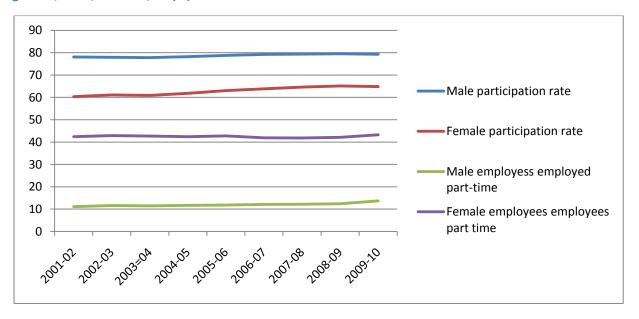


Women's Access to the Labour Market

Women's access to the paid labour market has altered, most significantly in the last forty years.

- On the score of employment, women's labour force participation rate in March 2011 stood at 58.6%, compared to 36.3% in 1966.¹
- In April 2011 women constituted 45.3% of the employed workforce and their contribution has underlined the cumulative increase in Australia's workforce participation since the 1970s.²
- Nonetheless a gendered pattern of workforce engagement remains apparent. In March 2011, 35.3% of all full-time workers and 69% of all part-time workers were women; 45.9% of women in paid work were employed on a part-time basis, with the comparable figure for men being 16.6%.³

Figure 1: Participation rates, proportion of employed persons in part-time employment, by gender, 2001/02-2009/10 (%)⁴



Women's engagement with the labour market is shaped by their engagement with dependant care responsibilities; women are significant more likely than men to have temporary or permanent withdrawals from the paid labour force. Each of these withdrawals is significant in terms of current and future foregone earnings.⁵

There is a drop in labour force participation rate for women between the ages of 20-24 years and 45-54 years relative to men. This has been attributed to caring for children, other caring and household responsibilities and the effect is more pronounced for lone mothers.⁶

The dip in labour force participation rates for women aged 25-44 years is less pronounced in 2011 than that evident 25-30 years ago. Yet this greater consistency in participation rate, from women, is shaped also by the manner of their labour force participation which and their greater representation in part-time employment.



Further the labour force participation rate is lower for women with dependent children in comparison to men with dependent children. In 2009-10, the difference in the participation rate between males and females whose youngest child was aged 5 years or under was 41 percentage points, but drops to a 15 percentage point difference when the youngest dependent child is aged 6-14 years.

The proportion of women working part-time is impacted also by the age of the youngest dependent child. In 2009-10, over two-thirds (67%) of employed women aged 20-74 years with a child aged 5 years or under were in paid part-time work, and this declined to 55% for women whose youngest child was aged 6-14 years. Only 7% of employed males aged 20-74 years with a child aged 5 years or under, and 8% with the youngest child aged between 6-14 years, worked part-time.

Lone parenting significantly impacts also joblessness (Figure 2).

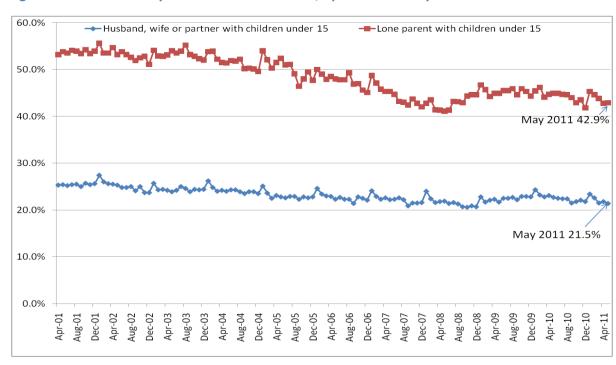


Figure 2: Trends in Family Joblessness⁷ in Australia, April 2001 to May 2011⁸

Measures to facilitate women's engagement with paid work have been shaped by feminist agency, and regulation and workplace initiatives concerning:

- the organisation of working time including access to paid parental leave
- measures to revalue women's paid labour
- affirmative action and equal opportunity and regulation that addresses sexual discrimination and sexual harassment
- child care, including tax transfer arrangements.

The Organisation of Working Time - Sustainability of jobs

Women's interest in their working hours has included working time flexibility; be it sustainable parttime employment opportunities, or increased flexibility in full-time working hours that would facilitate an effective work/life balance. It has also included a guaranteed right to a return to leave following reproductive leave, and more recently paid reproductive leave entitlements.



For a long time, employment outside of full-time, permanent employment was largely deemed 'casual' employment, although this was in effect an umbrella term encompassing a wide range of employment practices. This included casual employees who fell outside of specific labour regulation, casual employees who were covered by awards but who were vulnerable to the erosion of award conditions, and casual employees whose employment was effectively regulated. Presently 23.5% of employed women do not receive paid leave entitlements compared to 17% of employed men do not receive paid leave entitlements. 10

Permanent part-time employment, as a category of employment, did not enjoy consistent recognition until the changes introduced to awards by way of the March 1987 National Wage Case. Permanent part-time employment offered a more sustainable alternative to casual employment, given its greater employment security and the access to provisions including annual leave, sick leave and long service leave. Initially, its availability was largely confined to base grade positions allocated to mature-aged women returning to the workforce following an extended break. Although the distribution of part-time employment has broadened since then, part-time workers remain underrepresented in higher skill level employment, although professionals comprise a relatively high share of part-time workers at 16%. Even so, entitlements vary between full-time and part-time workers, and part-time workers experience lower access to the higher wage earnings arising from collectively bargained wage settlements.

