PEOPLE AND PLACE

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LOW FERTILITY AMONG WOMEN GRADUATES

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Australian women who are university graduates have fewer children than non-graduates. In most cases this appears to be the result of circumstantial pressures not preference. Long years of study fill the most fertile years of women students and new graduates need further time to establish their careers. The chance of medical infertility increases with age so, for some, this means that childbearing is not postponed but ruled out. Graduates who do make the transition from university to professional work find that working hours are long and that professional occupations are now both highly demanding and insecure. Women who take time off to care for young children must depend on one insecure income (their partner's) rather than two, and their return to work is uncertain. These difficulties of time, money and insecurity are compounded by problems in finding a suitable partner. They are magnified by the enduring tendency of women to marry up. Thus it can be more difficult for women graduates to find husbands than it is for women who are non-graduates.

There has been little direct attention paid in Australia to the phenomenon of low fertility among women graduates. Yet it was already observed a hundred years ago, when almost half of the first generations of female university graduates remained unmarried and the rest had below-average fertility.¹ There has been brief notice a number of times since,² but no extended study of its extent or causes. The question is significant because of the increasing education levels of women. A majority of recent graduates are women and, of 35 year-old women, about one in six have a bachelors degree and of these about one in four have a higher degree.³

The number of children ever born for 40 year old women in Australia varies dramatically with education level (Figure 1). At the 1996 census those with no post-school qualification had an average of 2.3 children, those with a bachelors degree 1.8, and those with a higher degree 1.3, that is, half a child less per degree.⁴

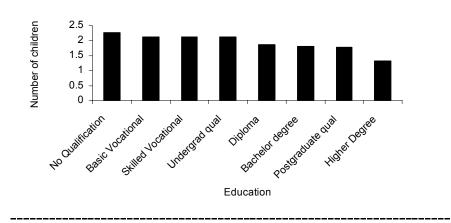
Rates of childlessness tell the same story. Women with no post school qualifications have the lowest level of childlessness of 11 per cent, women with a bachelor degree 22 per cent, those with a higher degree 34 per cent. And of those women who do have children, the proportions going on to have two or more children drop as education rises.

These figures are reflected in regional differences: regions in Australia with higher levels of educational qualifications and higher levels of skilled occupations have lower fertility.⁵

The reasons for these large differences are the subject of this article.

There has been more attention paid to the question in some overseas countries. The country where the issue has had the highest profile is Singapore where, in the mid-1980s, the government instituted a policy of substantial rewards for graduates who had children, at the same time as continuing its Sterilization Cash Incentive Scheme for the poor and uneducated. The Social Development Unit operated a government-sponsored matchmaking service principally aimed at graduates (and still does).⁶ These policies have had little success, and the fertility of both graduates and non-graduates in Singapore remains lower than in Australia.⁷ Studies in other Western countries, some motivated by eugenic concerns, have confirmed that the phenomenon of lower

Figure 1: Educational attainment and number of children ever born for 40-year-old women, 1996 census



Source: ABS, 1996 Census of Population and Housing, customised data table

fertility of graduates is widespread.⁸ None of these studies have considered the subpopulation with postgraduate qualifications.

LOW FERTILITY: CHOICE OR CHANCE?

Before discussing the pressures that may lead to low fertility, it needs to be established whether fewer children are primarily a matter of choice or not. If career women are simply choosing not to have children, there is little point in investigating their problems and no good reason to consider policies to reverse the phenomenon.

Certainly, some people give lifestyle and career choices as reasons for not having children,⁹ and the much higher rate of childlessness among women of no religion¹⁰ is presumably a matter of human rather than divine choice. But there are many reasons to believe that a substantial proportion of childlessness is not chosen. One piece of evidence is the gap between intended and actual numbers of children. Merlo and Rowland estimate that 20 per cent of today's young women will remain childless (and their article was written in criticism of a study by the Australian Bureau of Statistics [ABS] that estimated 24 per cent).¹¹ Yet that is not the stated intention of young women: over 90 per cent say they would like to have children by the age of 35.12 In another study, 89 per cent of respondents intended to have children while only six per cent said that they would not have children. Nor does it seem that the intention to have children lessens substantially over time ---though some change their stated intention in the sense of coming to terms with the reality of childlessness.¹³ As time goes on, a gap appears between intended numbers of children (in the sense of numbers hoped for, if all goes well) and expected numbers. The expectations of children held by Australian women with a post-school qualification drop sharply from age group 20 to 24 when 2.55 children are expected on average to age group 30 to 34 when 1.81 children are

expected on average (and that is still much more than is likely to be achieved).¹⁴ These conclusions drawn from overall figures are borne out by the extensive interviews in Leslie Cannold's Melbourne study of childlessness. Many interviewees had chosen to be childless, but many others deeply regretted the various circumstances and decisions that had led to that outcome.¹⁵

