis of factors that influence fertility and labour force participation, so as to establish the independent and joint effects of the key variables identified in this research.

Endnotes

- ¹ The author wishes to thank Heather Evert, Helen Moyle and the two anonymous referees for their valuable comments.
- ² The following educational profile of selected occupational groups demonstrate the point:
 - Managers and administrators—24.0 per cent had bachelor degrees, 22.8 per cent Year 11 or below, 16.9 per cent graduate degrees, 13.6 per cent certificates, and 12.9 per cent advanced diploma/diploma.
 - Science, business and information professionals— 46.6 per cent had bachelor degrees, 19.9 per cent graduate degrees and certificates, and 10 per cent each advanced diploma and Year 12.
 - Health professionals—70.4 per cent had bachelor degrees, 16.7 per cent graduate degrees, and 8.8 per cent certificates.
 - Education professionals—39.8 per cent had graduate degrees/certificates, 31.9 per cent bachelor degrees, and 21.1 per cent advanced diploma/diploma.
 - Social, arts and miscellaneous professionals—47.5 per cent had bachelor degrees, 17.5 per cent graduate degrees, and 11 per cent each advanced diploma and certificates.
 - Associate professionals—22.7 per cent had certificates I, II, III and IV, 19.4 per cent Year 11 or below, 17.2 per cent bachelor degrees, 15.9 per cent advanced diploma, and 14.2 per cent Year 12.
 - Tradespersons and related workers—50.5 per cent had certificates I, II, III and IV, 24.2 per cent Year 11 or below, 9.5 per cent Year 12, and 8.8 per cent advanced diploma.

- Advanced clerical and service workers—26.2 per cent had Year 11 or below, 24.3 per cent certificates I, II, III and IV, 15.0 per cent Year 12, 13.0 per cent certificate undefined and 12.6 per cent advanced diploma.
- Intermediate clerical workers—26.1 per cent had Year 11 or below, 20.7 per cent Year 12, 20.3 per cent certificates I, II, III and IV, 11.3 per cent bachelor degrees.
- Cleaners, factory workers and other labourers—58.2 per cent had Year 11 or below, 16.3 per cent Year 12, and 17.5 per cent certificates.

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Book reviews

Australian Social Policy 2004

Clive Hamilton, *Growth fetish*, Allen & Unwin, Crows Nest, NSW 2003, xvii + 262 pp., index.

Reviewer: Darian Clark

Strategic Policy and Analysis Branch, Department of Family and Community Services

Since the emergence of industrial society, the chief economic dilemma has been how best to achieve ‘economic growth’. Underlying this is the belief that the more people can consume, the greater their wellbeing. The proclaimed ‘end of history’ after the collapse of the Iron Curtain saw the global ascendancy of free-market, or neoliberal, capitalism to meet this growth imperative. For Clive Hamilton, however, history has restarted—the long assumed link between affluence and wellbeing is now beginning to unravel. In *Growth Fetish*, he both critiques the ‘ideology’ of growth and proposes an alternative, post-growth, vision for society.

Simon Kuznets, one of the principal founders of national accounting, once observed that ‘the welfare of a nation can scarcely be inferred from a measurement of national income as defined by Gross Domestic Product’. Clearly, growth contributes, at some level, to wellbeing. The problem is that growth is seen as a proxy for wellbeing, conflating this with material progress. In reviewing the empirical evidence, Hamilton shows that beyond a certain level, about US\$10 000, rising income does not increase a person’s wellbeing; indeed at very high levels, more income seems to lower wellbeing (Hamilton 2003, p. 26). This analysis may not appear to be of much relevance to many of the world’s people—but given that Australians are richer than ever (some three times wealthier than in the 1950s), with few putatively suffering genuine material hardship—it in fact presents a new set of social challenges.

