FAMILY-FRIENDLY WORK PRACTICES

Differences within and between workplaces



Matthew Gray & Jacqueline Tudball

Australian Institute of Family Studies

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Matthew Gray & Jacqueline Tudball



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Esso and Mobil have an ongoing commitment to family-supportive work practices, and a tradition of supporting community projects that aim to enhance the quality and character of life in the communities where the companies operate.

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Foreword

The publication of this report by the Australian Institute of Family Studies, which focuses on the availability of family-friendly work arrangements in Australian workplaces, is sponsored by Esso Australia and Mobil Oil Australia. This support follows Esso's previous sponsorship of earlier Institute research on achieving integration in work and family life.

I am pleased to be able to take this opportunity to thank Esso and Mobil for their interest in the Institute's work, and for their generous financial assistance.

One of the major economic and social changes of recent decades has been the large increases in the numbers of mothers in paid employment. While the higher rates of employment have apparently increased the choices regarding work and family that are available to women, this has often come with increased responsibility. Women are still most often the primary care-givers and house-workers as well as having additional responsibilities to an employer and workplace.

A consequence of these changes has been an increasing recognition of the importance of family-friendly work arrangements in assisting parents to balance work and family responsibilities. There is also recognition that if employers are to introduce family-friendly work arrangements then these must lead to increased competitiveness and profitability.

The Australian Institute of Family Studies has a long history of research in the area of work and family and in particular family-friendly work practices. Research has focused both on employers and employees, but the research in this report, prepared by Matthew Gray and Jacqueline Tudball, is the first which combines information from employers and employees and therefore provides a unique perspective on the incentives and constraints employers face when deciding which work practices to make available to which employees.

This research is the first large-scale analysis of the extent to which employees within organisations in Australia have differential access to a range of family-friendly work practices. The findings presented in this report raise important questions about the extent to which family-friendly work practices are being provided to the employees who need them the most.

David I. Stanton
Director
Australian Institute of Family Studies

Contents

Foreword	vi
Acknowledgments	ix
About the authors	ix
Summary	X
1. Introduction	1
2. Family-friendly work practices	3
Work arrangements analysed	3
Control over start and finish times	3
Access to a telephone for family reasons	3
Availability of permanent part-time employment	3
Type of leave used for the care of a sick family member	3
Brief introduction to the literature	4
Employee needs and preferences	4
Employer rationales or incentives	4
The determination of access to family-friendly work practices	4
3. The institutional context	7
4. Data	9
5. Differences within and between workplaces	11
Within versus between workplace variation	11
Variation within workplaces	13
6. Modelling the determinants of access to family-friendly	
work practices	17
Estimation method and model specification	17
Results	19
Control over start and finish times	20
Access to a telephone for family reasons	21
Availability of permanent part-time work	23
Overall patterns and implications	24
7. Concluding comments	25
Appendices	26
Endnotes	36
References	38

List of tables

Table	within and between workplaces	12
	2. Determinants of access to family-friendly work practices, marginal effects of key variables	22
List of figures	S	
Figure	1. Distribution of <i>within workplace</i> variation in control over start and finish times	14
	2. Distribution of <i>within workplace</i> variation in access to telephone for family reasons	14
	3. Distribution of <i>within workplace</i> variation of availability of permanent part-time work	15
	4. Distribution of <i>within workplace</i> variation in types of leave usually taken to care for a sick family member	15
List of appen	dices	
Appendix	A. Family-friendly work arrangements employed by firms	27
	B. Variable definitions	28
	C. Distribution of <i>within workplace</i> variation in access to family-friendly work practices	31
	D. Variable means and standard deviations	32
	E. Random effects (RE) probit estimates	33
	F. Conditional logit estimates	35

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About the authors

Dr Matthew Gray is a Principal Research Fellow in the Family and Society Program at the Australian Institute of Family Studies. He has written on a range of labour market topics including the determinants of Indigenous labour force status, the impact of unemployment on the earnings of young Australians and the effect of child rearing on mothers' subsequent earnings.

Ms Jacqueline Tudball, formerly a researcher at the Australian Institute of Family Studies, is a Research Officer at the Social Policy Research Centre, University of New South Wales. She is currently undertaking an evaluation of the NSW Families First Initiative and a project investigating community capabilities.

Summary

The interaction between work and family has long been of concern to policy makers and researchers. Initially this concern was driven by the substantial increase in the rate of female labour force participation over recent decades, particularly of mothers, and what the implications of this were for the ability of mothers to combine paid employment and child-rearing successfully.

More recently, there has been a growing awareness that the balance between work and family is also important for men. An important component of the ability of people to balance work and family commitments is the availability of working arrangements that facilitate the reconciliation of work and family life – often referred to as "family-friendly" work practices.

This study analyses the extent to which access to family-friendly work practices is influenced or determined by differential access *within* organisations as compared with differential access *between* organisations. The analysis is based upon the Australian Workplace Industrial Relations Survey 1995 (AWIRS95), a linked employee–employer data set. The linked nature of the data allows information from employers and employees to be combined, providing a unique perspective on the incentives and constraints employers face when deciding which work practices to make available to which employees. These data allow the first large-scale study in Australia of differences in access to family-friendly work practices amongst employees working in the same workplace.

Four particular family-friendly work arrangements are analysed: control over start and finish times; access to a telephone for family reasons; availability of permanent part-time employment; and type of leave used for the care of a sick family member. These work practices have been chosen because they have been shown to be of importance in assisting people to balance work and family responsibilities.

For each of the work practices examined, there is a great deal of variation in access to family-friendly work practices among employees in the same workplace, as well as between employees working in different workplaces. Nonetheless, the variation in access to a range of work practices is greater among employees working in the same workplace than the variation between workplaces. Indeed, there are relatively few workplaces in which a high proportion of employees reported having access to each work practice. For example, in only 35 per cent of workplaces did more than 70 per cent of employees report having control over start and finish times, and in only 6 per cent of workplaces did more than 90 per cent of employees report having flexibility of hours.

The finding that employees have differential access within organisations to family-friendly work practices raises the question as to which characteristics impact upon the likelihood of an employee having access to, or using, these

practices. A multivariate regression framework (random effects probit) is used to identify the determinants of access to family-friendly work practices. The statistical methodology employed allows the effects of each factor to be determined whist holding constant the impact of other factors.

A number of employee characteristics are found to be related to the probability of accessing family-friendly work practices after controlling for the impact of other factors. The most important findings are:

- Employees with dependent children are no more likely to report having access to family-friendly work practices than are other otherwise similar childless employees.
- Employers are most likely to offer family-friendly work practices to employees with high skills levels or in whom the employer has invested in the form of training.
- After controlling for other factors, there are no differences between men and women in the probability of having control over start and finish times or access to a telephone for family reasons. However, women are more likely than otherwise similar men to be able to get permanent part-time work in their current workplace if needed.
- There is a very strong occupation effect, with professionals, managers and administrators being much more likely than otherwise similar employees in other occupations to have control over start and finish times and access to a telephone for family reasons.

These finding have important implications for policy. First, evidence of differential access of employees within organisations to family-friendly work practices means that policy makers need to focus on increasing the availability of such practices within organisations to *all* employees, regardless of occupational or employment status or training, who would benefit from access to these practices. Second, the finding that employees with the lowest levels of education, job tenure and organisation-provided training are least likely to have access to family-friendly work practices means that policies need to pay particular attention to the situation of these types of employees.

The question, of course, remains as to what policy instruments the government can use to increase the coverage of access to family-friendly work practices, particularly to employees with dependent children or other care responsibilities. Possibilities include regulation of the conditions of employment via industrial relations legislation, and information campaigns aimed at raising the awareness of employers to the potential workplace benefits of offering family-friendly work practices.

1 Introduction

The interaction between work and family has long been of concern to policy makers and researchers. Initially this concern was driven by the substantial increase in the rate of female labour force participation over recent decades, particularly of mothers, and what the implications of this were for the ability of mothers to combine paid employment and child-rearing successfully. More recently, there has been a growing awareness that the balance between work and family is also important for men (Russell and Bowman 2000).

An important component of the ability of people to balance work and family commitments is the availability of working arrangements that facilitate the reconciliation of work and family life. Such arrangements are often referred to as "family-friendly" work practices. Many different categorisations of family-friendly work-practices have been proposed. The OECD has recently used the following categories: leave from work for family reasons; changes to work arrangements for family reasons; practical help with child care and care of the elderly; and relevant information and training (see Appendix A for more details).

Over the last twenty years both the number of employers offering a range of family-friendly work practices, and the number of employees availing themselves of such opportunities has increased (Junor 1998; Work and Family Unit 1999; Russell and Bowman 2000). While much is known about broad trends in the availability and use of family-friendly work practices, much less is known about differences *within* and *between* organisations in the access to, and use of, these work practices.

To date, existing research on differences within organisations has been based on small-scale case studies of large organisations, often selected for their reputation for providing innovative solutions for employees seeking to balance family and work responsibilities. This research has identified differences in internal access to family-friendly work arrangements, which is often related to the position of employees in the firm (Breakspear 1998; Glass and Estes 1997; Whitehouse and Zetlin 1999; Biggs and Han 2000).

The number and types of workplaces that report having family-friendly work arrangements, and the number and characteristics of employees who report having access to such arrangements, have been well documented (Evans 2001; Junor 1998; Morehead *et al.* 1997; Whitehouse and Zetlin 1999; Wolcott and Glezer 1995; Work and Family Unit 1999). One of the conclusions which can be drawn from this research is that employers are more likely to say they offer family-friendly work practices than employees are to report using these practices. Differences in responses of these two groups is, in part, explained by differences in employee and employer questioning about family-friendly work practices. In general, surveys have asked employees what they do, rather than what they are *allowed* to do – the latter being the question generally asked of employers.

Qualitative studies have found that employees will not take advantage of family-responsive policies – particularly leave, work reduction and work schedule policies – if they feel that doing so will jeopardise their job security, work assignments or chances of promotion (for example, Whitehouse and Zetlin 1999). Further, employees often have been found to be unaware of their entitlements (ACTU 2000).

For employees to have the *possibility* of access to family-friendly work practices, those practices obviously must be available in the first place. The nature of the changes needed to increase access to family-friendly work arrangements across the spectrum of all employment situations therefore depends upon the distribution (and hence availability) of such work arrangements both between and within different organisations. For example, at one extreme, organisations might make available family-friendly work practices to all or no employees; at the other end of the spectrum, such arrangements might be available to some, but not all, employees. The solution, then, lies in an increase both in the overall number of organisations offering these work practices, and greater coverage of employees within organisations generally.²

This paper looks at the extent to which access to family-friendly work practices is influenced or determined by differential access *within* or *between* organisations. The analysis is based upon the Australian Workplace Industrial Relations Survey 1995 (AWIRS95), a linked employee–employer data set.

The rest of this report is structured as follows. The next chapter looks at the types of family-friendly work arrangements analysed in the report and outlines the theory and empirical literature. Chapter 3 examines the institutional context for practices within the Australian labour market and, in particular, Australian Workplace Agreements and awards. Chapter 4 describes the AWIRS95 Survey and the measures of family-friendly work practices available. An analysis of the distribution of family-friendly work practices within and between workplaces is undertaken in Chapter 5. Chapter 6 provides a formal statistical model of the factors that determine which employees within a given firm are most likely to have access to family-friendly work practices. Finally, Chapter 7 presents some concluding comments, highlighting the implications of the results of this research for future policy and practice.



Work arrangements analysed

Four "family-friendly" work arrangements are analysed in this paper:

- control over start and finish times (hours flexibility);
- access to a telephone for family reasons;
- availability of permanent part-time employment; and
- type of leave used for the care of a sick family member.

