Family-Friendly Management in Britain under New Labour: were there

significant changes between 1998 and 2004?

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**Abstract**

This paper investigates family-friendly management in Britain from 1998 to 2004. Theoretical perspectives, the legislative context and previous evidence are reviewed. In the empirical analysis, data are extracted from the Workplace Employment Relations surveys that provide two snapshots of British workplaces. First, the panel subset is used to examine the nature and factors that were associated with introducing: parental leave, home-work, term-time-only contracts, switch from full-time to part-time work, job share, workplace nursery, and childcare subsidies. The analysis suggests that having made a practice available in the period does not reflect a common orientation, different practices were associated with distinct factors and neither the law nor governmental stimulus can be solely responsible for these changes. Second, the larger cross-section of British workplaces in 2004 and results from a similar sample in 1998 are used in order to assess any evolution of family-friendly management. In doing so, the focus is no longer on individual practices but on their combined availability. Results from a latent variable analysis show that, in contrast with 1998, when childcare and flexible-working were distinct dimensions of family-friendly management, the latest wave of the survey portrays an integrated phenomenon. Family-friendly management is found to be associated with: the size of the workplace and its composition, the proportion of female workers, the presence of a personnel department, high involvement management and equal opportunity. The key change is the association with high involvement management that may indicate performance concerns rather than a focus on work-life balance.

**Introduction**

Family-friendly practices have been a central element of the British governments'
employment and social policy since New Labour came to power in 1997 bringing with it a
new wave of employment rights, which emphasises equal opportunities and encourages the
participation of mothers in the workforce. In 1999, the Government signed up to enacting
European Union legislation on parental leave, and subsequently to equal conditions for part-
time and full-time employees (2000). Most noticeably, the Employment Act of 2002 provided
the right to apply for flexible working to employees with children under the age of six or with
disabled children under the age of eighteen.

In institutional theory terms such legislation creates coercive pressures for employers.
Nevertheless, the Labour Government's policy was founded on an aspiration that legislation
in these core areas provides "a minimum infrastructure of decency and fairness around people
in the workplace" (Prime Minister Blair, Department of Trade and Industry, 1998:3) and can
stimulate family-friendly management approaches. Legislation in this area was expected to
"enhance" the understanding of a new culture that values work-life balance (DTI, 1998: 3,
31). In this context, family-friendly practices are seen as good practices, since they help
employees combine work and family life satisfactorily, which is mutually beneficial for
parents, children and businesses. The main benefit for firms – the government's documents
tend to refer to private companies - is that the adoption of family-friendly approaches enables
them "to retain staff in whom they have invested and on whom they depend" (DTT, 1998:
31). The government's strategy highlighted the adoption of "good" employment practices by
what they referred to as successful modern companies, implicitly suggesting that such
companies might act as role models (Bevan et al. 1999; DTI, 2000).

The increase in the availability of family-friendly practices in Britain has been widely
reported (e.g. Kersley et al., 2006; Nadeem and Metcalf, 2007; Whitehouse et al., 2007).

Together the WERS cross-section and panel surveys indicate increases in the availability of flexitime arrangements, job share, home and term-time work (Kersley et al. 2006: 252-254). The panel component of the Workplace Employment Relations Survey (WERS) of 2004, which is one of the data sets that we use in this study, shows an increase in parental leave of 34.8% between 1998 and 2004. Although a significant proportion of employers in 2004 were providing beyond the statutory minimum, e.g. 55% were offering paid paternity leave, the panel data also shows no significant increase in the availability of either paid emergency care leave or workplace nursery.