According to Hamilton, the most concerning manifestation of this disconnection is the phenomenon of ‘overconsumption’. As market forces permeate more parts of society, consumption behaviour has come to play a greater role in the construction of personal identity. Rising incomes and marketing images mean, moreover, that ordinary people have an inflated sense of material expectations based on the ever-changing lifestyles and habits of the super rich. With the need to recreate identity constant, these material desires remain forever unsatisfied while consumption spirals (Hamilton 2003, pp. 92–7). Fortunately all is not lost, and the way out of this mire lies in rediscovering the search for an ‘authentic self’—this is the politics of so-called ‘downshifting’.

Across developed countries, a growing yet overlooked movement of people is opting out of the rat race and choosing to pursue a more balanced and fulfilled life, whether this involves spending more time with their families or living a simpler, more sustainable life. Downshifterers may thus be defined as people who make a voluntary, long-term, lifestyle change which involves accepting

significantly less income and consuming less. This movement is overlooked in part because gross domestic product does not measure the impact of decisions to downshift on quality of life (Hamilton supports the ‘Genuine Progress Indicator’, which attempts to reflect the costs and benefits of growth, including non-market household activity). While the seeds of this movement may well be growing, and he presents strong survey evidence, Hamilton makes it clear that a post-growth society will only be realised when parties adopt policies to promote downshifting *en masse* (Hamilton 2003, pp. 122–46; 205–40).

This is a persuasive and well-articulated book about the modern social condition, in the developed world. It is nonetheless limited in several ways. For one, Hamilton’s discussion ignores the context of an ageing Australian society, which is expected to bring less growth with fewer people of working age but more volunteering among a burgeoning cohort of retirees. Society is heading towards more equilibrium, it would appear, without a need to radically confront the growth ideology.

More profoundly, questions of intergenerational equity do not feature in this analysis. Yet the situation of a baby boomer, with a fully-owned home and stable work history, and a generation Xer, priced out of home ownership and with a part-time job and Higher Education Contribution Scheme debt to repay, is not readily comparable. Indeed, intergenerational issues are foreseeably of greater social policy interest than that of post-growth lifestyles.

Lastly, the implications of these ideas for the current Australian welfare reform process are not clear. The goal of the social support system to help people into work and promote self-reliance is not diminished by Hamilton’s analysis, while the Government has come to recognise the value of social forms of participation. In the end, his understanding of wellbeing is possibly just too existential. From a policy perspective, at least, the concept of social capital— absent in this book— would seem to be more useful in addressing legitimate concerns of societal malaise.

Phillip Mendes, *Australia's welfare wars: the players, the politics and the ideologies*, UNSW Press, Sydney 2003, viii + 219 pp., index.

Reviewers: Alison Smith and Bruce Smith

Participation Strategies Branch, Department of Family and Community Services

In *Australia's Welfare Wars* Phillip Mendes sets out to analyse the role played by ideologies and lobby groups in determining changes to the welfare system. While the book is clearly aimed at an undergraduate audience (questions for discussion and exercises are included at the end of each chapter), it is nevertheless ambitious in its scope, aiming to set out a 'defence of the positive humanitarian aspects of the welfare state against neoliberal attack'. Mendes argues that the successful advance of neoliberal ideas, and the lack of a coherent response, is a defining issue in contemporary welfare debates—a position that is both the strength of the book and a source of its weaknesses.

The book begins by setting out the historical and political context for current welfare debates. The historical summary is somewhat conventional, stopping at the standard stations:

- ▶ social laboratory in the 1900s
- ▶ conservative inaction in the 1910s to 1930s
- ▶ heroic reform in the early 1940s
- ▶ conservative caution in the 1950s and 1960s
- ▶ social democratic reform in the early 1970s
- ▶ partial rollback under Fraser
- ▶ increasing influence of economic rationalism under Hawke and Keating (held in check only by an in-principle commitment to social justice), and then
- ▶ full blooded neoliberalism unleashed by the Howard Government.