Control over start and finish times

Some control over the scheduling of work to meet unexpected and routine needs of family life is considered one of the best ways to assist a worker with family responsibilities (Friedman and Galinsky 1992; International Labour Office 1993; VandenHeuvel 1993). While workplace agreements can give employees limited control over start and finish times, in practice managerial discretion is very important, with flexitime arrangements often made available on a case-by-case basis. Hence employees who have a strong bargaining position or more sympathetic supervisors are more likely to have control over their working hours. Flexible start and finish times can only be considered to be family-friendly if the flexibility is employee controlled.

Access to a telephone for family reasons

Access to a telephone at work for family reasons can be very important in balancing family and work responsibilities. Such access enables employees to make care arrangements, check up on family members and be contactable in the event of any problems (Wolcott and Glezer 1995). While mobile telephones go some way towards alleviating this issue,³ not all employees can afford them or have access to them in their employment setting. Further, their use may be restricted by workplace safety or other protocols.

Availability of permanent part-time employment

Permanent part-time employment has been advocated as a family-friendly work practice because it allows employees with care or other family responsibilities to reduce their working hours while retaining the benefits of permanent employment. Such benefits include pro-rata entitlements to sick leave, holiday pay, maternity leave and long-service leave. There is strong survey-based evidence that women value permanent part-time employment as a means of balancing work and family responsibilities (Wolcott and Glezer 1995).

Type of leave used for the care of a sick family member

The ability to take time off from work in order to care for a sick or dependent family member can be vital when children are ill or when elderly relatives require assistance. While the AWIRS95 data indicate that only 3 per cent of employees are not able to take time off in any form, the ways in which such time is generally taken can vary markedly. For example, many employees are

required to take such time as leave without pay, holiday pay or sick pay, which impacts on earnings and the ability of employees to take leave for themselves when required. Clearly, paid "family leave" accrued separately from other forms of entitlements will be preferable for the overwhelming majority of employees.

A brief introduction to the literature

This section presents an overview of the literature about employee needs and workplace preferences for family-friendly work practices; employer rationales in choosing to implement (or not) family-friendly policies and practices; and the types of employees to which family-friendly work practices, where available, are offered.

Employee needs and preferences

The value a person places upon having access to family friendly work-practices will depend upon a number of factors including need. This will be closely related to the age and number of children in their household, assistance by others (including partner, other family members or friends) with caring responsibilities, and the availability and affordability of child care services. The need for, and value placed upon, family-friendly work-practices will vary over the life-course. For example, young workers often need time to establish new relationships and new households, to care for small children, and to undertake further education that will enhance their work prospects or career. Over the life-course these pressures change as children become teenage and move into adulthood, as relatives become aged or disabled, and as adults re-examine their personal relationships and goals.

The balancing of work and family responsibilities is particularly difficult for mothers who, in spite of their increasing rates of employment continue to undertake the majority of housework, child care (Bittman and Pixley 1997) and care of older family members (Fine 1994; McDonald 1997).⁵

Employer rationales or incentives

Economic models of the employment decisions by firms generally assume that organisations will employ a particular person if the benefits to the firm of employing that person outweigh the costs. The benefits to the employer are generally the net contribution the employee makes to the output of the employer. The costs are all the costs associated with employing the person, and will generally include wage and salary costs, on-costs, training costs and the benefits provided to the employee (for example leave, access to a telephone for family reasons and so on). In general, employers make employment and pay decisions on the basis of the total cost of employing a particular person. The voluntary introduction of a family-friendly work practice must therefore be seen to be in the best interests of the employer in terms of the costs and benefits associated with the particular policy or practice.

The determination of access to family-friendly work practices

Differences in preferences relating to the pecuniary and non-pecuniary aspects of a given job may lead to individual employees negotiating a combination of wage rate and non-pecuniary benefits that maximises their well-being. The ideal mix of monetary and non-pecuniary compensation will be specific to each employee and will depend upon the individual's underlying preferences, as well as their need for a given work practice. For example, an employee with young children may value flexible start and finish times more highly than an employee with adult children.

Standard economic theory suggests that employers will be indifferent as to the mix of the level of pecuniary compensation and non-pecuniary aspects of a job which produce the same cost to the employer and result in the same level of productivity. Employees will therefore bargain with employers over pecuniary compensation as well as the non-pecuniary aspects of a job in order to reach the mix of financial compensation and job conditions which maximises their well-being. Employees who place a very high value on family-friendly work practices will be prepared to negotiate for lower wages in return for greater access to these work practices. Employers will be happy to do this since it has no impact upon their profits. The economic literature refers to this trade-off between wages and better non-pecuniary aspects of a job as a compensating differential (Ehrenberg and Smith 1997).

Of course, in reality, the extent to which individual employees negotiate with employers the mix of financial compensation and non-pecuniary aspects will be limited. Typically a job has a specific set of terms and conditions with only limited provision for variation. Often these conditions have been set by a process of collective negotiation between unions and employers.

Employees who place a high value upon a particular set of work practices may look for employers and jobs where these are offered. Hence we may expect to see a sorting of employees into jobs according to the value placed on the work practices being offered. It is important to remember that people with low skills,

educational levels, little work experience or living in areas with few jobs will have less choice of employment overall. The ability of such employees to choose between jobs will thus be severely weakened.

Employees who place a high value upon a particular set of work practices may look for employers and jobs where these are offered.

The extent to which employees with access to family-friendly work practices receive a lower wage than they would in the absence of such practices is an empirical question. At least one study using data from the United States of America (US) provides some evidence that the introduction of mandated maternity benefits results in women receiving lower wages (Gruber 1994). This implies that the costs of providing the maternity benefits are, at least in part, borne by employees.⁶

The discussion to this point has assumed that the provision of family-friendly work practices is an additional cost. However, there are potential benefits to employers in terms of the productivity of their workforces. Possible benefits include improved recruitment and retention of workers, and greater productivity resulting from better morale and reductions in tardiness and absenteeism (Blau, Ferber and Winkler 1998). It is often less costly to provide workers with leave or assist them in finding child care than to train new employees (Glass and Estes 1997; Dickens 1994).

Employers may see offering family-friendly work practices as a recruitment tool, both for the actual practices they provide and as a signal of broader attitudes within the organisation (Rodgers 1992; Osterman 1995). This explanation leads to two hypotheses: (i) the likelihood of implementing work–family programs is positively related to the percentage of the firm's labour force that is female; and (ii), independent of the gender composition of the labour force, firms for which issues such as absenteeism, tardiness and recruitment are the most serious are more likely to introduce family-friendly work practices.

If offering family-friendly work practices increases the value of a job relative to other available jobs then the costs to the employee of losing the job are increased. This is argued to increase employees' work effort since the costs of loosing the job as a result of shirking are also increased – the so-called "efficiency wage" hypothesis (see Katz 1986 for a review of efficiency wage

Employers may offer familyfriendly work practices as a way of reducing worker turnover. models). In general, employers are most likely to use an efficiency wage strategy for employees whose work effort is difficult, if not impossible, to directly observe. Employers may also offer family-friendly work practices as a way of reducing worker turnover. Employers are most

likely to want to retain employees in whom they have invested a great deal of training or who are expensive to replace due to a shortage of skilled personnel.

The costs of making available family-friendly work practices is likely to vary between jobs. For example, the impact upon productivity of giving employees flexibility over start and finish times can be very high in jobs in which employees rely upon other employees being present – for example, on production lines. Employers will be less likely to make available the work practice to employees working in jobs in which it is more expensive to offer it.

The empirical evidence is that large firms have often been at the forefront of implementing family-friendly work practices (Whitehouse and Zetlin 1999). This is probably because in small firms, even the short-term loss of a single, highly-trained individual may have a substantial impact on the operation of the business whereas large firms can better cope with the temporary absence of an employee (Blau, Ferber and Winkler 1998).

In summary, the profit maximising (or cost minimising) behaviour of employers means that they are likely to differentiate between employees in the extent to which family-friendly work practices are made available and the ease with which employees use them. The theoretical models discussed above suggest that employers are most likely to offer family-friendly work practices to employees in whom they have invested training, who are difficult and costly to replace, or who are able to effectively collectively bargain. Differences in life circumstances mean that employees may desire different work practices and hence may seek employment in workplaces which offer the work practices that best meet their needs, or may negotiate with employers to trade off wages for access to family-friendly work practices.

The institutional context

The industrial relations system has been particularly important in workers' access to work–family provisions in Australia. Federal law is currently the major formal source of workplace relations arrangements, with Australia's system of industrial relations a hybrid of conciliation and arbitration, collective bargaining and employer power. Since the 1980s, the influence of conciliation and arbitration has diminished. There remains, however, a significant residual system of conciliation and arbitration. The main role of this residual system is the prescription of safety-net terms that afford a degree of protection to vulnerable employees (see Hancock 1999).

As Hawke and Wooden (1998:74) write: "The tribunal-based systems of conciliation and arbitration that have shaped labour-management relationships since the turn of the century now play a less pivotal role, and the systems of awards that continue to be administered by the various tribunals are less central to the determination of wages and conditions."

Bargaining and, more specifically, *enterprise bargaining*, has taken on increasing importance. The character of bargaining changed in the early 1990s with the expansion of enterprise bargaining and diminished role of trade unions in workplace agreements. Within the federal system, the Industrial Relations Reform Act 1993 provided for non-union agreements in the form of what were then known as Enterprise Flexibility Agreements. The Workplace Relations Act 1996 strengthened the non-union bargaining stream, leading to a marked

increase in the incidence of certified non-union collective agreements. By 30 June 1998, 576 non-union bargaining stream agreements had been made covering just over 75,000 employees (DEWRSB 1998).

Bargaining and, more specifically, enterprise bargaining, has taken on increasing importance.

In addition to promoting enterprise-based

bargaining, legislative changes have been introduced in some jurisdictions that provide greater scope for employers to use individually negotiated employment agreements to supplement and/or replace awards. The most prominent of these are Australian Workplace Agreements (AWA) that were introduced as part of the Workplace Relations Act 1996.

Despite these changes, the Australian labour market still has a substantial degree of regulation. The current system is probably best characterised as a system in which the pay and employment conditions of most Australian workers continue to depend heavily on a combination of statutory regulation and collective bargaining. Individual agreements continue to be implemented for a minority of workers, many of whom are well-paid managerial and professional employees (though considerable over-award and over-agreement bargaining occurs on an individual basis) (Wooden 1999). For the most part, individual agreements

remain subject to the provision that they must provide conditions that at least equate with conditions specified in relevant awards. Finally, only rarely does the making of these agreements involve the substantive differentiation of terms and conditions between different workers.

The effect on the family friendliness of Australian workplaces of the shift in focus of the industrial relations system away from a centralised system to bargaining and agreement making at the workplace and individual levels is unclear. On the one hand, the emphasis upon flexibility may promote the introduction of work conditions that are better tailored towards the needs of individual employees. On the other hand, the employees who are most likely to be able to negotiate successfully with employers over work conditions are those with skills in short supply and hence the greatest bargaining power.

The net effect of these changes on the extent to which family-friendly work practices have widespread coverage within workplaces is ultimately an empirical question. However, the lack of survey data on the experience of employees after 1995 makes it impossible to determine the impact of changes introduced by the Workplace Relations Act 1996.