The regulation of employment that falls outside of full-time permanent employment directs focus to what constitutes a standard employment relation. Further it raises questions about the sustainability of employment that falls outside standard employment relation. While permanent part-time employment may technically fall into the definition of a 'standard employment relation', Campbell and colleagues note that schisms remain between full-time and part-time employment as the latter 'often stands uneasily at the edges of social protection even when it is formally under a permanent contract of employment'.¹⁵

There are also relationships between the desirability for more sustained employment, and current rates of unemployment and underutilisation (see Figure 3).

Regulation and policy change has been distinct. Labour law decisions in the maternity leave, parental leave, family leave, personal/carer's leave and family provisions test cases illustrated the capacity for regulation to impact in a collective and positive manner on women's paid work experience.

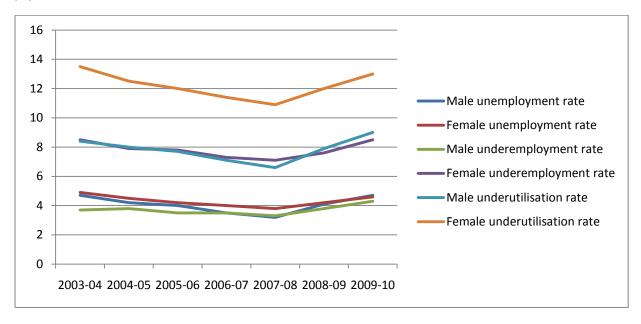
The maternity leave decision provided women with 12 months' continuous employment with the right to 52 weeks' unpaid maternity leave and a return to their current position. This benchmark was built upon through a series of additional decisions: adoption leave came in 1985, 52 weeks' parental leave in 1990, and the extension of leave entitlements to casual employees in 2001. To this suite of provisions are decisions which initially facilitated the use of sick leave for carer's leave, and then increased the quantum of personal leave that could be used for carer's leave.

Under more recent legislation (the *Fair Work Act* 2009), the National Employment Standards (NES) include key entitlements in the areas of maximum working hours, unpaid parental leave, and personal/carer's leave. There is also a separate legislative entitlement (under the *Paid Parental Leave Act* 2010) to 18 weeks' paid parental leave, paid at the rate of the Federal Minimum Wage (currently \$ 589.30). The NES also contain a provision that enables workers to request a change in



their working arrangements to assist in the care of pre-school age children, or children under 18 with a disability. 16

Figure 3: Unemployment, Underemployment, underutilisation rate by gender 2003/04-2009/2010 (%)¹⁷



Women's Earnings - Measures to revalue women's labour

Despite significant improvements in women's access to the paid labour market and the valuation of their work, women on average earn 16.7% less than men (full-time adult ordinary time average weekly earnings). This ratio reflects a level that has been stable over many years with this stability also evident in industry-specific ratios.¹⁸

The gender pay gap for additional measures of earnings is as follows:

- Full-time adult total average weekly earnings 19.8%
- Total average weekly earnings 34.9%

Australia's gender pay gap is below the average pay equity gap for OECD nations (Figure 4) and that measured through a study by the World Economic Forum.¹⁹

Factors that contribute to the earnings gap in Australia include:

- The undervaluation of women's skills
- Women's lower share of discretionary payments
- Occupational and industrial segregation
- A lack of investment in women through training and development
- Women's concentration in part-time and casual employment (for example women's employment is concentrated in the Health Care and Social Assistance, Education and Training Retail Trade industries. At an occupational level the significant occupational categories are Professionals, Clerical and Administrative, Sales).
- Pay setting methods
- Gender discrimination.



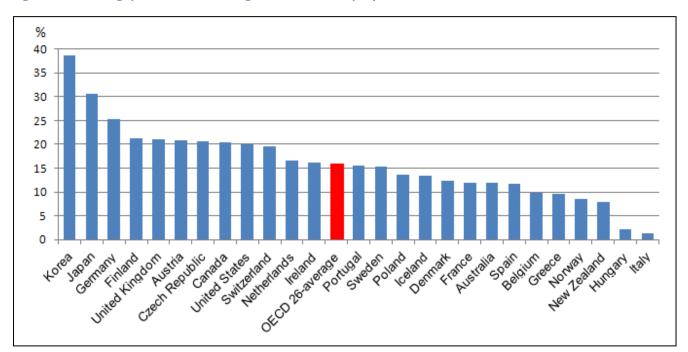


Figure 4: Gender gap in median earnings of full-time employees, 2008%²⁰

A number of studies identify and quantify the relative contributions of the key determinants of the gender pay gap. The most recent of these studies by the National Centre for Social and Economic Modelling (NATSEM) found that simply being a woman is the major contributing factor to the gap in Australia, accounting for 60% of the difference between women's and men's earnings, The NATSEM results indicate that eliminating the whole gender wage gap from 17% to zero, could be worth around \$93 billion or 8.5% of Gross Domestic Product (GDP).²¹

The gender pay equity gap persists despite Australia setting high international benchmarks for the participation of women in education,²² and education attainment. This noted there is a \$2000 gap in the starting salaries of female and male graduates (\$48,000 as opposed to \$50,000).²³ The gap in earnings is further evident by the time a women is in her mid twenties, and there are significant consequences for lost life time earnings including superannuation.