This sets the scene for a more detailed account of 'the ideological backlash against the Australian welfare state'. The rise of neoliberalism is tracked from the initial incursions by Bert Kelly and John Singleton in the early 1970s, through to the rise of a number of key right wing think tanks in the late 1970s and early 1980s. Mendes then sets out a five-point framework for the neoliberal critique of welfare, and summarises criticisms of each of these points in turn:

- ▶ the welfare state has been captured by interest groups (including the Australian Council of Social Services (ACOSS) and social workers) manipulating the redistributive process to their own advantage

- Mendes argues that this is simplistic and that, in any case, advocates of economic rationalism often benefit from rolling back the welfare state
- ▶ regulated minimum wages deny less skilled workers access to jobs—deregulation of the labour market would promote more equitable outcomes
 - Mendes contends that this is unproven, and that it is more likely that deregulation would significantly increase inequality
- ▶ government programs encourage welfare dependency, undermine the productive private sector, and are often misdirected to middle class families
 - Mendes notes there is no evidence that welfare programs encourage dependency, and that Australian welfare spending is low by international standards
- ▶ current welfare programs encourage people who do not genuinely need or deserve help—their poverty is the result of individual failings which social programs cannot rectify
 - Mendes maintains that the systemic causes of poverty far outweigh the effects of laziness or moral failure, and that the deserving/undeserving distinction is designed to isolate one group of poor people from the rest
- ▶ the welfare state has reduced the sphere of individual freedom and programs should instead be delivered by churches, families and the charitable voluntary sector
 - Mendes argues that delivery of services by non-government agencies compromises accountability, leaves the door open to services being delivered on the basis of moral criteria, and disguises reductions in government expenditure.

Mendes then proceeds to consider the links between neoliberal prescriptions and globalisation. He concludes that while there is a range of general global imperatives that frame Australian choices, nevertheless there is considerable room to move within that frame. Taking the McClure Welfare Reform Review and the debate over safe injecting facilities as case studies, he argues that the Australian Government has selectively introduced international influences into debates where they support its own policy preferences.

The rest of the book tracks the increasing influence of neoliberalism in both the Liberal and Labor parties over the past two decades, and then assesses the reactions to this by key players in welfare politics—particularly ACOSS and the major churches. The Liberal Party, it is argued, was ideologically diverse until the election defeat of 1983 after which there was a takeover by the ‘free-market faction’ and the virtual marginalisation of the social liberal faction. The Labor Party is presented as more complex, with a continuing tension between a commitment to social justice measures being opposed to an increasing reliance on market

mechanisms. Mendes argues that the Third Way discourse, while more subtle than standard neoliberal prescriptions, nevertheless confirms the centrality of the market and is broadly consistent with Labor's move to the right. Finally, the experience of ACOSS and the churches is presented as part of the same narrative—ACOSS futilely attempting to stem the rise of neoliberalism at a general policy level, and the churches, while supporting social justice in principle, being compromised in practice by their involvement in the market provision of labour market assistance and aged care.

Australia's welfare wars is written clearly and accessibly, and is a useful, if narrowly focused, introduction to some important welfare debates. Nevertheless, the book is ultimately unconvincing in its single-minded pursuit of the rise of neoliberalism as the key to understanding contemporary welfare policy. This is partly because neoliberalism itself has a somewhat ambiguous quality throughout the book, moving from a quite specific application of, for example, Hayek's principles, and then shifting to any opposition to or skepticism of a statist application of social liberalism.

This is evident in the very notion of the 'rise' of neoliberalism, where this rise is counterposed to the earlier social liberal consensus. As noted earlier, Mendes relies on a fairly conventional history of Australian welfare policy, and only notes in passing that this has been challenged by revisionists such as Rob Watts. This is unfortunate because Watts's study of the Curtin and Chifley reforms—*The foundations of the national welfare state*—questions a number of tenets of the heroic laborist account of welfare. In particular, he argues that the creation of the National Welfare Fund in 1943 was largely driven by the Curtin Government's fiscal strategy to control inflation by regressively increasing the taxation of low-income earners. Watts also argues persuasively that social policy in post-war reconstruction was underpinned by a residualist vision of welfare as a safety net, and that both Curtin and Chifley believed that private enterprise should be the cornerstone of reconstruction and that getting a job was the best way of ensuring long-term welfare (Watts 1987, ch. 6). The fact that any government in the past 20 years would be comfortable with endorsing these tenets means that we need to be cautious about overstating the contrast between past and present, and we need to be quite specific about what has changed.