4 Data

The data used in this paper are derived from the Australian Workplace Industrial Relations Survey (AWIRS95), a large-scale survey of workplaces and workers conducted in 1995 by the then Australian Commonwealth Department of Industrial Relations. The survey has four components, including a number of sub-components containing specialised questions on labour relations. The primary components are: main survey; panel survey; employee survey; and small workplace survey. Each survey was administered at a "workplace", defined as "a single physical area occupied by the establishment from which it engages in productive activity on a relatively permanent basis". Although the AWIRS95 data were collected prior to changes brought under the Workplace Relations Act 1996, the nature of employment relations has changed only gradually since that time and the conclusions drawn using these data remain valid. A more recent Australian data set does not exist.

The main survey comprised face-to-face interview-based questionnaires administered to the most senior manager, the manager responsible for workplace relations and a delegate from the union representing the majority of employees in the workplace. The sample for the main survey comprised 2001 workplaces with 20 or more employees, and covered all industry sectors except agriculture, forestry and fishing, and defence.

The employee survey involved a self-administered questionnaire that was either collected by the interview team or returned by mail. The sample for the survey was randomly selected from lists of employees at each of the workplaces in the main sample, where management gave permission for this to occur. Permission was granted at 1,896 workplaces, or 95 per cent of the sample. A total of 30,005 questionnaires were distributed resulting in 19,155 employee responses suitable for analysis. The survey provides detailed information on employee wages, weekly hours worked, and a large range of individual characteristics such as level of educational attainment and number and age of dependent children. A key feature of the survey in respect to the current study, is that each respondent can be linked to workplace-level data collected in the main survey, allowing comparison of individuals at the same workplace.⁷

The AWIRS95 data set contains questions on a wide range of work practices that may assist employees to balance family and work demands. This paper considers four work practices: control over start and finish times (hours flexibility); access to a telephone for family reasons; availability of permanent part-time employment; and the type of leave usually used when taking time off to care for a sick family member.

The variable measuring control over start and finish times is constructed from a question about the amount of influence the employee has over when they start and finish work. An employee is regarded as having control over start and finish

times if they have "a lot" or "some" influence over when they start and finish work.⁸ A detailed definition and description of the construction of all of the variables used in this paper can be found in Appendix B.

Employees were asked whether they would, if needed, be able to use a telephone at work for family reasons. The question contains the option "not relevant to

An employee with limited family responsibilities who takes one day a year as leave without pay to care for a sick family member is in a very different position to an employee who takes 10 days each year for similar reasons.

me", which means that it is possible to restrict the analysis to employees for whom access to a telephone for family reasons is relevant. Only 8.5 per cent of employees responded that having access to a telephone for family reasons was "not relevant to me".

The question about whether the employee, if needed, could get permanent part-time employment similarly included the option "not relevant to me". A somewhat higher 24.0

per cent of employees responded that permanent part-time work at their current workplace was not relevant to them. 9

Finally, employees were asked to indicate from a list of options how they usually take time off to care for a sick family member. The options were: paid family leave; use own holiday leave; use own sick leave; take time off and make it up later (flexitime); take leave without pay; other way of taking time off; and not able to take any time at all off. Multiple responses were allowed.

A number of issues exist in regard to the question about how time is taken off to care for a sick family member. First, there is no information about the frequency or usage of the options provided for different types of leave. An employee with limited family responsibilities who takes one day a year as leave without pay to care for a sick family member is in a very different position to an employee who takes 10 days each year for similar reasons. Second, the question asks what employees *usually* do, rather than what they are *allowed* to do, under their current employment conditions. Hence responses reflect what is formally (and/or informally) permitted as well as differences in employee preferences. Third, there is no ranking of employee preferences for type of leave taken. This means that it is not possible to rank the different ways of taking time off from "most family-friendly" to "least family-friendly". For example, some employees might prefer to use paid family leave, while others might prefer to take time off and make it up later.

5 Differences within and between workplaces

This section presents a statistical analysis of the extent to which variation exists in access to family-friendly work practices *within* and *between* workplaces.

Within versus between workplace variation

Differences in access to, and usage of, family-friendly work practices between employees can be separated into the component due to variation between workplaces (termed between workplace variation) and the component due to differences between employees working in the same workplace (termed within workplace variation). At one extreme, if all employees in the same workplace have equal access to family-friendly work practices, the within workplace variation will be zero and all differences between employees will be due to differences between workplaces. At the other extreme, if there is no correlation among employees working in the same workplace, the degree of variation in the within workplace and between workplace measures will be the same. The degree of variation in access to family-friendly work practices can be summarised using the standard deviation. The larger the standard deviation, the greater the degree of variation.

Table 1 presents an analysis of the variances in access to each of the family-friendly work practices broken down into the *overall*, *between* and *within* workplace components. As an example to the interpretation of Table 1, consider control over start and finish times. The proportion of employees who report having control over start and finish times is 52.0 per cent. The overall standard deviation is 0.500. The breakdown of the variation into the *between* and *within* workplace components reveals that the standard deviation of the variation *between workplace* is 0.230 as compared to 0.445 for *within workplace*. This can be interpreted to mean that the variation in employees having control over their start and finish times is greater within workplaces than between workplaces. In other words, if you were to randomly select two employees working in different workplaces, the chance that they both have control over their start and finish times will be greater than the equivalent chance for two employees working in the same workplace.

Evident also from Table 1 is the finding that a high proportion of employees report being able to access a telephone for family reasons (74.8 per cent). The further breakdown of this finding into *within* and *between* workplace components reveals that the *between* variation is again substantially less than the *within workplace* variation. A much smaller percentage of employees report having access to permanent part-time employment in their current workplace if needed (42.5 per cent). The breakdown into the *within* and *between* workplace variation indicates that the *within workplace* variation is larger than the *between workplace* variation.

Table 1 Variance in family-friendly work practices, overall, within and between workplaces

	Per cent of employees	Standard Deviation	Number of observations
Control over start and finish time	s		
Overall Between workplaces Within workplaces	52.0	0.500 0.230 0.445	13,315
Access to a telephone for family re	easons		
Overall Between workplaces Within workplaces	74.8	0.434 0.224 0.391	9,134
Availability of permanent part-time	ne work		
Overall Between workplaces Within workplaces	42.5	0.494 0.300 0.412	8,697
Type of leave usually used			
Paid family leave Overall Between workplaces Within workplaces	17.7	0.382 0.191 0.330	13,384
Holiday leave Overall Between workplaces Within workplaces	44.4	0.497 0.207 0.456	13,384
Own sick leave Overall Between workplaces Within workplaces	43.7	0.496 0.188 0.461	13,384
Make-up time later Overall Between workplaces Within workplaces	15.9	0.366 0.133 0.341	13,384
Leave without pay Overall Between workplaces Within workplaces	33.2	0.471 0.186 0.436	13,384
Other Overall Between workplaces Within workplaces	7.2	0.258 0.104 0.252	13,384
Not able to take any time off Overall Between workplaces Within workplaces	3.8	0.192 0.077 0.181	13,384

Notes: Figures exclude workplaces with less than 10 employee interviews. The estimates of the within and between workplace variation is likely to be unreliable for workplaces with less than 10 interviews. Source: AWIRS95.

Turning to the ways in which employees usually take time off to care for a sick family member, it is apparent that holiday leave and sick leave are the most commonly used form of leave, with 44.4 and 43.7 per cent of employees respectively reporting usually doing this. The next most common means of taking time off is leave without pay (33.2 per cent), with smaller numbers of employees reporting taking paid family leave (17.7 per cent) and taking time off and making it up later (15.9 per cent). A very small proportion of employees reported not being able to take any time off at all. For all types of leave, the variation within workplaces is much larger than the variation between workplaces. This finding is not altogether surprising given that employees will usually have some choice as to how leave for family reasons is taken. Further evidence of this is the finding that employers reported offering an average of 3.8 ways from a list of six possible ways for employees to take leave to care for a sick family member.

Variation within workplaces

This section presents a more detailed analysis of the distribution of the variation in access to family-friendly work practices between employees at the same workplace.

For each workplace a variable is constructed which measures the proportion of employees reporting have access to (or using) each work practice. This provides a summary measure of the uniformity of access within each workplace. For example, if a workplace has 10 employees of whom one employee reports having control over start and finish times, then the proportion of employees in that workplace who report having control over their start and finish times is 0.1 (1 divided by 10). If all 10 employees report having control over their start and finish times the proportion reporting this would be 1. The closer the proportion is to 1, the more universal is the reported availability of the work practice within the workplace.

The estimates of the proportion of employees within each workplace reporting having access to a work practice is likely to be unreliable for workplaces in which only a small number of employees were interviewed. In order to avoid potential biases, workplaces in which fewer than 10 employees were interviewed have been excluded from the analysis. Because the number of employees interviewed in each workplace increased relative to the size of the workplace, the exclusion of workplaces with less than 10 employee interviews resulted in the exclusion of smaller workplaces.¹¹ These estimates are presented in Appendix C.

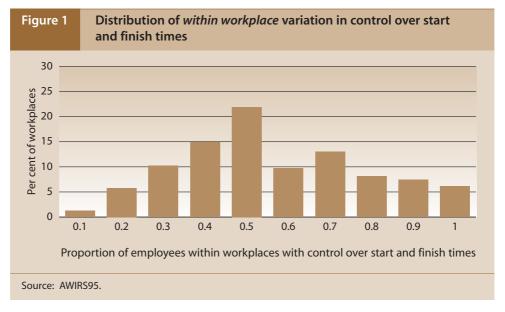
Graphing provides an overall picture of the distribution within workplaces of access to each of the family-friendly work practices. Figure 1 presents the distribution of the proportion of employees within each workplace reporting having control over start and finish times. The horizontal axis indicates the proportion of employees within each workplace who report having control over start and finish times. Workplaces in which no employee reported having control over start and finish times are excluded so that the proportion ranges from just above zero to one. The vertical axis presents the percentage of workplaces which have that proportion of employees reporting having control over their start and finish times.

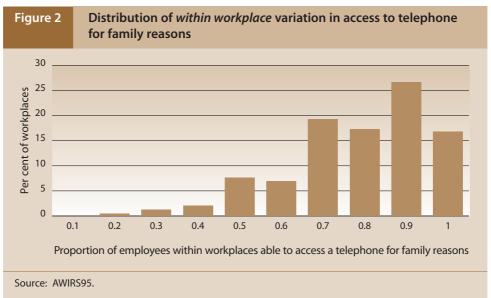
The most striking feature of Figure 1 is the *within workplace* variation in control over start and finish times. In only 35 per cent of workplaces do 70 per cent

(a proportion of 0.7) or more of employees report having control over start and finish times, and in only 6 per cent of workplaces do 90 per cent or more of employees report this.

Figure 2 shows the distribution of *within workplace* variation in access to a telephone for family reasons. This distribution is skewed much more to the right indicating that a higher proportion of employees are able to access a telephone for family reasons than that for control over start and finish times. However, there are a substantial numbers of workplaces in which less than 70 per cent of employees report having access to a telephone for family reasons.

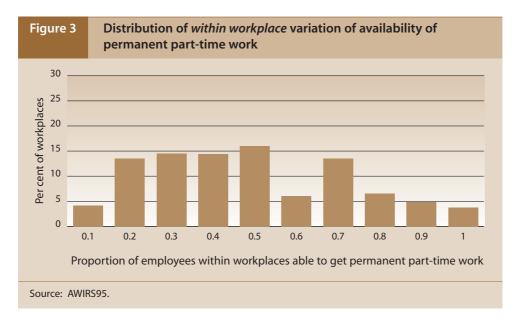
The distribution of *within workplace* variation in the availability of permanent part-time work is skewed to the left, with the bulk of the distribution being in the range 0.2 to 0.5 (Figure 3). In only a few workplaces did a high proportion of employees report being able to access permanent part-time employment if needed.