The disparity between lifetime earnings between men and women is significant. A 25-year-old man is likely to earn a total of \$2.4 million over the next 40 years, more than one-and-a-half-times the \$1.5 million prospective earnings of a 25-year-old woman. Meanwhile, a man who holds a bachelor degree or higher and has children will earn around \$3.3 million over his working life compared with a woman in the same category who would earn only \$1.8 million.

Men typically have larger superannuation balances than women with 18% of men having a super balance between \$25,000 and \$100,000, compared to 14% of women of the same age. And retired men aged between 55 and 64 years have around 1.7 times the disposable weekly income of retired women in this age group.²⁴

These deficiencies noted there have been significant improvements in women's earnings since Federation. Improvements in women's earnings were most evident in the period that immediately followed changes in labour law in 1969 and 1972 (Figure 5). Hourly earnings data for private sector, non-managerial, adult full time employees show a steep improvement in gender pay equity ratios between 1967 and 1980, arguably revealing the impact of the 1969 and 1972 equal pay principles. Since 1980 the improvement in gender pay equity ratios has been far less obvious but also subject to



fluctuation. The gender pay equity ratio increased from 64% in 1967 to 80.1% in 1980 – an increase of 16.1 percentage points over a thirteen year period. In the period 1980-2008 the ratio increased only 4.9 percentage points – from 80.1% to 85.0%, although the ratio peaked at 88.9% in 1994 and displayed higher ratios in 2000, 2002 and 2004 than those recorded for 2008 and 2010. Data for all non-managerial employees evidence a similar pattern, although this data is only available from 1974. There was a steep increase between 1974 and 1980 (from 74.2 to 85.8%). Thereafter the ratio demonstrates a fluctuating pattern. ²⁵

95 90 85 80 75 Private sector 70 nonmanagerial employees 65 -All nonmanagerial 60 employees 55 19671969197119741976197819801983198619881990199219941996200020042008

Figure 5: Gender Pay Equity Ratios, Australia, 1967-2010, Hourly Rates, Total Earnings, Full-Time Adults.²⁶

Key labour law milestones in gender pay equity included:

- The initial construction of the minimum or basic wage in 1907 was based on the average weekly expenditure of an unskilled male worker with a wife and three children, and was the first concrete expression of a living wage in federal wage fixing.²⁷
- The establishment of separate female rates of pay was promoted through two principles adopted by the Commonwealth Arbitration Court in 1912. Under these principles, equal pay was granted to women only in those occupations where men's employment was at risk due to the use of 'cheaper' female labour. Where this risk did not exist, because of the inherent 'suitability' of women for the work at hand, women were granted a proportion of the male rate, as they were presumed not to have a family to support. Further support to this principle was provided in 1918 when the federal Arbitration Court fixed a lower minimum basic wage for women in the clothing industry, based on their cost of living needs.



- In 1969 the Conciliation and Arbitration Commission adopted the principle of equal pay for equal work, which rested on a narrow interpretation of equal pay. The decision only applied to situations where 'work performed by men and women was of the same or a like nature'. A specific exclusion applied to work predominantly undertaken by women. This construction limited the available remedies to women who worked in identical jobs to men but received lower award wages than their male counterparts. As a result of the restrictions in the 1969 principle only 18% of women in the workforce received equal pay.²⁹
- The restricted nature of the measures available under the 1969 decision soon became
 apparent and led to further applications as part of proceedings for the 1972 National Wage
 Case. As a result of the 1972 proceedings, the effective exclusion of female dominated
 industries from the ambit of the 1969 decision was lifted, through the introduction of the
 broader principle of 'equal pay for work of equal value'.
- The success of the 1969 and 1972 principles provided an example of positive developments in labour law. Even so the Commission, and the industrial parties, struggled to assess equivalence in work value across different areas of work.
- In 1993 a federal legislative right to equal remuneration for work of equal value was introduced. The legislative right introduced a new rule in that applicants were required to demonstrate that any disparities in earnings for work determined to be equivalent had a discriminatory cause. In the 15 years that these provisions were in force, no equal remuneration orders were ever issued (this entitlement was contained in the Industrial Relations Act 1988, Workplace Relations Act 1996).
- The equal remuneration provisions in the Fair Work Act 2009 Act no longer carry a requirement for applicants to demonstrate a discriminatory cause for any male/female earnings disparity the subject of the application. Fair Work Australia's interpretation of these provisions was tested through an application by the Australian Services Union and four other unions in the social, community and disability services sector. FWA's decision determined that the work of employees in the sector was undervalued and the parties have been asked to make submissions on the extent to which this undervaluation is informed by gender. FWA affirmed that parties do not need to prove that any disparities in earnings arise from sexbased discrimination. Additionally, FWA noted explicitly that applicants seeking equal remuneration remedies do not require recourse to male comparators, to sustain their application, although they are not precluded from using such comparisons.³⁰

Affirmative action, equal opportunity and measures to address sex discrimination, sexual harassment

Federal equal opportunity legislation (*Equal Opportunity for Women in the Workplace Act* 1999) requires all non-government and not for profit organisations that employ a total of 100 or more staff to submit a report annually to the Equal Opportunity for Women in the Workplace Agency (EOWA) on their workplace program for women. A workplace program comprises six steps:

- Prepare a workplace profile
- Workplace analysis including steps to consult women
- Issues prioritised following analysis
- Action taken
- Evaluation of action



Identification of Future action.