In this context, it is important to investigate factors that are associated with these changes and to assess any evolution on the nature of family-friendly management in British workplaces, during a period of significant new legislation. This investigation is the subject of this paper, which is based on an economy-wide representative sample of British workplaces. We use WERS2004, which is the second survey in the series that includes data on the availability of the following practices: parental leave, work from/at home, term-time-only contracts, switch from full-time to part-time work, job-share, workplace nursery and childcare subsidies. We first focus on the introduction of these family-friendly practices in the period (1998-2004). For this initial exercise, we use the panel data, which is a separate dataset that includes two points information on 956 workplaces. We investigate whether the recent availability of practices is consistent with theoretical perspectives on determinants of family-friendly management that have been outlined in the literature. Second, we address the coexistence of these family-friendly practices in the latest sample of the whole economy (WERS2004 cross-section) and extend previous analyses that were based on the earlier wave of the survey (WERS98 cross-section). In doing so, we aim to assess whether and how family-friendly management has evolved between the two surveys.

In the next section, we first review the legislative context, the theoretical background and the empirical evidence, which form the baseline for the present study. Subsequently, we describe our goals, the data, measures and analysis procedure. The results are then reported and finally we draw our conclusions and implications for future research.

**The UK Family-friendly Legislative Programme 1998- 2004**

Prior to the New Labour Government, maternity leave was the only area of family-friendly legislation. Women qualified for fourteen weeks of maternity leave from the first day of their employment; for paid leave, if they had worked for at least six months; and for extended maternity leave had they worked at least two years for the same employer. New Labour brought family-friendly policies to Britain, through an articulated strategy that recognised an overall concern for work-life balance, which included: a National Care Strategy (1998) to assist working parents, a National Carer Strategy (1998) and the Work-life Balance Campaign (2000) as well as the commissioning of research and consultancy on flexible working arrangements (Dex and Forth, 2009:20). This strategy was supported by significant legislation to help parents achieve work-life balance.

On 15th December 1999, the qualifying period for additional maternity leave reduced from two years to one. Paid maternity leave was increased to 26 weeks and unpaid leave to the same period, thus allowing new mothers up to a year off work.

Parental leave was subject to a European Directive that the UK government enacted so that, after 15 December 1999 an employee who had worked continuously for an employer for at least a year became entitled to 13 weeks unpaid parental leave for each child born or adopted. On 10 January 2002, parental leave was extended to parents of all children under the age of 5. The extension was backdated to cover children under the age of 5 on 15 December 1999 and those placed for adoption between 15 December 1994 and 14 December 1999. The

right of return after parental leave was enacted, as already applied to maternity leave, in order to ensure that employees would not be deterred from taking parental leave due to fear of loosing their job. Under the same legislation, all employees, regardless of their length of service, were given the right to a reasonable amount of time off to deal with emergencies involving a dependent. Since 1 July 2000, part-time workers can no longer be treated less favourably than comparable full-time workers.

From 2003, Standard Maternity Pay (SMP) increased and fathers gained the right to two weeks paid paternity leave at the standard rate of SMP. Similar rights were extended to adoptive parents, who are entitled to paid adoption leave at the standard SMP. In addition, parents with a child under the age of six or disabled are eligible to request flexible working conditions.

**Theoretical Background and Empirical Evidence**

In the last two decades a body of literature has emerged that attempts to explain the spread of family-friendly practices. Among these a number of theories have been offered, some of which are defined not only by their predictors, but also by the nature of what they predict (Wood et al., 2003). We now briefly review this literature and the empirical evidence that has been accumulated. Together with the legislative background these set the context for the present study.

On determinants of family-friendly practices

It is generally argued that pressures arising from a combination of factors have created a greater need to ensure a healthy equilibrium between work and family life. Particularly important factors are: the greater participation of women in the workforce (e.g. a substantial increase in women returning to work within nine months of having a child and an increase in

the average female job tenure were observed by the late 90's: Desai et al. 1999), longer life expectancy, the increase in single parent households, as well as changes in attitudes such as the growing involvement of men in childcare.