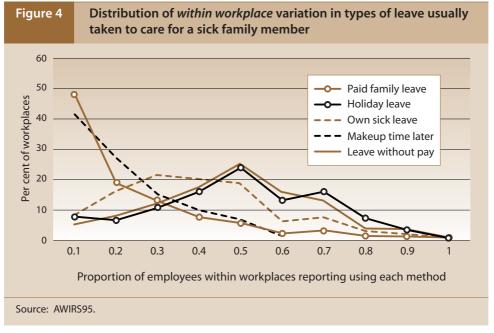




The distribution within workplaces of the proportion of employees reporting using each type of leave for the care of a sick family member is presented in Figure 4. When interpreting this figure it is important to remember that more than one type of leave could be nominated as usually being used.¹² The distribution of *within workplace* variation in use of paid family leave is heavily skewed to the left (that is, the majority of workplaces had a low proportion of employees usually using paid family leave).

Among workplaces in which at least some employees reported usually using paid family leave to care for a sick family member, just under 50 per cent of those workplaces had less than 10 per cent of employees who usually used this form of leave. In only a very small proportion of workplaces did all employees report using paid family leave.





The distribution of being able to take time off and make it up later is most similar to paid family leave, with less than 70 per cent of employees in any workforce reporting usually using this form of leave. A much higher percentage of employees reported using their own sick leave or holiday leave to care for an ill family member.

In summary, the analysis of *within* and *between* workplace variations in access to a range of work practices has clearly demonstrated that there is a great deal of variation both between workplaces and among employees working for the same workplace. However, the real surprise is that, for every work practice analysed, the *within workplace* variation is greater than the variation between workplaces.

6 Modelling the determinants of access to family-friendly work practices

The finding that employees have differential access within organisations to family-friendly work practices raises the question as to the characteristics which affect the likelihood of an employee having access to, or using, these practices. This question is explored using a formal statistical model.

The formal statistical modelling of access and usage is restricted to three of the work practices examined in the previous section: control over start and finish times (hours flexibility); access to a telephone for family reasons; and the availability of permanent part-time employment. The analysis is restricted to workplaces where at least some employees are using the work practice. The determinants of the type of leave taken to care for family members is not modelled because the lack of information on the frequency of use for each type of leave makes meaningful interpretation of the estimation results impossible.

Estimation method and model specification

As the variables measuring access to the work practices are binary (that is, they take the value of zero or one), ordinary linear regression is inappropriate. Consequently, a technique appropriate for a dependent variable with only two possible values is necessary. Data of this type are conventionally modelled using logit (logistic) or probit regression.

As foreshadowed earlier in the paper, controlling for unobserved differences between workplaces (sometimes called unobserved heterogeneity) is important in order to obtain accurate estimates of the determinants of each work practice. The effects of these unobserved differences can be statistically controlled for using a random effects (RE) probit or a fixed effects (FE) logit (sometimes called a conditional logit).

In this paper an RE probit is used. There are two advantages of the RE probit model as compare to the FE logit. First, the RE probit estimates can be used to calculate the probability of an individual with a given set of characteristics having access to the work practice. This is not possible using the FE logit estimates (Greene 2000). The inability to calculate probabilities limits the interpretability and therefore usefulness of the FE results. Second, as with all FE estimators, variables that take the same value for all employees in the same workplace are not estimated (these are workplace or organisation level variables such as workplace size and industry).

The RE model includes an error term with two components: an error for each employee; and an error for each workplace. The workplace error controls for unobserved differences between workplaces in terms of their tendency to provide work practices globally to employees.¹⁴

The theoretical framework outlined in Chapter 2 suggests that the probability of a particular employee being able to access a family-friendly work practice is a function of the value employees place on the work practice, the costs to the employer of providing the work practice, and the incentive the employer faces to retain the employee.

Controls are included for highest level of educational attainment: primary education; incomplete secondary education; a basic vocational qualification; a skilled vocational qualification; an associate diploma level qualification; a degree level qualification; a postgraduate qualification; and other qualifications. The omitted category is completed secondary school. Age is included as a proxy for labour market experience. Age squared is also included to allow for a non-linear relationship between the probability of accessing each work practice and age.

An important variable is gender, with females being expected to have greater need for family-friendly work practices.

Empirical studies have consistently found being a migrant to be related to labour market outcomes (Preston 1997). The literature has also found that migrants from English-speaking countries have different labour market outcomes than migrants from non-English-speaking countries. Hence variables measuring being a migrant from an English-

speaking country and being a migrant from a non-English-speaking country are included. A control for speaking a language other than English at home is included.

An important variable is gender, with females being expected to have greater need for family-friendly work practices. Employees with young children are likely to have considerable family demands. The demands upon parents' time and the types of family-friendly work practices required clearly differs according to the age of their children. Controls for having a youngest dependent child less than four years of age, four to 12 years of age, and aged 13 years or older are included. Many employees have care responsibility for non-child family members, so a control for having a non-child dependant was also included.

As dependent children are likely to have a different impact for male and female employees, variables that interact gender with each of the variables measuring having dependent children are included. This allows the effects of the variables relating to children on the probability of having control over start and finish times to differ between males and females.

The theoretical discussion in Chapter 2 suggests that employers are most likely to offer family-friendly work practices to employees in whom they have invested the most (in terms of training). A variable measuring whether or not the employee had received employer-provided (or paid for) training in the previous 12 months is included. Tenure (length of time with current employer) is included as a proxy for the amount of organisation-specific training received. Tenure squared is also included to allow a non-linear relationship. Hours of work are captured using a variable which distinguishes between part-time (less than 35 hours per week) and full-time employees.

Occupation is thought to be an important determinant of access to family-friendly work practices. This is partly due to the fact that it is easier to provide some work practices to employees in some types of jobs than others. Occupation is also related to earnings and skills level.

A number of workplace and organisation level characteristics which are expected to be related to the probability of a firm offering employees family-friendly work practices are included. Workplace size may be related to the ability of an employer to offer flexibility. It may also be related to management style and the degree to which work practices can be applied differentially to employees in the same workplace. Workplace size squared is included to allow a non-linear relationship.

One reason for differential treatment of employees in the same workplace is that entrenched work cultures may make it difficult for certain types of employees to access family-friendly work practices. In an attempt to control for the feminisation of work culture, a variable that measures the proportion of managers who are female is included. The feminisation of the workplace using the proportion of employees who are female is also controlled for. A control for the workplace sector is also included because the incentives facing government, private and non-commercial employers may differ.

Having an equal employment opportunity (EEO) policy is expected to increase the proportion of employees within firms able to access the work practice and reduce the chance that employees are discriminated against. While the presence of an active trade union may increase the bargaining power of employees, it also may lead to a formalisation of work practices that reduces management flexibility. Hence the presence of an active trade union is controlled for. Hours of operation of the workplace is also controlled for using a variable which measures whether the workplace operates 24 hours a day, seven days a week.

The sample used in the estimation is restricted to workplaces that had two or more useable employee responses. The estimates of the probability of being able to get permanent part-time employment if needed excludes part-time employees since the question as to whether they can get permanent part-time employment if needed is largely irrelevant – they are either permanent or casual.

Variable definitions are included in Appendix B. Descriptive statistics of all of the variables used in the estimation are presented in Appendix D.

Results

This section presents the estimates of the determinants of the probability of having access to each work practice. Because the effects of changes in the explanatory variables on the probability of accessing the work practice varies with the value of *all* the explanatory variables in the model, simply reporting these coefficients conveys very little to the reader. Hence the "marginal effects" for each of these variables is illustrated using a base case. The effects reported show the change in the predicted probability of accessing the work practice for a *ceteris paribus* change in a variable (that is, when the value of other variables is held constant). These effects are presented in Table 2.

The marginal effects are calculated relative to a base case person who is aged 30 to 34 years, has a highest level of educational attainment of completed secondary school, is female, in good health, has a tenure of one year with their current employer and has not received employer-provided training in the last 12 months. They are employed full-time, do not have dependent children and work as a salesperson or personal service worker. The organisation they are

employed by has 1,000 to 5,000 employees and there are 300 employees in their immediate workplace. Within this workplace, 10 per cent of managers and 25 per cent of the employees are female. The workplace does not have a written EEO policy and is classified as a non-commercial organisation. There is not an active trade union and the firm does not operate 24 hours a day, seven days a week.

All three models estimated appear to be well specified. The estimates find that unobserved differences between workplaces are present. This means that estimates which do not take into account the unobserved workplace differences may be misleading. ¹⁶

Control over start and finish times

A wide range of factors were found to be related to the probability of an employee having control over their start and finish times (hours flexibility) after controlling for the effects of employee and workplace characteristics (observed and unobserved). An example may assist with the interpretation of the marginal effects presented in Table 2. For the base case individual described above, having received organisation-provided training in the previous 12 months is estimated to increase the probability of having control over start and finish times by 5.3 percentage points as compared to an otherwise similar employee who did not receive organisation-provided training. The effect is statistically significant at the 5 per cent or better confidence level.

Increases in age are estimated to increase the probability of having control over start and finish times at an increasing rate with the effect becoming negative once age reaches 50 to 54 years. An increase in age from 30 to 34 years to 35 to 39 years is estimated to increase the probability of having control over start and finish times by 1.8 percentage points.

There is little evidence of a relationship between highest level of educational attainment and having control over start and finish times. This is primarily due to the correlation between occupation and educational attainment.

Occupation is found to be a powerful factor impacting upon the chances of having control over start and finish times. For example, professionals are estimated to be 14.4 percentage points more likely to have flexibility over hours worked than are salespersons and personal workers, and managers and administrators are estimated to be 35.6 percentage points more likely to have control over start and finish times than are salespersons or personal workers. Plant and machinery operators and drivers are estimated to be 12.3 percentage points less likely to have control over start and finish times.

Gender is found to have no impact upon the chances of having control over start and finish times once employee and workplace characteristics (observable and unobservable) are taken into account. Employees with a health condition or disability which is likely to last for more than six months are estimated to be 4.5 percentage points less likely to have control over their start and finish times. This effect is statistically significant.

The variables for age of youngest child are statistical insignificant, meaning that there is no evidence of any relationship between having dependent children and the likelihood of an employee having control over their start and finish times. This finding implies that within workplaces that offer to at least some

employees control over start and finish times, those with children are no more likely to have control over their start and finish times than employees without dependants. This confirms the results of cross-tabulations conducted using ABS data (Kilmartin 1996). Further, there is no evidence that people with dependent children who would benefit from flexibility of start and finish times are sorting into workplaces that offer this work practice. According to the AWIRS95 data, employees with dependent children are equally likely to be employed in workplaces that offer these work practices as firms that do not.¹⁷

Part-time workers are estimated to be 3.8 percentage points less likely to have control over start and finish times. This finding suggests that part-time employees trade off flexibility in working times for a lower number of hours of work. There are similar findings using US data (Golden

After controlling for other factors, having dependent children has no impact on control over start and finish times.

2001a, 2001b). There is no relationship between being a casual employee and having control over start and finish times. Increases in tenure with the current employer are estimated to increase significantly the probability of having control over start and finish times at a decreasing rate. For example, increasing tenure from four to five years is estimated to increase the probability of having control over start and finish times by 0.4 percentage points.