There is provision for organisations that have been compliant for the past three years to be exempt from filing a report for a period determined by EOWA.

As a measure of the number of organisations that report annually to EOWA, in the 2008-09 year 2,400 organisations reported to EOWA.

Organisations whose EOWA program has been assessed as either <u>compliant</u> with the *Equal Opportunity for Women in the Workplace Act 1999* can apply for the EOWA Employer of Choice for Women citation. Organisations whose achievements have been acknowledged by this award, can use this citation in their recruitment, advertising and other company promotional material.

The current legislation and the operation of EOWA is presently the subject of review. This review contemplates both the effectiveness and efficiency of the measures. Strachan, Burgess and Henderson argue that equal opportunity legislation rests firmly on a base of recognition of historic and systemic discrimination against women. Positively it acknowledges systemic disadvantage and discrimination yet a constraint is the issue of masculinised norms. Anti-discrimination and affirmative action/EEO legislation do not seek to change work practices explicitly except to remove discrimination and to promote equality of opportunity. The default position, unless there is more systemic overview, is that women are to receive the same conditions and opportunities as men.³¹

State governments have an established mechanism for government departments to report on equal opportunity. For example in New South Wales the Director of Equal Opportunity in Public Employment administers those sections of the *Anti-Discrimination Act 1977* (NSW), which deals with equal employment opportunity (EEO) and discrimination across the NSW Public Sector and universities. Under this part of the Act, the Director assists agencies to develop EEO Management Plans and is required to report to the Premier annually on cross-sector outcomes.

Federal legislation (*Sex Discrimination Act* 1984) makes it unlawful for women to be discriminated against on the grounds of sex, pregnancy status, marital status and family responsibilities. This applies to the following realms of public life: employment; education; buying goods and using services; accommodation and housing; Commonwealth laws and programs; and, playing sport.

In the area of employment this would address those practices listed below if a women felt that, because of her sex, she had been:

- Refused employment
- Dismissed
- Denied of promotion, transfer of other benefits associated with employment
- Given less favourable terms or conditions of employment
- Denied equal access to training opportunities.

In the prosecution of sexual harassment employers can be held responsible for sexual harassment by their employees if they has failed to take steps to prevent it from happening. Appropriate measures include having a workplace policy on sexual harassment; putting in place a process for dealing with complaints; and, training employees to identify and deal with sexual harassment.

There are specific provisions concerning the protection of employment conditions of employees on their return to work following a period of parental leave.



While a number of these measures have reduced the levels of direct discrimination and promoted greater levels of procedural fairness, leading researchers argue that Australia needs to adopt regulatory measures that reflect a substantive rather than a formal model of equality. Belinda Smith notes that while 'citizens are ostensibly permitted to participate in education and work and other public realms of life, but our anti-discrimination laws do little to enable the participation of those who do not fit the norm of benchmark man'.³²

The Sex Discrimination Commissioner Elizabeth Broderick launched a *Gender Equality Blueprint 2010* which sets out recommendations in five priority areas that the Sex Discrimination Commissioner observed significantly affect both the public and private lives of women and men:

- Balancing paid work and family and caring responsibilities
- Ensuring women's lifetime economic security
- Promoting women in leadership
- Preventing violence against women and sexual harassment
- Strengthening national gender equality laws, agencies and monitoring.³³

The Sex Discrimination Act was the subject of review in 2008 by the Senate Legal and Constitutional Committee. Legislative changes identified by that Committee, and considered also by the Australian government's response to the report have not yet been passed by the Parliament.³⁴

Child Care Assistance, Taxation Transfer Measures

Measures introduced and maintained by successful governments are Family Tax Benefit A, and Family Tax Benefit B, the Child Care Benefit (CCB) and the Child Care Rebate. Additionally there is a Baby Bonus and the recently introduced paid parental leave measures (detailed earlier in this overview).

- Family Tax Benefit A provides a benefit (as an example a maximum \$164.64 per week for a child under 13) where the families adjusted taxable income is less than \$46,355 and where the taxpayer cares for a dependent child aged under 16 for at least 35 per cent of the time.
- Family Tax Benefit Part B is an extra payment (as an example a maximum of \$140 per week
 for a child under 5) for single parents and families with one main income to assist with the
 costs of raising children. Part B is limited to families where the primary earner has an
 adjusted taxable income of \$150,000 or less per financial year.
- Baby Bonus (currently \$5437) may be paid to families following the birth or adoption of a child if they are eligible for the Family Tax Benefit, meet the Baby Bonus income test and are not receiving Paid Parental Leave.
- Child Care Benefit (CCB) is a payment to assist with the cost of child care services approved by, or registered with, the Government. As an example the current rate for a non school-age child in up to 50 hours of care per week is \$3.78 per hour or \$189 per week.
- Child Care Rebate assists parents or guardians with out-of-pocket expenses for approved child care if the care giver is working, training or studying. Out of pocket expenses are total child care fees less the CCB. Child Care Rebate covers 50% of out of pocket expenses, up to a maximum of \$7,500 per child per financial year.