Young educated women do not show a greater preference for low fertility than the less educated. Australian women aged 20 to 24 with a post-school qualification expect to have 2.55 children on average, more than the 2.40 expected by those without secondary school qualifications. The outcomes are the reverse: higher education and a subsequent career lead the more educated to delay marriage and childbearing and their family size expectancy (around age 30-34) and eventual outcome drops to a lower number than for the less educated.¹⁶

In view of the tendency of graduate women to delay childbearing into their thirties, the increase of medical infertility with age needs to be taken into account in evaluating whether childlessness is by choice. Women who delay pregnancy are not always aware of how early the biological clock begins ticking - rates of medical infertility are about five per cent for twenty year olds, 10 per cent for thirty year olds and 15 per cent for thirty-five year olds, after which the rate increases rapidly.¹⁷ A woman who delays childbearing until her mid-thirties in the reasonable expectation of being fertile and then finds it impossible cannot be said to have chosen childlessness, even though a different choice much earlier might have resulted in children.

OBSTACLES TO GRADUATE FERTILITY: TIME

Education takes time, graduate work takes

time, forming and sustaining relationships takes time and motherhood takes time. There is only so much time to go around. We examine time pressures affecting fertility in some detail, as they have not been very visible in the demographic literature; for example, McDonald's four suggested theories of low fertility (rational choice theory, risk aversion theory, post-materialist values theory and gender equity theory) do not easily incorporate simply being too busy as a cause of low fertility.¹⁸

Study itself takes years, during which students normally have neither the wish nor the money to have children. A graduate, and even more a higher-degree holder, will have passed a large proportion of her fertile years before considering having children. Even if she intends to make up time and have children later, there will be little time to recover from the various events that can impede planned childbearing — medical fertility problems, delays and errors in finding an acceptable partner who also wants children, early divorce and so on.

The simplest illustration of the time conflict between work and motherhood is the different employment patterns of men and women. Rates of full-time employment are still much higher for men than women, while a temporary break from work and later part-time work is the norm for women with children.¹⁹ It is clear that motherhood and full-time work is not an easy combination.

For graduates, there are several factors that exacerbate the conflict. Higher education equips a graduate with the potential for a professional and competitive career, but it does not automatically lead to that outcome. The promise of higher salaries and better jobs is not always realized: 29 per cent of 35 year old women with higher degrees are earning less than \$400 a week.²⁰ Although the proportion on this

low income is less than the 41 per cent for those with a bachelor degree and the 71 per cent for those with no post-school qualifications, it is still clear that investment in years of education is not a guarantee of wealth. To catch up to and surpass less-educated workers, the graduate needs to offer employers more. Long working hours are among the rewards that workers, especially graduate workers, are expected to offer employers.

For workers overall, the average of working hours has been increasing over the past two decades. The proportion of full-time workers on 50 or more hours a week has increased from 20 per cent to 30 per cent in the last twenty years (for women, from 10 per cent to 19 per cent).²¹ Much overtime is unpaid, but the figures for overtime are increasingly meaningless as long hours become an accepted part of the job package, especially in professional jobs. Also women are now working over 100 hours more per year than they did 20 vears ago and men are working an extra 156 hours a year; many, especially but not only men, are still expressing a preference to work even more.22

Just as much a hazard, though less well recognised, are the time demands specific to graduate work. Work in the knowledge economy is demanding in a way that makes it hard to resist its demands even in a good cause. Part of the attraction of such jobs is that they are interesting, especially for intelligent people. Graduates secure the pick of the crop of the many fascinating jobs on offer; they are paid well, but a special kind of performance is expected. The typical task is not to keep a process operating for a given time but to produce a report/software/widget in perfect working order before deadline, and the team does whatever it takes.