Being a member of a trade union is estimated to significantly decrease the probability of having control over start and finish times by 6.3 percentage points. This result is probably the reflection of the fact that unions tend to formalise work arrangements and reduce supervisor discretion. Given that many firms have a formal policy of fixed start and finish times, but supervisors exercise their discretion not to strictly enforce this rule, reducing supervisor discretion may reduce the chances of an employee having flexibility over the actual hours worked.¹⁸

Similarly, the presence of an active trade union in the workplace is estimated to have a negative and statistically significant effect on the flexibility of hours worked, reducing it by 5.0 percentage points. This result probably reflects the desire of unions to reduce employer discretion in decisions about work practices by formalising work arrangements.

An interesting finding is that the variable measuring the proportion of managers who are female is not statistically significant. However, the proportion of employees who are female is estimated to have a positive impact upon the probability of having control over start and finish times.

Access to a telephone for family reasons

Increases in educational attainment are estimated to increase the probability of an employee being able to access a telephone for family reasons. For example, having a degree-level qualification is estimated to increase the probability of telephone access by 4.0 percentage points as compared to an otherwise similar employee with the highest level of educational attainment being completed secondary education. The effects of occupation are surprisingly small, with only professionals and managers and administrators being 4.8 and 8.0 percentage points, respectively, more likely to have access to a phone than sales and personal service workers.

Table 2 Determinants of access to family-friendly work practices, marginal effects of key variables

	Control over start and finish times	Access to telephone for family reasons	Access to permanent part-time work
Age	1.8*	0.5	-0.3
Educational attainment			
Primary	-4.3	-4.1	-0.2
Incomplete secondary	0.0	-3.0*	2.8
Basic vocational	-0.4	0.2	1.3
Skilled vocational	-3.9*	1.7	-2.2
Associate Diploma Degree	2.5 3.5	2.0 4.0*	-3.1 -2.1
Postgraduate	3.2	5.1*	2.0
Other qualification	-5.0	-1.4	4.5
NESB	5.6*	-5.1*	-1.9
Migrant – ESB country	5.3*	2.6	-4.5*
Migrant – NESB country	1.7	2.8*	-1.2
Female	-2.7	-2.7	8.5*
Indigenous	0.5	0.7	14.8*
Health problem	-4.4*	2.1	3.4
Age youngest dependent – Males	** *		3.1
Aged 0 to 3 years	0.3	-1.6	0.6
Aged 4 to 12 years	2.9	1.8	0.4
Aged 13 years or older	2.4	-2.3	4.0
Non-child dependent	-3.0	-3.1	-3.9
Age youngest dependent – Fema			
Aged 0 to 3 years	-3.2	-0.6	0.6
Aged 4 to 12 years	-4.1	-3.0	0.4
Aged 13 years or older Non-child dependent	-6.0 -4.1	5.3* 0.7	4.0 -3.9
Tenure	0.4*	-0.3*	0.4*
Organisation-provided training	5.3*	6.4*	10.9*
Part-time employee	-3.8*	-3.1*	10.9
Casual employee	0.4	-3.5	
Member of a trade union	-6.3*	-3.0*	3.6*
% managers who are female	1.6	-3.0 1.1	2.8
			2.8 9.8*
% employees who are female Written EEO policy	-3.6* 2.4	-3.5 1.4	
· · ·	2.4 4.7	1.4 -7.9*	-3.3 7.8
Government Private	4.7 3.1	-7.9 ⁻ -0.7	7.8 5.1
Active trade union	3.1 -4.0*	-0.7 4.3*	5.1 -2.6
Firm operates 24 hrs/7 days a wee	ek -9.2*	-3.1*	0.9
Occupation Labourers	-8.6*	-1.0	-4.2
Plant & machinery	-0.0 -12.3*	1.2	-4.2 -3.2
operators & drivers	12.5	1.2	5.2
Clerks	7.1*	2.4	-9.4*
Tradespersons	-8.3*	-0.5	-15.0*
Paraprofessionals	3.6	-1.3	-8.5*
Professionals	14.4*	4.8*	-11.2*
Managers & administrators	35.6*	8.0*	1.9
Other occupation	5.6	-0.1	0.0

Notes: * signifies statistical significance of the underlying regression coefficient at the 5 per cent level. Full estimation results are presented in Appendix E. Marginal effects are calculated relative to the base case employee. The estimates of the probability of having access to permanent part-time employment excludes part-time employees.

Source: Derived from estimates made using AWIRS95.

Employees who speak a language other than English at home are estimated to be 5.1 percentage points less likely than those who speak English at home to have access to a telephone for family reasons. As for control over start and finish times, there appears to be no differences between women and men after controlling for other factors.

In respect to access to a telephone for family reasons, there is little evidence of a relationship between having dependent children and having access to a telephone for family reasons. The only effect is that women with a youngest dependent child aged 13 years or older are estimated to be 5.3 percentage points more likely to have access to a telephone than women without dependent children (or non-child dependant).

As for having control over start and finish times, having received organisation-provided training is estimated to increase the probability of telephone access by 6.4 percentage points.

Part-time employees are estimated to be 3.1 percentage points less likely to have telephone access. Being a casual employee is found to have no effect on control over start and finish times.

Availability of permanent part-time work

Before discussing the estimates of the probability of being able to get permanent part-time work if needed, it is worth reiterating that the estimates are restricted to full-time employees. The determinants of access to permanent part-time work differ somewhat to those of hours flexibility and telephone access. Age and highest level of educational attainment are not statistically significant. Women are estimated to be 8.5 percentage points more likely to report being able to get permanent part-time work in their current workplace if needed than are men. It is noteworthy that Indigenous employees are 14.8 percentage points more likely to report being able to get permanent part-time employment than non-Indigenous employees with otherwise similar characteristics.

As for control over start and finish times and access to a telephone for family reasons, there are no statistically significant relationships between having dependent children and the probability of being able to get permanent part-time work.

Having received organisation-provided training in the previous 12 months is estimated to increase the probability of permanent part-time work being available by 10.9 percentage points. Increases in tenure are estimated to increase the probability of being able to get permanent part-time employment at a decreasing rate. In other words each additional year of tenure has a smaller impact upon the likelihood of being able to get permanent part-time employment if needed. For example, an increase in tenure from one to two years is estimated to increase the probability of being able to get permanent part-time employment by 0.4 percentage points.

There are strong occupational effects. Unlike hours flexibility and access to a telephone for family reasons, paraprofessionals, professionals, clerks and tradespersons are less likely to report being able to get permanent part-time work if needed than are sales and personal service workers.

Overall patterns and implications

While variations exist between each of the work practices examined, a number of clear patterns emerge. First, there appears to be no relationship between having dependent children and the likelihood of having access to each work practice, the only exception being that mothers with teenage children are more likely to report having access to a telephone for family reasons.

Second, employees who have recently received employer-provided training are much more likely to have access to each work practice than otherwise similar employees who have not received such training. Increases in tenure are estimated to increase the probability of having access to each of the work practices. This finding is consistent with theoretical arguments which suggest that employers have the greatest incentive to provide family-friendly work practices to employees in whom they have invested the most, either through formal or informal on-the-job training.

No differences are evident between males and females in the probability of having control over start and finish times or access to a telephone for family reasons. However, women are found to be more likely to be able to get permanent part-time work in their current workplace than are men.

There is a very strong occupation effect, with professionals and managers and administrators being much more likely to have control over start and finish times and access to a telephone for family reasons than other occupations. However, full-time employed professionals, paraprofessionals, clerks and tradespersons are less likely to report being able to get permanent part-time work if needed.

These results suggest that in spite of the work practices analysed being of assistance to employees in successfully managing their family and work responsibilities, those with the greatest care commitments (at least in terms of time) have no increased probability of reporting being able to access these work practices.

7 Concluding comments

This paper presents the first large-scale analysis of the extent to which employees within organisations in Australia have differential access to a range of family-friendly work practices. Such practices include: control over start and finish times (hours flexibility); access to a telephone for family reasons; availability of permanent part-time employment if needed; and the type of leave used to care for a sick family member. The extent to which differential access to family-friendly work practices is due to differences between workplaces and/or differences among employees within the same organisation is a question that is of policy importance.

The analysis reveals that the variation in access to each of the work practices is greater among employees working in the same workplace than between workplaces. There are relatively few workplaces in which a high proportion of employees reported having access to each work practice.

Statistical modelling was used to explore which employee characteristics are associated with having control over start and finish times, access to a telephone for family reasons, and the availability of permanent part-time employment if needed. In general, employers are most likely to offer family-friendly work practices to employees with high skills levels or in whom they have invested training or other resources. This has significant ramifications for those in the labour market who are most vulnerable but unable to access these work practices.

It is worth highlighting that the research in this paper is based upon the latest data available, collected in 1995. There is an urgent need for a new AWIRS-style survey to provide more recent data.

There are several implications for policy of the analysis presented in this paper.

- Evidence of differential access of employees within organisations to family-friendly work practices means that policy makers need to focus on increasing the availability of such practices within organisations to *all* employees, regardless of occupational or employment status or training, who would benefit from access to these practices.
- While there is strong evidence from other studies that the work practices examined in this paper assist employees in balancing work and family responsibilities, the analysis of the AWIRS95 data reveals that there is no relationship between having dependent children and the likelihood of having access to family-friendly work practices. In other words, those identified as having the most need for family-friendly work practices are no more likely to be able to access these work practices than are otherwise similar employees with no child or non-child dependants.

■ The finding that employees with the lowest levels of education, job tenure and organisation-provided training are least likely to have access to family-friendly work practices means that policies need to pay particular attention to the situation of these types of employees.

The question, of course, remains as to what policy instruments the government can use to increase the coverage of access to family-friendly work practices, particularly to employees with dependent children or other care responsibilities. Possibilities include regulation of the conditions of employment via industrial relations legislation and information campaigns aimed at raising the awareness of employers to the potential workplace benefits of offering family-friendly work practices.

Any attempts to increase access to such work practices via legislative or other means must take account of the risk that if the costs to employers are perceived to increase, then employers may choose not to employ those likely to make heavy use of these work practices, or alternatively, employees with family responsibilities may bear the costs indirectly through lower wages and conditions.

Attempts to educate employer groups about the benefits of assisting employees to balance work and family commitments will be strengthened by highlighting the long-term pecuniary benefits of such policies to employers, for example, through reduced tardiness and absenteeism, better morale, improved retention of workers and greater productivity.

Appendix A. Family-friendly work arrangements employed by firms

Leave from work for family reasons

Emergency leave (e.g. to deal with a sick child, or when there has been a problem with child are at short notice.

Extension of maternity leave beyond statutory period either paid or unpaid.

Paternity leave, paid or unpaid.

Career break.

Leave to care for elderly relative.

Other extended leave for family reasons.

Changes in work arrangements introduced for family reasons

Reduced work week for full-time workers, of 4.5 days or fewer.

Flexi-time weekly hours.

Term-time only contracts.

Switching from full-time to part-time, on permanent or temporary basis, on initiative of employee.

Job-sharing schemes.

Work at home for family reasons.

Practical help with child-care and elder care

Workplace or linked nursery.

Financial help/subsidy to parents for child care (child-care allowance or voucher).

Child-care provisions in holidays (e.g. play scheme).

Breast-feeding facilities.

Workplace parent support group.

Assistance with costs of looking after elderly relatives.

Having a telephone at work to use for family reasons.

Relevant information and training

Maternity packs - information on maternity pay and leave.

Policy of actively informing staff of the benefits available and encouraging their use.

Additional supportive information, e.g. on local childcare.

Contact during maternity leave.

Contact during career breaks.

Refresher courses, retraining, workshops on or as preparation for re-entering workforce.

Source: Evans 2001.