The need for greater specificity also undermines the book's arguments about the dominance and coherence of neoliberalism in the present. Mendes's case that neoliberalism has all but overwhelmed other competing discourses seems to rely on a conflation of market-related thinking with just about every other discourse that is not standard social liberalism. This means that quite important discursive tensions and oppositions tend to be underplayed or ignored. A neoliberal focus on markets and individuals, for example, is not always consistent with a more traditional conservative focus given to normative family functioning. There are also significant tensions between neoliberalism and even conservative forms of

communitarianism. We have only to think of gambling policy, for example, to find an area where a conservative approach to family and community would take a very different direction to an approach premised on markets and individual responsibility.

This generalised approach to neoliberalism is, I suspect, the reason behind the otherwise inexplicable omission in the book of any sustained analysis of the report of the Reference Group on Welfare Reform (the McClure report). Aside from one short descriptive paragraph (p. 93), the only consideration of the report is in the chapter on globalisation, where it is noted that the Welfare Reform Review happened at the same time as the Australian Institute of Family Studies sponsored the visit to Australia of Lawrence Mead, the United States proponent of mutual obligation. Putting aside the fact that there is no evidence in the report itself of any influence by Mead (or any reference to him), this is hardly an adequate treatment of a highly influential report which has set the direction for change for the past few years. The most likely reason for this absence is that the report itself is a complex blend of influences (communitarian, neoliberal, practical social administration) advocating a range of interventions which does not easily lend itself to a single grid-reading, looking for evidence of the state being rolled back by markets. This means the report, and the range of reforms which have come out of the Government's consideration of the report, cannot easily be understood within the parameters of Mendes' analysis.

Why does the book find itself in these dead ends? An underlying reason is the way in which Mendes sets up the problem. In tracing the rise and influence of neoliberalism, he has subscribed to a somewhat old-fashioned conception of an 'ideology' as a constellation of ideas that sets out to change reality and that can be assessed in terms of the extent to which it has inscribed itself into the real world. While this is no doubt how the relevant 'ideologues' understand what they are doing, it is not necessarily the best way to understand social change. While it might be tempting, for example, to draw a link between Hayek and the introduction of privatised case management of unemployed people, there are at least two reasons to be cautious. First, we know that the widespread critique of state-provided welfare, that emerged in the 1970s, stretched across the political spectrum and in fact was advocated for many years more strongly by the left than the right (Donzelot 1991). Mendes' own introductory comment about the 'often undemocratic and unaccountable structures of the welfare state' (p. 2) bears the traces of decades of leftist and left-libertarian accounts of welfare that have arguably been as influential in undermining the legitimacy of state provision as anything from the 'new right'. This confluence of programs of reform means that it is difficult to establish any clear causation between one of those programs and a specific government initiative.

Perhaps more fundamentally, it can be argued that drawing links between **any** generalised ideas and specific initiatives is contentious unless they can be linked through a series of mediating categories. Neoliberalism, left ideologies or any

other ideologies seem very blunt tools to help us to understand the emergence of case management techniques, the development of assessment instruments, the organisation of tendering rounds, the re-articulation of service sub-systems, reallocations of risk in personalised client agreements, or the increasing integration of counseling into welfare programs. These developments, which constitute the nuts and bolts of the welfare system, are where the most important changes to the system are happening, and each of them have specific histories and a host of very important consequences. Some work has been undertaken to try to understand this proliferation of new social technologies, including most notably, Nikolas Rose's development of the category of 'Advanced Liberalism', which encompasses neoliberalism with related forms of communitarianism and neo-social democracy (Rose 1999). Rose, along with William Walters and Mitchell Dean, has traced the emergence of a new constellation of governmental strategies being pursued by state and non-state agencies, including:

- ▶ a new prudentialism, which aims to increasingly make people more responsible for their own risk minimisation, including taking responsibility for their own skill acquisition, their job search, their health, and so on
- ▶ technologies of agency, which focus on giving people capacities to increase self-esteem, empowerment, consultation and negotiation in an environment increasingly focused on contract and agreement
- ▶ technologies of performance, which aim to introduce new forms of calculation into formerly closed areas of welfare expertise, including performance driven by quasi-markets, and new forms of audit and evaluation (Dean 1999).