Not surprisingly, institutional theory became the first explanation and is the most prominent theoretical perspective in attempts to explain diversity in the availability of family-friendly practices. Institutional theory assumes that environmental factors act as pressures on organizations to react and introduce family-friendly practices, regardless of whether they fit the firm's competitive strategy or yield profits. Part of an organization's policies thus reflects the need to comply with such pressures (Boxall, 2006: 61) in order to achieve or maintain social legitimacy (DiMaggio and Powell, 1983). When scholars in the US and UK began to observe an increasing interest in family-friendly practices, they presumed that employers were reacting to institutional pressures to "assume a more active role in helping employees balance work and family demands" (Goodstein, 1994: 356). As Kossek et al. (1994: 1122) wrote, "Given the lack of rigorous research demonstrating that childcare improves worker productivity, lowers absenteeism, or raises performance, it can be argued that institutional isomorphic forces have largely shaped management's dominant logic toward childcare assistance". It was thus expected that the early adoption of family-friendly practices, for example, in Britain in the 1990s ahead of the Labour governments' programme of legislation, would be explained by characteristics of organizations that make them more susceptible to institutional pressures. Consequently, institutional theory has been tested through the relationship between family-friendly practices and (a) the size of the organization, (b) whether it is in the public sector or not, and (b) whether it is in sectors where health and related issues are assumed to be especially salient, such as the health sector.

Since institutional theory implies that organisations that are more exposed to societal pressures are likely to react to these, we observe that, in the UK during the period of our

study, the financial services sector was particularly prominent. It represented over 35% of the gross valued added of the UK economy and 22% of the total compensation of employees. In addition, a number of large firms within this sector were attempting to overcome a widely acknowledged glass ceiling on female promotion and react to high profile discrimination cases that were highlighted by the media. As a result, we expect financial service organizations to have been more likely to offer family-friendly practices than other sectors in the economy.

An alternative explanation is that rather than institutional environments being "iron cages" (Kossek et al, 1994: 1122), they are perceived as a set of regulations, norms, or expectations that create demands for organizations, who may then react in a variety of ways ranging from total embracement to active opposition (Oliver, 1991). As a result, academics have argued for the need to allow for strategic choice and this is central to the *organizational adaptation theory* (Goodstein 1994, 1995). Accordingly, management's values and awareness of employees demands for work-life balance have a bearing on their response to institutional pressures. Given that managers have discretion over how they respond to environmental challenges, predictors of family-friendly management become more extensive than in institutional theory. First, there are management's attitudes: how much does management value an employee achieving work-life balance? Second, managements are assumed to vary in how they scan their environments and in their awareness of employees' needs, so that the greater their awareness the more likely they are family-friendly. Third, the interpretation and relevance of any societal pressure may vary between organizations (Milliken, et al., 1988: 582). Common in the literature is the assumption that a family-friendly approach is more relevant to working mothers. In which case, organizations with larger proportions of women are more likely to be family-friendly. Finally, there may be some moderation of institutional

pressures. For example, pressures may intensify, if an organization has a higher proportion of female workers, or if managers value work-life balance.

Several authors (e.g. Batt and Valcour, 2003; Davis and Kalleberg, 2006; Ortega, 2009) have argued that family-friendly policies are offered due to concerns with individual performance and imply a connection with other human resource management practices. More specifically, there is a potential association with high involvement management that is grounded on family-friendly practices constituting a means of fostering the motivation and commitment required to make a high involvement workplace (Berg, et al., 2003: 172; Osterman, 1995: 685). In addition, such link may strengthen where institutional pressures are stronger. Finally, Smith-Perry and Blum (2000:1109) take the argument to its extreme and suggest that family-friendly practices may be part of the broader high performance system (Davis and Kalleberg, 2006; Bloom et al., 2006).

Albeit the empirical evidence of an increase in high involvement practices such as empowerment, team-working and intensive training during the past two decades in the UK (Wood, de Menezes and Lasaosa, 2003; Bloom et al. 2006) that coincided with the spread of family-friendly policies, the direct link with performance remains an open issue. We therefore use Wood et al. (2003)' label: *high involvement perspective*, whose essence is that family-friendly provisions are linked to a management approach geared at employee involvement and development. Furthermore, Bailyn (1993) and others argue that the equality and diversity agendas imply that any effective high involvement management must be extended from employee involvement to embrace issues of working time (Bailyn 1993: 87). In which case, equal opportunity policies are also potential predictors of family-friendly management, as in Wood et al. (2003).