Between 1997 and 2006 there was only incremental change in the division between employment and care work between women and men.



- In 2006 men spent 4 hours 33 minutes per day on employment related work per day (1997 4 hours 21 minutes). The commensurate figures for women were 2 hours 21 minutes (2006) and 2 hours 12 minutes (1997).
- o In contrast the amount of time spent on unpaid activities by men in 2006 was 2 hours 52 minutes per day (2 hours 47 minutes in 1996). The commensurate figures for women were 5 hours 13 minutes and 5 hours 03 minutes).
- The total number of hours and minutes per day spent by male parents to care for children was 3 hours 55 minutes in 2006 (3 hours 55 minutes in 1997). The commensurate figures for women were 8 hours 33 minutes in 2006 and 7 hours 56 minutes in 1997.³⁵

A number of the taxation and benefit measures identified above have particular application to women given women's disproportionate engagement, relative to men, in care and domestic activities. The effectiveness of these measures is the matter of ongoing debate. This debate includes question about whether the tax benefits provide workforce disincentives to low and middle-income couple families (although not sole parents).³⁶ In the area of child care there has been a growth in child care places particularly in the area of places provided by corporate child care providers,³⁷ and there remain issues with affordability.³⁸

Women's Role in Innovation including Science and Technology

One measure of women's standing in innovation can be drawn for their representation at Associate Professor and Professor level in Universities.

Carmel Diezzmann and Susan Grieshaber note the improvement evident in women's representation in the professoriate; nevertheless women are underrepresented at this level in the academy (see Table 1). The under-representation of women in the professoriate is not due to low numbers of women completing degrees or entering academe. In Australia, participation rates for women at undergraduate levels in many disciplines is over 50% and women now make up over half of lecturing staff in universities.³⁹

This pattern is replicated at the level of Vice-Chancellor positions. Universities Australia have observed that progress in improving the representation of women has been slow.

- In 2004 28% (11 out of 39) of Vice Chancellors were women, 26% of Deputy Vice Chancellors were women and 39% of senior university administrative staff were women.
- In late 2009 18% (7 out of 39) of Vice-Chancellors were women, 34% of Deputy Vice-Chancellors were women and 40% of senior administrative positions were held by women.
- Universities Australia have developed a three year strategy for addressing this representation.⁴⁰

Table 1: The trend of women in the professoriate⁴¹

Year	Position	Percentage of female senior academics (%)
2006	Level D and above	23.1
2002	Levels D & E	19.4
2000	Levels D & E	16.0
1996	Above Senior Lecturer	13.0
1994	Above Senior Lecturer	11.6
1992	Above Senior Lecturer	10.1

Note: Level A Associate Lecturer, Level B Lecturer, Level C Senior Lecturer, Level D Associate Professor, Level E Professor



In the area of women's representation in science, engineering and technology (SET) employment women have been historically under represented and remain so (see also Figure 6). The Federation of Australian Scientific and Technological Societies (FASTS) observed that:

- SET specific occupational data indicates that women constituted 18.1% of full-time professionals in the field of Design, Engineering, Science and Transport in 1996. This grew by only 4.2 percentage points to 22.3% in 2009.
- While women constituted 19% of all full-time ICT professionals in 1996, this number fell 3.8 percentage points to 15.2% in 2008.
- The percentage of women in full-time Engineering, ICT and Science Technician roles similarly dropped from 18.9% in 1996 to 17.1% in 2008.
- Of the 1,727 research scientists at the CSIRO only 21% are women and fewer than 10% at the top salary level are women.
- In the Academy of Science, and the Academy of Technological Sciences and Engineering women constitute only 7% and 6% of Fellows respectively. FASTSA notes that this underrepresentation is reflection of low levels of female representation amongst academic staff, which consistently declines with seniority.
- Women make up only 8.5% of ARC Federation Fellows.⁴²

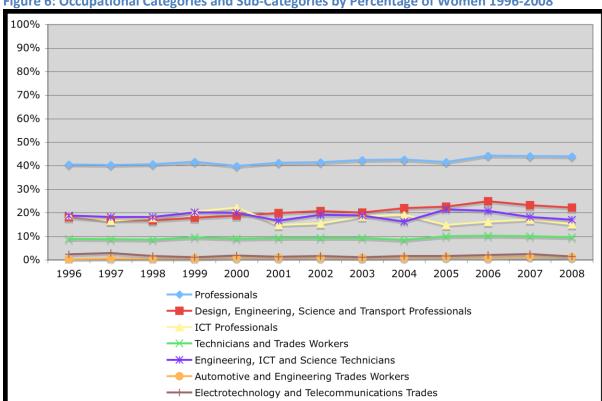


Figure 6: Occupational Categories and Sub-Categories by Percentage of Women 1996-2008⁴³

FASTS attributed the low representation to both horizontal segregation and vertical segregation.

horizontal segregation of women in the various science disciplines based on perceptions regarding women's innate ability in science and mathematics, societal attitudes towards gender stereotypes and gender equality, and job security and employability of science graduates.



vertical segregation, generated by the organisational culture of the workplace through
practices that disadvantage women such as work load, promotions policies and practice, sex
discrimination, lack of female role models, mentors and networks and family responsibilities.