Whether these or other categories prove to be most useful in understanding current developments is yet to be seen. What does seem clear is that taking account of the range of micro-practices that constitute the welfare apparatus, and their diverse histories and trajectories, offers a greater potential to understand the present than remaining focused on the influence of overarching ideologies on a unitary welfare state.

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Barbara Pocock, *The work/life collision*, The Federation Press, Sydney 2003, xi + 288pp., index.

Reviewers: Claudia Zines with Ruth Ragless

Family and Children's Policy Branch, Department of Family and Community Services

Introduction

Work-life balance is a topic of considerable community and media interest and debate. Barbara Pocock's recent book provides a detailed and sometimes passionate exploration of the high social costs of the current work–life collision, including a declining sense of local community, hidden costs on intimacy and relationships, falling fertility rates, and entrenched gender inequality. In her view, the work–life collision is intense because work patterns have changed well ahead of changes in our institutions and culture.

Research informing the book is mostly drawn from interviews and focus groups with women. While some of her qualitative research was originally commissioned by the Australian Council of Trade Unions, and may have a tendency to focus on extreme cases, she presents a challenging story about the effect of work on family life. Personal accounts are set within the larger social context through reference to various sources of quantitative data, mostly from large surveys, for example, the Australian Bureau of Statistics surveys and the Australian Workplace Industrial Relations Survey. This mix of qualitative and quantitative research allows for some powerful arguments.

Pocock's ideas are fresh and innovative, and tailored specifically to Australian circumstances, rather than relying on adaptations of international models. Her solutions are multidisciplinary—calling on a range of government departments, institutions and individuals to respond. She believes there should be more effort directed towards integration of care with paid work and greater genuine acceptance of the diversity of people's experiences. Integration and acceptance, Pocock argues, can be achieved through better public policy, combined with shifts in public attitudes. She explains how a life-cycle approach to labour and to care is needed, with policies that enhance genuine choices.

Explaining the work–life collision

Pocock tells the story of modern life, starting with the rise in participation of women in the labour market, and an increase in the number of dual-earner couples with children. In addition, she demonstrates how in her view, we are faced with longer hours spent working, deteriorating leave provisions, and a diminishing sense of community.

According to Pocock, a collision between work and care is occurring because the cultural constructions of ‘proper mothers’ and ‘proper carers’ have not changed commensurate with change in their roles in paid work. She cites evidence that women continue to do most domestic work and care, that there are inadequate leave regimes, and part-time workers are often considered second-rate to full-time workers.

As a result, Pocock points to a declining quality of life for individuals, households and children. Furthermore, she argues that the squeeze on care and community by paid work is likely to intensify, given existing labour market trends. To date, individuals have made adjustments to accommodate wider, sometimes conflicting responsibilities, but fundamental change is needed—by men, workplaces, governments and the wider community. The lack of any real institutional change has resulted in adaptation being privately borne by individuals and, in Pocock’s view, evidence of this can be seen in falling birth rates and high rates of relationship breakdown.

Countering the collision

Pocock suggests guiding principles for a new work/care regime, including the following examples:

First, **an integrated life-cycle approach needs to be adopted**. This means that more consideration needs to be given to transition points in people’s lives such as from full-time worker to full-time carer, to ensure people have the skills, finances and help available to adapt to these changes. Research shows that times of transition in people’s lives are often very stressful. For example, childbirth can lead to significant financial strains on a family, along with stress in adjusting to new household needs and patterns. Better integration between work and care arrangements such as paid maternity leave, Pocock claims, will assist employees, employers, families and our communities, and result in a better functioning, fairer labour market, lower personal risks, and higher personal satisfaction.