Appendix B. Variable definitions

Variable name	Variable description
Family-friendly work prac	ctices
Control over start and finish times	Variable that takes the value of 1 if the employee has a lot or some finish times influence over when they start and finish work and zero otherwise.
Access to permanent part-time work	A variable that takes the value of 1 if the employee can get permanent part-time work part-time work at their current workplace if needed and zero otherwise.
Access to telephone for family reasons	A variable that takes the value of 1 if the employee, if needed, would be able to access a telephone at work for family reasons and zero otherwise.
Usual way time taken to care for sick family member	
Holiday leave	A variable that takes the value of 1 if the employee usually used holiday leave and zero otherwise.
Paid family leave	A variable that takes the value of 1 if the employee usually used paid family leave and zero otherwise.
Own sick leave	A variable that takes the value of 1 if the employee usually used own sick leave and zero otherwise.
Make up time later	A variable that takes the value of 1 if the employee usually takes time off and makes it up later and zero otherwise.
Leave without pay	A variable that takes the value of 1 if the employee usually goes on leave without pay and zero otherwise.
No time taken	A variable that takes the value of 1 if the employee can't take any time off and zero otherwise.
Training	A variable that takes the value of 1 if the employee received training in the last 12 months which was provided or paid for by their employer and zero otherwise. "Not relevant to me" responses are coded as "did not receive training".
Part-time employment	A variable that takes the value of 1 if the employee usually works less than 35 hours per week and zero otherwise. Usual hours of work includes overtime hours that are normally worked.
Age	A variable which measures age in five-year age groups, ranging from 15 to 20 years of age to 55 years or older.
Educational attainment	
Postgraduate	A variable that takes the value of 1 if highest level of completed education is a postgraduate degree or diploma and zero otherwise.
Degree	A variable that takes the value of 1 if highest level of completed education is an undergraduate degree or diploma and zero otherwise.
Associate Diploma	A variable that takes the value of 1 if highest level of completed education is an associate diploma or advanced certificate and zero otherwise.
Skilled vocational	A variable that takes the value of 1 if highest level of completed education is a skilled vocational qualification (e.g. trade certificate, apprenticeship) and zero otherwise.
Basic vocational	A variable that takes the value of 1 if highest level of completed education is a basic vocational qualification (e.g. pre-vocational certificate) and zero otherwise.

Appendix B continued

Variable name	Variable description
Completed secondary	A variable that takes the value of 1 if highest level of completed education is completion of secondary school and zero otherwise.
Incomplete secondary	A variable that takes the value of 1 if highest level of completed education is attendance at secondary school level up to Year 11 and zero otherwise.
Primary	A variable that takes the value of 1 if highest level of completed education is attendance at primary school level and zero otherwise.
Tenure	Number of years worked at the workplace.
Disabled	A variable that takes the value of 1 of a worker has a health condition or disability likely to last for more than 6 months and zero otherwise.
Female	A variable that takes the value of 1 if the employee is female and zero otherwise.
Dependents	
Child under 4 years	A variable that takes the value of 1 if the respondent has a dependent child and the youngest dependent child is aged less than 4 years of age and zero otherwise.
Child 4-12 years	A variable that takes the value of 1 if the respondent has a dependent child and the youngest dependent child is aged 4 to 12 years and zero otherwise.
Child over 13 years	A variable that takes the value of 1 if the respondent has a dependent child and the youngest dependent child is aged 13 years or older and zero otherwise.
Other dependent	A variable that takes the value of 1 if the respondent has a non- child dependent family member (including aged, disabled or long- term sick family members) they have to care for and zero otherwise.
Indigenous	A variable that takes the value of 1 if the employees is of Aboriginal or Torres Strait Islander origin and zero otherwise.
NESB	A variable that takes the value of 1 if a language other than English is usually spoken at home and zero otherwise.
Migrant-ESB	A variable that takes the value of 1 if born overseas in an English- speaking country and zero otherwise.
Migrant-NESB	A variable that takes the value of 1 if born overseas in a non-English speaking country and zero otherwise.
Occupation	
Labourers	A variable that takes the value of 1 if employed as a labourer and zero otherwise.
Plant & machinery operators & drivers	A variable that takes the value of 1 if employed as a plant and machinery operator or driver and zero otherwise.
Clerks	A variable that takes the value of 1 if employed as a clerk
Tradespeople	A variable that takes the value of 1 if employed as a tradesperson and zero otherwise.
Paraprofessionals	A variable that takes the value of 1 if employed as a paraprofessional and zero otherwise.

continued overleaf

Appendix B continued

Variable name	Variable description
Professionals	A variable that takes the value of 1 if employed as a professional and zero otherwise.
Managers & administrators	A variable that takes the value of 1 if employed as a manager and administrator and zero otherwise.
Other occupation	A variable that takes the value of 1 if employed as other occupation and zero otherwise.
Workplace characteristics	5
Proportion female	A variable which measures the proportion of employees in the workplace who are female.
Manager female	A variable which measures the proportion of managers who are female.
Active trade union	A variable that takes the value of 1 if there is an active trade union present in the workplace. An active trade union is defined to exist if:
	 the senior delegate from the union with most members spends one hour or more each work on union activities; and a general meeting of members is held at least once every six months; or a joint or single union committee exists and meets regularly with management; or
	delegates meet with management at least once a month.
Size of workplace	A variable which measures the total number of employees at the workplace in August 1995.
Size of firm (FS1–FS7)	A set of dummy variables that measures the number of employees working for the whole firm throughout Australia. FS1 takes the value of 1 if less than 100 employees, and zero otherwise. Similarly, FS2 – 100 to less than 500 employees; FS3 – 500 to less than 1,000 employees; FS4 – 1,000 to less than 5,000 employees; FS5 – 5,000 to less than 10,000 employees; FS6 – 10,000 to less than 20,000 employees; and FS7 – more than 20,000 employees.
EEO	A variable which takes the value of 1 if the workplace is covered by a written policy on equal employment opportunity or affirmative action policy and zero otherwise.
Sector	
Government	A variable that takes the value of 1 if the workplace was a government business organisation, commercial statutory authority, non-commercial, federal public service department or state public service department and zero otherwise.
Private	A variable that takes the value of 1 if the workplace was a private sector organisation and zero otherwise.
Non-commercial	A variable that takes the value of 1 if the workplace was non-government and did not operate on a for-profit basis and zero otherwise.
24 hours / 7 days	A variable that takes the value of 1 if the workplace operates 24 hours a day, 7 days a week and zero otherwise.

Appendix C. Distribution of within workplace variation in access to family-friendly work practices

					Type	Type of leave usually used	nsed	
	Control over start and finish times	Access to a telephone	Permanent part-time employment	Paid family leave	Holiday leave	Own sick leave	Make up time later	Leave without pay
		Per cent c	Per cent of employees within the workplace reporting having access to the work practice	n the workplace r	eporting having	access to the wor	k practice	
0.01 to 10	1.4		4.7	48.3	7.6	4.5	41.3	8.1
11 to 20	5.9	0.4	13.9	18.7	6.0	7.4	27.1	16.0
21 to 30	10.3	1.4	14.8	12.8	10.4	11.6	14.8	21.2
31 to 40	15.1	2.0	14.7	7.4	15.5	16.9	9.3	19.7
41 to 50	22.2	7.7	16.2	5.3	23.1	25.0	6.5	18.4
51 to 60	6.6	7.1	6.2	2.1	12.8	15.2	1.0	5.6
61 to 70	13.2	19.5	13.9	3.1	15.5	12.8		7.0
71 to 80	8.2	17.7	6.8	1:1	6.4	3.4		2.2
81 to 90	7.6	27.1	5.0	6.0	2.3	2.4		1.3
91 to 100	6.2	17.0	3.9	0.2	0.3	0.7		0.4
Number of workplaces	901	904	844	904	904	904	904	904

Note: Workplaces in which no employee had access to the work practice are excluded. Source: Estimates from AWIRS95 data set.

Appendix D. Variable means and standard deviations

	Control over start and finish times Mean		Access to a telephone for family reasons Mean		Access to permanent part-time employment Mean	
Primary	0.020	(0.14)	0.019	(0.14)	0.0185	(0.13)
Incomplete secondary	0.020	(0.44)	0.264	(0.14)	0.2460	(0.13)
Basic vocational	0.203	(0.20)	0.042	(0.20)	0.0424	(0.43)
Skilled vocational	0.115	(0.32)	0.119	(0.32)	0.1238	(0.33)
Associate Diploma	0.097	(0.30)	0.097	(0.30)	0.1002	(0.30)
Degree	0.145	(0.35)	0.145	(0.35)	0.1548	(0.36)
Postgraduate	0.102	(0.30)	0.107	(0.31)	0.1142	(0.32)
Other qualification	0.019	(0.14)	0.019	(0.14)	0.0180	(0.13)
NESB	0.056	(0.23)	0.054	(0.23)	0.0602	(0.24)
Migrant – ESB	0.121	(0.33)	0.119	(0.32)	0.1282	(0.33)
Migrant – NESB	0.117	(0.32)	0.118	(0.32)	0.1179	(0.32)
Female	0.441	(0.50)	0.436	(0.50)	0.4068	(0.49)
Indigenous	0.010	(0.10)	0.010	(0.10)	0.0107	(0.10)
Disabled	0.080	(0.27)	0.084	(0.28)	0.0838	(0.28)
Child under 4 years	0.148	(0.35)	0.157	(0.36)	0.1530	(0.36)
Child 4-12 years	0.160	(0.37)	0.169	(0.37)	0.1521	(0.36)
Child over 13 years	0.117	(0.32)	0.121	(0.33)	0.1093	(0.31)
Other dependent	0.085	(0.28)	0.089	(0.28)	0.0876	(0.28)
Tenure	7.262	(6.79)	7.445	(6.81)	7.3448	(6.71)
Training	0.641	(0.48)	0.644	(0.48)	0.6534	(0.48)
Part-time	0.186	(0.39)	0.176	(0.38)	0.0000	(0.00)
Casual	0.068	(0.25)	0.061	(0.24)	0.0187	(0.14)
Trade union	0.522	(0.50)	0.539	(0.50)	0.5349	(0.50)
Size of workplace	308	(500.25)	309	(496.19)		(509.43)
Size of firm FS1	0.070	(0.26)	0.069	(0.25)	0.0687	(0.25)
FS2	0.222	(0.42)	0.217	(0.41)	0.2269	(0.42)
FS3	0.106	(0.31)	0.105	(0.31)	0.1108	(0.31)
FS5	0.081	(0.27)	0.083	(0.28)	0.0832	(0.28)
FS6	0.083	(0.28)	0.084	(0.28)	0.0888	(0.28)
FS7	0.185	(0.39)	0.187	(0.39)	0.1568	(0.36)
Manager female	0.214	(0.27)	0.212	(0.27)	0.1867	(0.25)
Proportion female	0.418	(0.26)	0.415	(0.26)	0.3890	(0.25)
EEO	0.876	(0.33)	0.880	(0.32)	0.8815	(0.32)
Government sector	0.384	(0.49)	0.389	(0.49)	0.4164	(0.49)
Private sector	0.553	(0.50)	0.547	(0.50)	0.5290	(0.50)
Active trade union	0.664	(0.47)	0.675	(0.47)	0.6748	(0.47)
24hrs /7days	0.214	(0.41)	0.222	(0.42)	0.2133	(0.41)
Labourers	0.121	(0.33)	0.120	(0.32)	0.1066	(0.31)
Plant & machinery operators & drivers	0.089	(0.29)	0.093	(0.29)	0.0951	(0.29)
Clerks	0.198	(0.40)	0.191	(0.39)	0.2078	(0.41)
Tradespeople	0.079	(0.27)	0.083	(0.28)	0.0891	(0.28)
Paraprofessionals	0.125	(0.33)	0.129	(0.34)	0.1323	(0.34)
Professionals	0.169	(0.38)	0.173	(0.38)	0.1904	(0.39)
Managers & administrators	0.090	(0.29)	0.092	(0.29)	0.0951	(0.29)
Other occupation	0.006	(80.0)	0.006	(80.0)	0.0059	(0.08)
Number of observations	12,863		10,666		8,286	

Notes: Standard deviation in brackets. The sample used to estimate the probability of having access to a telephone for family reasons is smaller than that used to estimate the determinants of control over start and finish times due to "not relevant" responses. The sample used to estimate the probability of availability of permanent part-time employment excludes "not relevant" responses and part-time employees. Source: Estimates from AWIRS95 data set.