There are initiatives aimed at assisting women's careers in science. The annual L'Oréal Australia For Women in Science Fellowships are awarded to three female early career scientists to reward excellence in their Australian research and to boost their prospects of sustaining their careers and rising to leadership positions in science. The Fellowships, worth up to \$20,000 each and are linked to an international fellowship and prize program developed by L'Oréal in conjunction with the United Nations Educational Scientific and Cultural Organization.

The Fellowship winners in 2011 were:



Georgina Such, The University of Melbourne⁴⁴

2006 - PhD (Material Science), University of New South Wales

2002 – Bachelor of Science with Honours (Physical Chemistry), *The University of Melbourne*

Georgina Such wants to change the way we deliver drugs. Today, when we're treated for cancer, the drug spreads throughout the body indiscriminately. Along the way it causes side-effects such as nausea and hair loss. To tackle this problem

Georgina imagines a miniscule capsule designed like a set of Russian babushka dolls. The capsule sneaks through the blood stream untouched. When it finds its target—a cancer cell—it passes into the cell, sheds a layer, finds the part of the cellular machinery it needs to attack, sheds another layer and releases its cargo of drugs, destroying the cancer cell and only the cancer cell. Creating such a capsule may take decades, but Georgina and her colleagues at The University of Melbourne have already developed several materials which offer potential to do the job.



Eve McDonald-Madden, The University of Queensland⁴⁵

2008 – PhD (Integrative biology), *The University of Queensland*

2005 – Diploma in The Sciences (Mathematics and Statistics), *University of New England*

2001 – Honours, Bachelor of Science (Behavioural Ecology), *The University of Melbourne*

1999 – Bachelor of Science (Ecology and Environmental Science), *The University of Melbourne*

The diversity of life on Earth underpins the global economy. But we're losing biodiversity at an unprecedented rate and human-induced climate change will threaten more species—up to 37 per cent of the plants and animals with which we share the world. Eve McDonald-Madden is doing something about it. She's recognised that, despite the urgency of the problem, the funds and resources to tackle the problem are limited. So she's turned to mathematics to develop systems that allow us to make smarter conservation decisions. Working at The University of Queensland and CSIRO, she has already helped to develop and implement a policy for monitoring the Sumatran tiger to prevent poaching. In addition, she has come up with a strategy for managing Tasmanian devils as they confront an infectious facial tumour disease. In short, Eve McDonald-Madden has become a world expert on making effective conservation decisions when information is limited.



Tracy Ainsworth, James Cook University⁴⁶

2008 – PhD (Microbiology and cell biology), *University of Queensland*

2001 – Masters of Science (Immunology), *James Cook University*

n of Gender Training Workshop for People Attending the APEC Women Summit the Tannous & Dr. Meg Smith University of Western Sydney



1998 – Masters of Science qualification, *James Cook University*

1996 – Bachelor of Science (Marine Biology/Aquaculture), James Cook University

Tracy Ainsworth's research is changing our understanding of the life of the tiny coral animals that built Australia's iconic Great Barrier Reef. Her work comes at a critical time for the future of coral reefs—threatened by a warming ocean and by coral bleaching. Just three years out from her PhD and now at James Cook University, Tracy has already demonstrated that the interactions between corals, their communities and their environment are far more intricate and subtle than we ever imagined. She has shown, for instance, that bacteria as well as algae play a significant role in the life of the coral and in how it responds to changing temperatures. She has also found that coral bleaching is a far more complex process than previously thought. And she's done so by applying skills in modern cell biology which she picked up working in neuroscience laboratories.

Attachments

Equal Opportunity in the Workplace Agency *Gender Workplace statistics at a glance* downloaded http://www.eowa.gov.au/Information_Centres/Resource_Centre/Statistics/gender%20stats%206-11_ONLINEversion.pdf

Equal Opportunity in the Workplace Agency *Gender Pay Gap: The Facts, Why it is Important and What can be Done About It* downloaded from

http://www.eowa.gov.au/Pay Equity/Gender%20Pay%20Gap%20The%20Facts.pdf

Equal Opportunity in the Workplace Agency *An Overview of Pay Equity Statistics February 2011* downloaded from http://www.eowa.gov.au/Pay Equity/Files/EPD%202011%20factsheet.pdf

Equal Opportunity in the Workplace Agency *EOWA Industry Snapshots –Finance and Insurance* downloaded from

http://www.eowa.gov.au/Information Centres/Resource Centre/EOWA Publications/Industry Verticals/2011/finance%20&%20insurance V1.pdf

Equal Opportunity in the Workplace Agency *EOWA Industry Snapshots –Manufacturing* downloaded from

http://www.eowa.gov.au/Information Centres/Resource Centre/EOWA Publications/Industry Verticals/2011/manufacturing V2.pdf

Universities Australia (2010) Universities Australia Strategy for Women 2011-214 downloaded from http://www.universitiesaustralia.edu.au/resources/427/486

_

¹ ABS, Australian Social Trends, Cat 4102.0 (March 2011). Canberra: Australian Bureau of Statistics; ABS, Women in Australia, Cat no 4113.0 (1993). Canberra: Australian Bureau of Statistics.