Second, people need **real choice**, that is, between **a range of options that accommodate diverse situations**. Policy, Pocock argues, should recognise that individuals have different preferences and often these change over time. In addition, benefits should be equal for those in paid work or providing care. Part of the process of enabling choice, Pocock adds, is to better understand what constraints exist and to find ways of alleviating these. Choice, she clarifies, should be real and effective rather than in name or law only. Pocock illustrates, for example, how for both sexes the decision to work part-time is frequently read as a turning away from career, and thus workers are given low-priority work, and are frequently not considered for promotion. While legislation and agreements may make part-time work a possibility, attitudes also need to change in order to address the prejudices against part-time workers, she claims.

Strategies

The book is brimming with specific ideas and examples of how to tackle the work–life collision, some more radical than others, some explored in detail, and others just briefly mentioned. Below are examples of some strategies that are discussed.

Child care

Pocock argues that, given the costs, patchy availability, and poor articulation between forms of public and private care, Australia’s child care provision is a very long way from a universal, low cost, high quality system. Such a system is essential if all those parents and carers who undertake paid work are to truly have ‘choice’, she adds.

Government payments

Pocock argues that Australia is in need of an overhaul of work/family payments. She questions why, with so much money spent, families continue to report pressures. Consequently, she claims that there are many better ways to allocate resources, including through a simplified system of payments that are made directly to carers, rather than to their partners through the tax system, with support especially targeted at the years of intensive caring.

This mirrors similar calls from a range of commentators, including Professor Peter McDonald, known for his research on low fertility and work and family matters, who also argues for a radical re-shaping of family payments in Australia. He claims that the current system is illogical and inefficient because in some cases people are given incentives to stay at home, in other cases people are given incentives to go out to work; so the incentives can conflict with each other, and become disincentives for alternative behaviour. Like Pocock, he envisages a payment system that redresses the social value that is given to working parents and allows them more flexibility in choosing a balance between work and family life (McDonald 2003).

Reducing long hours

Pocock’s in-depth interviews show that individuals who work long hours, or unpredictable long hours and shifts, suffer serious effects from such hours. To reduce this pressure, some of Pocock’s suggestions include reducing the ordinary hours of a full-time working week, phasing out unpaid overtime, and creating staffing agreements that ensure adequate staffing.

Is Pocock overstating the situation?

Not all would agree with the story Pocock tells of modern society. Certainly, her forceful use of language (for example, calling a mother’s return to work only a few weeks after childbirth ‘barbaric’) and dramatic selection of interview material can be a little overbearing at times.

Mark Wooden (2002) provides a good example of contrasting opinions. He argues that research shows working long hours is not detrimental for the majority of workers and their families. He claims that the mechanisms by which long hours of work might impact on individual and family outcomes are likely to be both complicated and highly variable with individual situations. Thus, he concludes that long work hours may be a risk factor in conjunction with other factors.

Similarly, in an article entitled, ‘Stressed out on four continents: time crunch or yuppie kvetch?’, the authors claim, judging by the results of their study, at least some of the concern about a ‘time crunch’ may be misplaced—complaints about insufficient time come disproportionately from higher-income families. They therefore conclude that being concerned about these complaints or simply viewing them as ‘yuppie kvetching’ (whingeing) is a matter of preference (Hammermesh & Jungmin 2002, p. 24).

Conclusion

Overall, Pocock successfully presents an informative, if sometimes emotional, account of the Australian situation. Her interviews include some delicate and personal questions about work and family, thus allowing a rare insight into people’s private lives—their worries and struggles. Complementing this, her knowledge of Australian industrial law, cultural history, labour, and care arrangements is impressive.

Her book is a timely and useful contribution in helping all of us understand the depth of the collision between work and life and its impacts, and the significance and extent of the need to make attitudinal and institutional changes to enable balancing of work and family life in Australia, now and in the future.

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