Workers in the information economy are expected to be agile.²³ Job ads typically write: 'You will thrive in a dynamic,

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results-driven environment and enjoy working under pressure. Team players only need apply'. Workers are genuinely concerned to perform well in the team and to impress superiors.²⁴ And knowledge workers are not interchangeable like process or retail workers, in that they are likely to be the only ones with specialised knowledge of the particular case, so that their work is essential to the team's completing its task. As a result, among employees, very long working hours are most common in occupations involving high levels of personal responsibility and accountability, relatively high earnings and in jobs with no standard working hours; a majority of doctors, for example, work fifty or more hours a week.25

International comparisons confirm the perception that time stress is in general worst in higher-income or yuppie jobs.²⁶ The reward for success is first call to solve the next crisis, and a permanent state of being, in effect, on call. A team player does not let the team down by demanding forty-hour weeks. There is added pressure to expand work hours arising from the competitive nature of many jobs, for example in academia and in large law and consulting firms, where a lectureship or partnership is held out as a distant goal which only the most able and dedicated will attain. In any case, the nature of a knowledge-based task is that it is not easy to forget about it, in the way one can forget about an assembly line when away from it. It is all too easy to become very adept at what the job ads call time management skills, and to be left with little time mentally free for developing personal relationships. Women general practitioners, for example, faced with regular conflicts between domestic pressures and patient emergencies, identify as the two most important issues in their non- professional life making time for self-care to avoid stress, guilt, burnout and mental ill-health, and having time to nurture a quality relationship with a partner.²⁷

The trend to provision of services at all hours adds further to the observed expansion in work at unsociable hours,²⁸ so that what free time a worker does have may be at times when no-one else is free. One of the subjects interviewed in Pocock's The Work/Life Collision recalls, 'I was doing a lot of nights in obstetric anaesthesia --- we hadn't actually seen each other for 26 nights out of the month ... there are a whole lot of things we can't manage to do because of the schedules not matching up'.²⁹ The fact that, world-wide in developed countries, work policies that are family friendly are positively correlated with fertility³⁰ also suggests that the work-life conflict has a major effect on fertility.

Knowledge workers also, in the nature of their work, need to keep renewing their skills. Graduates have no choice but to undergo more training, whether through a further degree, on-the-job training or conferences. That needs not just time, but quality time when concentration is possible.

Motherhood itself is extremely time-consuming, and every prospective mother knows the sleepless nights and constant worry involved. It is not conducive to intellectual work, even part-time. The demands made of good mothers may be impossible, and even a good-enough mother will not have the hours in the day to do what is reasonably required. Consequently the knowledge of having to comply with the standard of a good or even mediocre mother can lead to guilt about a decision to have children (let alone guilt afterwards while trying to cope). A detailed Melbourne study of new mothers found that 59 per cent reported not having time to pursue their own interests, 57 per cent did not have an active social life and 55 per cent needed a break from the demands of the child.³¹ And it seems these

facts are by and large well-known to younger people planning their fertility.³²

OBSTACLES TO GRADUATE FERTILITY: MONEY

The direct and opportunity costs of childbearing for women are very high, and, at least in money terms, are even higher for graduate women.

Estimates of the direct costs of children vary greatly according to methodologies.³³ They are not a high proportion of typical graduate salaries, but can loom large when a drop in income is being contemplated. The opportunity cost is more severe: lost lifetime earnings for a women with a degree or diploma, having a first child, are estimated at \$220,000 (net present value, after tax), or a third of lifetime earnings.³⁴

The decision to take a drop in income has to be made at the time in the life cycle when indebtedness is highest. Household indebtedness, mostly due to mortgages, peaks at ages 35 to 39 (of the household head),³⁵ and a graduate has fewer earlier years of work when savings could have been accumulated.