Appendix E. Random effects (RE) probit estimates

	Control over start and finish times Coefficient		Access to a telephone for family reasons Coefficient		Access to permanent part-time employment Coefficient	
Age	0.0847	(2.69)	0.0579	(1.60)	0.0402	(0.93)
Age ²	-0.0056	-(1.87)	-0.0060	-(1.76)	-0.0068	-(1.69)
Primary	-0.1069	-(1.14)	-0.1250	-(1.17)	-0.0046	-(0.04)
Incomplete secondary	0.0012	(0.03)	-0.0908	-(2.11)	0.0743	(1.46)
Basic vocational	-0.0096	-(0.15)	0.0079	(0.11)	0.0351	(0.42)
Skilled vocational	-0.0980	-(1.95)	0.0537	(0.94)	-0.0596	-(0.87)
Associate Diploma	0.0635	(1.25)	0.0641	(1.10)	-0.0859	-(1.30)
Degree	0.0870	(1.66)	0.1320	(2.20)	-0.0576	-(0.87)
Postgraduate	0.0799	(1.30)	0.1733	(2.47)	0.0526	(0.71)
Other qualification	-0.1261	-(1.35)	-0.0448	-(0.43)	0.1206	(0.97)
NESB	0.1402	(2.21)	-0.1548	-(2.09)	-0.0510	-(0.61)
Migrant – ESB	0.1339	(2.92)	0.0839	(1.56)	-0.1267	-(2.10)
Migrant – NESB	0.0427	(1.07)	0.0931	(2.03)	-0.0342	-(0.67)
Female	-0.0684	-(1.83)	-0.0820	-(1.87)	0.2225	(4.69)
Indigenous	0.0131	(0.11)	0.0209	(0.15)	0.3819	(2.51)
Disabled	-0.1110	-(2.40)	0.0686	(1.33)	0.0920	(1.58)
Child under 4 years	0.0077	(0.16)	-0.0510	-(0.96)	0.0173	(0.29)
Child 4-12 years	0.0724	(1.46)	0.0578	(1.03)	0.0100	(0.16)
Child over 13 years	0.0591	(1.06)	-0.0722	-(1.18)	0.1064	(1.47)
Other dependent	-0.0744	-(1.27)	-0.0954	-(1.49)	-0.1077	-(1.42)
Female* child under 4 years	-0.0129	-(0.17)	0.0628	(0.72)	-0.0018	-(0.02)
Female* child 4-12 years	-0.0340	-(0.48)	-0.0087	-(0.11)	0.0429	(0.44)
Female* child over 13 years	-0.0829	-(1.02)	0.2605	(2.82)	0.0093	(0.09)
Female* other dependent	-0.0336	-(0.37)	0.1055	(1.05)	0.0262	(0.22)
Tenure	0.0109	(2.01)	-0.0115	-(1.92)	0.0121	(1.70)
Tenure ²	-0.0001	-(0.63)	0.0002	(0.86)	-0.0001	-(0.42)
Training	0.1341	(5.00)	0.2183	(7.27)	0.2831	(7.96)
Part-time	-0.0952	-(2.43)	-0.0937	-(2.12)		
Casual	0.0096	(0.17)	-0.1077	-(1.64)		
Trade union	-0.1573	-(5.17)	-0.0919	-(2.71)	0.0953	(2.40)
Size of firm FS1	-0.0320	-(0.39)	-0.0200	-(0.25)	-0.1723	-(1.60)
FS2	-0.0683	-(1.24)	-0.0643	-(1.20)	-0.1633	-(2.30)
FS3	-0.0156	-(0.24)	-0.0212	-(0.33)	-0.2541	-(2.95)
FS5	0.0934	(1.25)	0.0907	(1.25)	0.1405	(1.45)
FS6	-0.1485	-(2.05)	-0.0820	-(1.19)	0.2884	(3.15)
FS7	0.2714	-(4.67)	-0.0026	-(0.05)	0.1901	(2.51)

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Appendix E continued

	Control over start and finish times Coefficient		Access to a telephone for family reasons Coefficient		Access to permanent part-time employment Coefficient	
Number of employees	0.0001	(1.25)	0.0000	(0.17)	0.0001	(1.20)
Number of employees ²	0.0000	-(0.79)	0.0000	(0.42)	0.0000	-(0.53)
Manager female	0.1780	(0.86)	-0.1173	-(0.58)	0.4108	(1.52)
Manager female ²	-0.0352	-(0.15)	0.3326	(1.45)	-0.1853	-(0.59)
Proportion female	1.3755	(4.88)	0.2192	(0.79)	2.2894	(6.10)
Proportion female ²	-1.5441	-(4.94)	-0.5538	-(1.81)	-1.2080	-(2.89)
EEO	0.0596	(0.99)	0.0453	(0.76)	-0.0903	-(1.13)
Government sector	0.1194	(1.44)	-0.2338	-(2.90)	0.2051	(1.89)
Private sector	0.0787	(0.97)	-0.0213	-(0.27)	0.1341	(1.25)
Active trade union	-0.0999	-(2.39)	0.1440	(3.49)	-0.0709	-(1.29)
24hrs /7days	-0.2320	-(4.76)	-0.0958	-(2.06)	0.0251	(0.40)
Labourers	-0.2162	-(3.95)	-0.0310	-(0.50)	-0.1176	-(1.46)
Plant & machinery operators & drivers	-0.3127	-(4.86)	0.0380	(0.53)	-0.0891	-(1.02)
Clerks	0.1802	(3.63)	0.0793	(1.38)	-0.2720	-(3.97)
Tradespeople	-0.2092	-(3.11)	-0.0166	-(0.22)	-0.4640	-(4.85)
Paraprofessionals	0.0909	(1.56)	-0.0419	-(0.64)	-0.2437	-(3.06)
Professionals	0.3707	(5.93)	0.1611	(2.22)	-0.3315	-(4.04)
Managers & administrators	1.0688	(15.51)	0.2819	(3.77)	0.0516	(0.63)
Other occupation	0.1399	(0.90)	-0.0043	-(0.03)		
Constant	-0.5860	-(4.06)	0.5827	(3.88)	-1.3503	-(7.02)
sigma_u	0.4337	0.020	0.3290	0.024	0.5381	0.0273
rho(ρ)	0.1583	0.012	0.0977	0.013	0.2245	0.0177
LR test of rho=0:	346		95		323	
Number of observations	12,863		10,666		8,403	
Number of workplaces	1,324		1,319		1,279	
Wald chi2(47)	1,159				636	
Log likelihood	-7,803		-5,703		-4,844	

Notes: T-statistics in brackets. The estimates are restricted to workplaces with two or more valid employee responses. Sigma_u is the standard deviation of the panel-level variance component σ_v . The proportion of the total variance contributed by the panel-level variance component is given by $rho(\rho)$. When rho is zero (as determined by the likelihood ratio test) the panel-level variance component is unimportant and the panel estimator is no different from the pooled estimator (probit). Source: Estimates from AWIRS95 data set.

Appendix F. Conditional logit estimates

	Control over start and finish times Odds ratio		Access to a telephone for family reasons Odds ratio		Access to permanent part-time employment Odds ratio	
Age	1.093	(1.61)	1.060	(0.86)	1.088	(1.32)
Age ²	0.995	-(0.92)	0.993	-(1.09)	0.989	-(1.78)
Primary	0.882	-(0.79)	0.948	-(0.28)	0.928	-(0.36)
Incomplete secondary	1.054	(0.80)	0.901	-(1.35)	1.091	(1.13)
Basic vocational	1.037	(0.32)	1.017	(0.12)	1.061	(0.47)
Skilled vocational	0.906	-(1.14)	1.123	(1.11)	0.874	-(1.23)
Associate Diploma	1.074	(0.81)	1.172	(1.48)	0.958	-(0.43)
Degree	1.152	(1.53)	1.307	(2.42)	0.954	-(0.48)
Postgraduate	1.223	(1.84)	1.398	(2.58)	1.106	(0.88)
Other qualification	0.910	-(0.59)	0.835	-(0.97)	1.172	(0.90)
NESB	1.204	(1.67)	0.724	-(2.37)	0.887	-(0.92)
Migrant – ESB	1.179	(2.06)	1.069	(0.68)	0.869	-(1.52)
Migrant – NESB	1.038	(0.54)	1.194	(2.09)	1.030	(0.37)
Female	0.915	-(1.36)	0.879	-(1.62)	1.475	(5.34)
Indigenous	0.957	-(0.20)	1.158	(0.55)	1.562	(1.86)
Disabled	0.775	-(3.15)	1.097	(0.99)	1.058	(0.63)
Child under 4 years	1.006	(0.07)	0.959	-(0.44)	1.050	(0.50)
Child 4-12 years	1.192	(2.04)	1.168	(1.51)	1.044	(0.43)
Child over 13 years	1.130	(1.27)	0.840	-(1.57)	1.201	(1.54)
Other dependent	0.822	-(1.90)	0.816	-(1.77)	0.881	-(1.01)
Female* child under 4 years	0.942	-(0.43)	1.111	(0.67)	1.198	(1.22)
Female* child 4-12 years	0.948	-(0.43)	0.920	-(0.57)	1.178	(1.17)
Female* child over 13 years	0.872	-(0.98)	1.757	(3.36)	1.122	(0.69)
Female* other dependent	1.000	(0.00)	1.180	(0.92)	1.045	(0.25)
Tenure	1.032	(3.26)	0.981	-(1.78)	1.051	(4.41)
Tenure ²	0.999	-(1.63)	1.000	(0.93)	0.999	-(2.79)
Training	1.247	(4.66)	1.355	(5.48)	1.486	(7.25)
Part-time	0.898	-(1.52)	0.842	-(2.07)	1.000	, ,
Casual	1.111	(1.00)	0.964	-(0.29)	1.000	
Trade union	0.808	-(3.81)	0.878	-(1.97)	1.047	(0.75)
Labourers	0.742	-(3.01)	0.871	-(1.14)	0.819	-(1.69)
Plant & machinery operators & drivers	0.629	-(3.97)	0.917	-(0.60)	1.009	(0.06)
Clerks	1.149	(1.55)	0.987	-(0.12)	0.732	-(2.98)
Tradespeople	0.737	-(2.58)	0.797	-(1.57)	0.511	-(4.15)
Paraprofessionals	1.141	(1.25)	0.870	-(1.09)	0.867	-(1.15)
Professionals	1.835	(5.27)	1.104	(0.70)	0.663	-(3.19)
Managers & administrators	5.400	(13.31)	1.440	(2.58)	1.158	(1.10)
Other occupation	1.257	(0.85)	0.948	-(0.17)	0.820	-(0.60)
Number of observations	12,038		9,102		9,104	
LR chi2(30)	748		180		252	
Log likelihood	-5,202		-3,580		-3,877	
Pseudo R2	0.067		0.0246		0.0314	

Notes: The odds ratio presents the exponentiated coefficients. The odds ratio indicates how often something happens relative to how often it does not happen. The coefficients can be interpreted in terms of odds ratios as follows: for a change of δ in x_k , the odds are expected to change by a factor of $\exp(\beta_k \times \delta)$, holding all other variables constant. Odds ratio's greater than 1 mean that the variable has a positive effect, and odds ratios less than 1 mean that the variable has a negative effect. Standard dayiations are presented in brackets. deviations are presented in brackets. Source: Estimates from AWIRS95 data set.