² ABS, *Labour Force, Australia, Detailed, Electronic Delivery,* Cat no 6291.0.55.001 (April 2011). Canberra: Australian Bureau of Statistics.

³ ABS, Australian Social Trends, Cat 4102.0 (March 2011).



- ⁴ Calculated from ABS, *Gender Indicators Australia*, Cat 4125.0 (July 2011). Canberra: Australian Bureau of Statistics.
- ⁵ House of Representatives Standing Committee on Employment and Workplace Relations (2009) *Making It Fair: Pay Equity and Associated Issues Related to Increasing Female Participation in the Workforce*. Canberra: Australian Parliament, p. 302
- ⁶ House of Representatives Standing Committee on Employment and Workplace Relations (2009) *Making It Fair: Pay Equity and Associated Issues Related to Increasing Female Participation in the Workforce*. Canberra: Australian Parliament, p. 333
- ⁷ Jobless rate = (number unemployed + Number not in labour force)/civilian population
- ⁸ ABS, ABS, *Labour Force, Australia,* Cat no 6202.0 (various issues). Canberra: Australian Bureau of Statistics.
- ⁹ Campbell I (1996) Casual Employment, Labour Regulation and Australian Trade Unions. *Journal of Industrial Relations* 38(4): 571-599.
- ¹⁰ ABS, Gender Indicators Australia, Cat 4125.0 (July 2011). Canberra: Australian Bureau of Statistics.
- ¹¹ Junor A (1998) Permanent Part-Time Work: New Family-Friendly Standard or High Intensity Cheap Skills? *Labour & Industry* 8(3): 77-96 (p. 90).
- ¹² Abhayaratna J, Andrews L, Nuch H and Podbury, T (2008) *Part Time Employment: The Australian Experience*, Staff Working Paper. Canberra: Productivity Commission, p.8.
- Abhayaratna J, Andrews L, Nuch H and Podbury, T (2008) *Part Time Employment: The Australian Experience*, Staff Working Paper. Canberra: Productivity Commission, p.178.
- ¹⁴ van Wanrooy B, Oxenbridge S, Buchanan J and Jakubauskas M (2007) *Australia @ Work: The Benchmark Report*. University of Sydney: Workplace Research Centre, pp. 39-48, 58; van Wanrooy B, Jakubauskas M, Buchanan J and Scalmer J (2008) *Australia @ Work. Working Lives: Statistics and Stories*. University of Sydney: Workplace Research Centre, pp. 36-37.
- ¹⁵ Campbell I, Whitehouse G and Baxter, J (2009) Australia: Casual Employment, Part-time Employment and the Resilience of the Male Breadwinner Model. In: Vosko L, MacDonald M and Campbell I, eds, *Gender and the Contours of Precarious Employment* 1-25. London: Routledge (p. 6).
- ¹⁶ Stewart A (2009) A Question of Balance: Labour's New Vision for Workplace Regulation. *Australian Journal of Labour Law* 22(1): 1-50.
- ¹⁷ Calculated from ABS, *Gender Indicators Australia*, Cat 4125.0 (July 2011). Canberra: Australian Bureau of Statistics.
- ¹⁸ Jefferson T and Preston (2011) Labour markets and wages in Australia *Journal of Industrial Relations* 55(3): 303-323 (p. 311).
- ¹⁹ Organization for Economic Cooperation and Development (2010) *OECD Economic Outlook* downloaded from http://www.oecd.org/dataoecd/29/63/38752746.pdf; World Economic Forum (2010) *The Global Gender Gap Report* downloaded from http://www.oecd.org/dataoecd/29/63/38752746.pdf
- National Centre for Social and Economic Modelling (NATSEM) (2009) the Impact of a Sustained Gender Wage Gap on the Australian Economy, Report to the Office for Women, Department of Families, Community Services, Housing and Indigenous Affairs, downloaded from
- http://www.canberra.edu.au/centres/natsem/publications?sq_content_src=+dXJsPWh0dHAIM0EIMkYIMkZ6a WJvLndpbi5jYW5iZXJyYS5IZHUuYXUIMkZuYXRzZW0IMkZpbmRleC5waHAIM0Ztb2RIJTNEcHVibGljYXRpb24IMjZ wdWJsaWNhdGlvbiUzRDEyNzAmYWxsPTE=
- World Economic Forum (2010) *The Global Gender Gap Report* downloaded from http://www.eowa.gov.au/Pay_Equity/Files/WEF_GenderGap_Report_2010[1].pdf
- ²³ Graduate Careers Australia (2010) *Grad Stats: Employment and Salary Outcomes of Recent Higher Education Graduate*, no. 15, December 2010 downloaded from
- http://www.graduatecareers.com.au/ucm/groups/content/documents/document/gca001543.pdf
- ²⁴ AMP- National Centre for Social and Economic Modelling (NATSEM)(2009) *She works hard for her money,* Income and Wealth Report, *no. 22 downloaded from*

https://www.amp.com.au/wps/portal/au/AMPAUMiniSite3C?vigurl=%2Fvgn-ext-

templating%2Fv%2Findex.jsp%3Fvgnextoid%3D67c93e8b696f1210VgnVCM10000083d20d0aRCRD