But these simple monetary figures understate the risk of stopping work to have a baby in a number of ways. A family dropping from two incomes to one, even for a short period, faces the risk of retrenchment of the sole breadwinner --and many graduates work in unstable industries like IT — at the same time as fixed outgoings like mortgages have to be paid. Lifetime earnings are not entirely to the point when the drop in earnings is immediate. (And near-term financial risks are one of the best-established causes of low and delayed fertility, as evidenced by the very low fertility rates in the 1930s Depression.) Older researchers especially need also to remember the pervasive sense of job insecurity of the younger generations, who have never known a secure job market.36

A woman leaving the workplace for more than the bare minimum of maternity leave also faces a long-term career risk, in the diminution of the value of her labour market skills. For high-flying graduate jobs in academia and management, where success is measured in continuous progress through a hierarchy and needs constant learning to keep at the cutting edge, the temporary halt to progression, even if alleviated by a move to part-time work, is unlikely to be made up later.³⁷ By contrast, less educated women may have less to lose if they have to leave the labour market.³⁸ There are adequate job opportunities available for women in clerical and retail-related areas, and those jobs can be gained without further training. Better educated women however have to compete with freshly graduated students if they want to re-enter the labour market as a professional, and they do so with the disadvantage of less up-to-date training.

In addition, a graduate woman, and often her partner as well, are liable for Higher Education Contribution Scheme (HECS) payments. It is true that there is little evidence that HECS directly affects fertility.³⁹ And since university educated women earn more than other women (\$906 per week for the average wage earner with a bachelor degree compared to \$643 per week for women with only year 12 education), there are prospects of eventually recouping the costs of study over a long period. Women can pay their HECS and still be much better off financially than earlier generations. Nevertheless, it remains true that a prospective graduate mother, after years of low income as a student, is liable for a debt premised on her higher earning power, at the very moment when childbearing will cut that earning power.

OBSTACLES TO GRADUATE FERTILITY: PARTNERING DIFFICULTIES

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Finding the right partner is another area where educated women face special difficulties. Among the ways in which fertility differs with education is the large number of ex-nuptial births among younger women without post school qualifications.⁴⁰ Failed relationships, inexperience and deliberate choice contribute to the high number of single individuals in the late twenties age bracket, but the less educated are more likely to have children by that time. Time spent on education and career means less time to spend in a relationship; indeed, a graduate beginning a career involving travel and long hours may find a committed relationship an obstacle or risk to the career.

Issues such as educational mismatches can bring delays in entering relationships, delays that may lead to being single forever. The result is higher childlessness in better educated and more career oriented women. There is a strong marrying-up phenomenon evident in the late thirties and early forties age groups as women still tend to form relationships with men who are better educated than themselves. This leads to a large excess of unpartnered educated women ('balanced' by a large excess of unpartnered less educated men). Although there is a rough balance in unpartnered graduates in the late twenties, there is a ratio of nearly three women to two men among unpartnered graduates aged forty to forty-four.⁴¹ The observation that men with low incomes tend to be unpartnered may lead to the conclusion that less-educated and poorer women are targetting higher earning and better educated men, in competition with women graduates (and doubtless, with more time to devote to the chase).

More general questions about male decisions on fertility are of course important, since the decision to have a child is normally taken by both potential parents. Unfortunately, much less is known about male fertility and male decision-making than about women. It has been noticed that men in their early thirties are delaying having a first child much more than in previous generations,⁴² with presumably special consequences for graduate fertility, but the present state of research does not permit more definite conclusions.

Sylvia Ann Hewlett's focused American study of infertility among professional women gives some insight into the dynamics behind the figures. The more successful the woman, Hewlett finds, the less likely it is for her to find a husband or bear a child. (The reverse is true for men.) A third of high achieving American women are childless at age forty and this figure rises to 42 per cent in the corporate world. Among ultra achieving women, those who earn more than \$US100,000 a year, the childlessness figure rises to 49 per cent. (On the other hand, only 25 per cent of high achieving men are childless at the age of 40 and this figure falls to 19 per cent among ultra achieving men, those earning more than \$US200,000 a year.) The majority of these high-achieving women did not choose to be childless. Difficulties in finding the right man while there was still time to have children seem to be the main cause. Many of these career-oriented women are willing to spend up to \$US9,600 taking courses on how to find a partner.

We have argued elsewhere that there are some prospects of raising graduate fertility through carefully targeted policies to reduce the financial risk of childbearing, such as cancellation of the HECS debts of childbearers and paying a living wage to postgraduate research students.

Governments, like individuals, tend to postpone decisions about fertility. In both cases, the result is an unhappy one.

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