Endnotes

- 1 For example, between 1986 and 2000 the rate of employment of women with a youngest child aged less than five years increased from 35.7 to 45.0 per cent. There has been a similar increase in the employment rate of women with a youngest child aged 5–15 years from 58.4 to 66.8 per cent (ABS Catalogue No. 6224.0).
- 2 A third possibility is for organisations deemed to be family-friendly to increase the size of their workforces, relative to those that are not.
- 3 It is estimated that in June 1999, 35 per cent of the Australian population used a mobile telephone (OECD 1999).
- 4 It is sometime argued that permanent part-time employees miss out on organisation-provided training and opportunities for promotion, thus limiting subsequent carer development and reducing the "family-friendliness" of permanent part-time employment (Junor 1998). Notwithstanding such concerns, survey-based evidence consistently reveals that women with children value permanent part-time work as a way of reconciling work and family responsibilities.
- 5 For example, evidence from the Australian Bureau of Statistics Time Use Surveys reveals that Australian mothers contribute 74 per cent of the time devoted to the physical care of children (Bittman and Pixley 1997).
- 6 A number of studies have taken the approach of comparing the earnings of women with access to a family-friendly work practice to those of women who do not. These studies have usually found that women who have access to the work practice have higher earnings than do otherwise similar women. Such studies usually fail to adequately take account of unmeasured differences between women such as innate ability or motivation. This means that it is impossible to disentangle the impacts of the work practices and other unmeasured differences on wages. Gruber (1994) gets around this difficulty by using the natural experiment provided by the mandating of maternity benefits in some US states but not in others. Gruber uses the State variation in the mandating of maternity benefits to isolate the effects of maternity benefits on wages as compared to other factors.
- 7 Detailed discussions of the AWIRS95 survey can be found in Morehead *et al.* (1997) and Wooden and Bora (1999).
- 8 The respondents were given several options to choose from, ranging from "a lot" to "a little".
- 9 The higher proportion of employees reporting being able to get permanent parttime employment as being not relevant to them is largely the result of males being much more likely to not consider part-time work relevant (unreported estimates from AWIRS95 data set). This probably reflects strongly held beliefs about the role of men

- 10 If the access of individual i in workplace n is given by x_{in} then the overall average (across all employees in all workplaces) is given by $\bar{x} = \sum_i \sum_{n} x_{in} / (nT_i)$ where n is the number of workplaces and T_i is the number of employees at workplace i. The between workplace measure is given by $\bar{x}_i = \sum_{n} x_{in} / T_i$. The measure of differences between employees within firms is given by $(x_{in} \bar{x}_{i+\bar{x}})$. The standard deviations of each of these measures gives a measure of the variation in that variable. If a variable does not vary between employees at the same workplace, its within workplace standard deviation will be zero.
- 11 This is illustrated by the fact that the average workplace size in the AWIRS95 is 187 as compared to 290 among workplaces that had 10 or more employee interviews. A sensitivity analysis was conducted using 5 and 15 employee responses as the cut-off. There was found to be very little difference in the *within workplace* distribution in the use of family-friendly work practices using these different cut-offs. The analysis is therefore restricted to workplaces with valid responses from 10 or more employees.
- 12 On average 1.6 ways of usually taking time off for family reasons were nominated.
- 13 In addition to unobserved differences between workplaces there may be unobserved differences between employees. These can include differences in innate ability, preferences and extent of family responsibilities. In order to control for unobserved employee heterogeneity, longitudinal (that is, multiple observations on each employee) linked employee–employer data is needed. Such data sets do not exist for Australia.
- 14 In technical terms the appropriate estimator depends upon whether there is correlation between any of the explanatory variables and the unobserved workplace effects. If there is no correlation between any of the explanatory variables and the unobserved workplace effects then the appropriate estimator is the RE probit. If there is correlation between any of the explanatory variables and the unobserved workplace effect then the appropriate model is the FE logit. While it is not possible to formally test wether there is correlation between the explanatory variables and the unobserved workplace effects, it is possible to indirectly test the sensitivity of the results by comparing the FE and RE model. The results of the FE logit are presented in Appendix F. While it is not possible to compare the magnitudes of the coefficient estimates between the RE probit and FE logit estimation, it is possible to compare the direction of the estimated effect and statistical significance. Overall there are few differences in the direction of the estimated effects or statistical significance. This provides confidence in the results of the RE probit.
- 15 The standard ABS classification of countries as English and non-English-speaking countries is used. The countries classified as being English-speaking are United Kingdom, United States of America, New Zealand, South Africa and Canada.
- 16 The proportion of the variance explained by the panel level variance component is statistically significantly different from zero.
- 17 Unreported estimates from the AWIRS95 data set.
- 18 An alternative explanation is that the employees who join a trade union are those who have the least amount of bargaining power.

References

ABS (various years), Labour Force Status and Other Characteristics of Families, Australia, Australian Bureau of Statistics, Catalogue No. 6224.0, Canberra.

ACTU (2000), Working Families in the New Millennium: An Action Plan for Balancing Work and Family Life 2000–2003, Australian Council of Trade Unions, Melbourne.

Biggs, S. and Han, J. (with assistance from Warrilow, P.) (2000), *Learning to Think Flexibility? The Reality Versus the Rhetoric of Flexible Work Practices*, Families at Work, Sydney.

Bittman, M. and Pixley, J. (1997) *The Double Life of the Family: Myth, Hope and Experience*, Sydney, Allen & Unwin.

Bittman, M. (2000) "Now It's 2000: Trends in Doing and Being in the New Millennium", *Journal of Occupational Science*, Vol. 7, No. 3, pp. 108-117.

Blau, F., Ferber, M., and Winkler, A., (1998), *The Economics of Women, Men and Work*, 3rd Edition, Prentice Hall, New Jersey.

Breakspear, C. (1998), From Juggling to Managing? The Evolution of Work and Family Policies in Three Organisations, UNSW Studies in Organisational Analysis and Innovation, Number 14, Industrial Relations Research Centre, The University of New South Wales, Sydney.

Department of Employment, Workplace Relations and Small Business (DEWRSB), (1998), *Update: Collective Agreement-making Under the Workplace Relations Act, January to June 1998*, Commonwealth of Australia, Canberra.

Dickens, L. (1994), "The business case for women's equality: is the carrot better than the stick?", *Employee Relations*, vol. 16, no. 8, pp. 5-18.

Ehrenberg, R., and Smith, R., (1997), *Modern Labor Economics: Theory and Public Policy*, 6th Edition, Addison-Wessley, Massachusetts.

Evans, J. (2001), "Firms' contribution to the reconciliation between work and family life", *Labour Market and Social Policy Occasional Papers No. 48*, OECD, Paris.

Fine, M. (1994), "Supporting, exploiting or displacing the family?", in J. R. Inglis (ed.) *Flexible Families: New Directions for Australian Communities*, Pluto Press, Leichhardt.

Friedman, D. and Galinsky, E. (1992), "Work and family issues: a legitimate business concern", in Zedeck, S. (ed.) *Work, Families and Organizations*, Jossey-Bass, San Francisco.

Glass, J., and Estes, S. (1997), "The family responsive work-place", *Annual Review of Sociology*, vol. 23. pp. 289-313.

Golden, L. (2001a), "Flexible work schedules: What are we trading off to get them?", *Monthly Labor Review*, vol. 124, no. 3, pp. 50-67.

Golden, L. (2001b), "Flexible work schedules: Which workers get them?" *American Behavioral Scientist*, vol. 44, no. 7, pp. 1157-1178.

Greene, W. H. (2000), Econometric Analysis, 4th edn, Prentice Hill, London.

Gruber, J. (1994), "Incidence of mandated maternity benefits", *American Economic Review*, vol. 84, no. 3, pp. 622-641.

Hancock, K. (1999). "Labour market deregulation in Australia", in S. Richardson (ed.) *Reshaping the Labour Market, Regulation, Efficiency and Equality in Australia,* Cambridge University Press, Melbourne.

Hawke, A. and Wooden, M. (1998), "The changing face of Australian industrial relations: A survey", *The Economic Record*, vol. 74, no. 1, pp. 74-88.

Hochschild, A. (1989), The Second Shift, Viking Press, New York.

International Labour Office (1993), Workers With Family Responsibilities: International Labour Conference, 80th Session, 1993, International Labour Office, Geneva.

Junor, A. (1998), "Permanent part-time work: a new family-friendly standard or high intensity cheap skills?", *Labour and Industry*, vol. 8, no. 3, pp. 77-95.

Katz, L. (1986), "Efficiency wage theories: a partial evaluation", in *NBER Macroeconomic Annual*, ed. Fischer, S., MIT Press, Cambridge, Massachusetts.

Kilmartin, C. (1996), "Are Australian workplaces family-friendly?", *Family Matters*, no. 44, pp. 36-37.

McDonald, P. F., (1997), "Older people and their families: issues for policy", in Borowski, A., Encel, S. and Ozonne, E. (eds), *Ageing and Social Policy in Australia*, Cambridge University Press, Melbourne.

Morehead, A., Steele, M., Alexander, M., Stephen, K. and Duffin, L. (1997), *Changes at Work: The 1995 Australian Workplace Industrial Relations Survey,* Longman, South Melbourne.

OECD (1999), *Cellular Mobile Pricing Structures and Trends*, OECD (available online from http://www.oecd.org//dsti/sti/it/cm/prod/e_99-11.htm).

Osterman, P. (1995), "Work/family programs and the employment relationship", *Administrative Science Quarterly*, vol. 40, pp. 681-700.

Preston, A. (1997), "Where are we now with human capital theory in Australia?", *The Economic Record*, vol. 73, no. 220, pp. 51-78.

Rodgers, C. (1992), "The flexible workplace: What have we learned?", *Human Resource Management*, vol. 31, no. 3, pp. 183-200.

Russell, G. and Bowman, L. (2000), *Work and Family: Current Thinking, Research and Practice*, Department of Family and Community Services, Canberra.

VandenHeuvel, A. (1993), When Roles Overlap: Workers with Family Responsibilities, Australian Institute of Family Studies, Melbourne.

Whitehouse, G. and Zetlin, D. (1999), "Family-friendly" policies: distribution and implementation in Australian workplaces", *The Economic and Labour Relations Review*, vol. 10, no. 2, pp. 221-239.

Wolcott, I. and Glezer, H. (1995), Work and Family Life: Achieving Integration, Australian Institute of Family Studies, Melbourne.

Wooden, M. (1999), "Individual agreement-making in Australian workplaces: incidence, trends and features", *The Journal of Industrial relations*, vol. 41, no. 3, pp. 417-445.

Wooden, M. and Bora, B. (1999), "Workplace characteristics and their effects on wages: Australian evidence", *Australian Economic Papers*, vol 38, no. 3, pp. 276-289.

Work and Family Unit (1999), *Work and Family State of Play 1998*, Work and Family Unit, Department of Employment, Workplace Relations and Small Business (DEWRSB), Canberra.