- ²⁵ Smith (2011 forthcoming) Gender equity: The Commission's legacy and the challenge for Fair Work Australia, *Journal of Industrial Relations* 53(5).
- ²⁶ 1967-1972 Commonwealth Bureau of Census and Statistics *Survey of Weekly Earnings and Hours*, Cat no 6.1 1975 Australian Bureau of Statistics, Earnings and Hours of Employees, Distribution and Composition, Cat no 6.52; 1976-1981 Australian Bureau of Statistics, Earnings and Hours of Employees, Distribution and Composition, Cat no 6306.0; 1983-1994 Australian Bureau of Statistics, Distribution and Composition of Employee Earnings and Hours, Cat no 6306.0; 1995- 2010 Australian Bureau of Statistics, *Employee Earnings and Hours*, Cat no 6306.0
- ²⁷ Buchanan J, Watson I and Meagher G (2004) Living wages in Australia: history, recent developments and current challenges. In: Figart DM, ed, *Living Wage Movements: Global Perspectives* 123-137. London: Routledge (p. 123).
- ²⁸ Short C (1986) Equal Pay What Happened?, Journal of Industrial Relations 28(3): 315–333(p. 316).
- ²⁹ Scutt J (1992) Inequality Before the Law: Gender, Arbitration and Wages. In: Saunders K and Evans R, eds, *Gender Domination in Australia: Domination and Negotiation* 266-286. Sydney: Harcourt Brace (p. 278).
- ³⁰ Smith (2011 forthcoming) Gender equity: The Commission's legacy and the challenge for Fair Work Australia, *Journal of Industrial Relations* 53(5).
- ³¹ Strachan G, Burgess J and Henderson L (2007) Equal employment opportunity legislation and policies: the Australian experience *Equal Opportunities International* 26(6): 525-540 (p. 534).
- ³² Smith B (2008) From *Wardley* to *Purvis* How far has Australian anti-discrimination law come in 30 years? *Australian Journal of Labour law* 21(3): 1-19.
- ³³ Human Rights and Equal Opportunity Commission (2010) *Gender Equality Blueprint 2010* downloaded from http://www.hreoc.gov.au/sex_discrimination/publication/blueprint/Gender_Equality_Blueprint.pdf
- ³⁴ Parliament of Australia \ Senate Committee on Legal and Constitutional Affairs (2009) *Effectiveness of the Sex Discrimination Act 1984 in eliminating discrimination and promoting gender equality* downloaded from http://www.aph.gov.au/Senate/committee/legcon ctte/sex discrim/report/index.htm
- ³⁵ ABS, *Gender Indicators Australia*, Cat 4125.0 (July 2011). Canberra: Australian Bureau of Statistics.
- ³⁶ Brennan D (2007) Babies, Budgets, and birthrates: work/family policy in Australia 1996-2006 *Social Politics* 14(1): 31-57 (p. 45).
- ³⁷ Brennan D (2007) Babies, Budgets, and birthrates: work/family policy in Australia 1996-2006 *Social Politics* 14(1): 31-57 (p. 47).
- 38 Brennan D (2007) The ABC of Child Care Politics Australian Journal of Social Issues 42(2): 213-225 (p. 220).
- ³⁹ Diezmann C and Grieshaber S (2010) Gender equity in the professoriate: A cohort study of new women professors in Australia, *Research and Development in Higher Education: Reshaping Higher Education*, Refereed papers form the 33rd HERSDA Annual International Conference 6-9 July 2010, p. 224.

 ⁴⁰ Universities Australia (2010) Universities Australia Strategy for Women 2011-214 downloaded from
- ⁴⁰ Universities Australia (2010) Universities Australia Strategy for Women 2011-214 downloaded from http://www.universitiesaustralia.edu.au/resources/427/486
- ⁴¹ Diezmann C and Grieshaber S (2010) Gender equity in the professoriate: A cohort study of new women professors in Australia, *Research and Development in Higher Education: Reshaping Higher Education*, Refereed papers form the 33rd HERSDA Annual International Conference 6-9 July 2010, p. 225.
- ⁴² Bell, S (2009) *Women in Science in Australia: Maximising Productivity, Diversity and Innovation*. Report prepared for the Federation of Australian Scientific and Technological Societies (p. 9) downloaded from http://www.fasts.org/images/news2009/fasts%20women%20in%20science[1].pdf
- ⁴³ Based on ABS data sourced in Bell, S (2009) *Women in Science in Australia: Maximising Productivity, Diversity and Innovation*. Report prepared for the Federation of Australian Scientific and Technological Societies (p.20) downloaded from http://www.fasts.org/images/news2009/fasts%20women%20in%20science[1].pdf
- 44 http://www.scienceinpublic.com/loreal/fellows/georgina-such
- 45 http://www.scienceinpublic.com/loreal/fellows/eve-mcdonald-madden
- 46 http://www.scienceinpublic.com/loreal/fellows/tracy-ainsworth