Finally, the most obvious alternative explanation for family-friendly management, under the microscope, is one in which situational factors are dominant. Employers are then

likely to adopt family-friendly practices simply as a response to local problems, for example, shortages of labour. In consequence, across the economy the availability of family-friendly practices would be completely ad-hoc to an extent that no dominant predictor would emerge, with perhaps the exception of a higher proportion of young parents in the workforce.

The literature so far has shown no support for a dominant theory since analyses of the predictors of family-friendly management have led to mixed results, of which we now consider those that support at least one of the outlined perspectives. For example, Morgan and Milliken (1992) found that none of their institutional measures or the proportion of women were associated with family-friendly practices. However, in a subsequent study, Milliken et al. (1998) found that the size of the female workforce remained independent of family-friendly practices, but the latter varied across industries and were prevalent the financial services. They also found strong support for the role of managerial discretion, which is central to the organizational adaptation perspective. These tally with previous findings by Goodstein (1994) that showed not only the importance of management's discretion and significant variation in the adoption of family-friendly practices across industries, but also that larger organizations were more likely to adopt family-friendly practices. By contrast, in another study, Goodstein (1995) found that the proportions of employees that were women or over forty were independent of family-friendly practices.

Osterman (1995) found, albeit using US data, that some elements of high involvement management were linked to family-friendly practices. However, this result was then contradicted by Wood (1999), who used the same data set, but analyzed scales for family-friendly and high involvement management rather than individual practices. More recently, Davis and Kalleberg (2006) found that the proportion of women in the establishment and high performance work systems (measured by an index of practices such as joint consultation

meetings, team-working, team meetings, job rotation and cross training) predicted three out of their four family-friendly practices.

When we focus on the WERS series, from which we extract our data, we consider three studies that used the previous wave (WERS98). Wood et al. (2003) developed two measures of family-friendly management and showed that: (1) the public sector, health and financial service workplaces were more likely to have a high degree of family-friendly management; (2) the size of the organization (but not the workplace) was associated with family-friendly management; (3) having a personnel department was a significant predictor, but having a consultative approach or recognized union were not significant; (4) family-friendly management was positively associated with equal opportunity, but not with high involvement management. By contrast, Budd and Mumford (2004) showed that the presence of a recognized union positively affected the provision of specific practices: parental leave, special paid leave and job sharing options, but was negatively associated with the provision of the opportunity to work at home and flexible working hours. In a subsequent study, Mumford and Budd (2006) identified the following predictors of the availability of family-friendly practices: workplaces with at least 500 employees, the presence of a human resources employee in the workplace, having a recognized union, the proportion of females (as well as proportion of parents), proportion of the workforce in quality circles, proportion of the workforce that has discretion over their tasks. Overall there is limited agreement on the dominant predictors, but the organizational adaptation theory that implies that responses to societal pressures reflect strategic choices emerged as the most promising explanation.

On the nature and measurement of family-friendly management

In summarising the different perspectives on family-friendly management Wood et al. (2003) stressed that theories differ not only by their predictors but also by what should be measured.

According to them, *institutional theory* implies that organizations adopt family-friendly practices in a concerted way and thus we would expect the correlation between family-friendly practices to be explained by a common underlying factor.

By contrast, under the *organizational adaptation theory*, the nature and thus the appropriate measure of the dominant family-friendly approach(es) is an empirical question (Wood et al., 2003: 224). It may be that the pattern of family-friendly practices is consistent with that hypothesised by strong institutional theory, but it may also be that several factors explain the association between family-friendly practices. Alternatively, workplaces cluster according to the adoption of particular combinations of practices. In the extreme case, management reacts to the context of the workplace and we should find no pattern in the availability of practices. This lack of pattern would characterise the *situational perspective*.

The extent of integration between family-friendly practices with other human resource management practices is at the core of other theories. For example, Berg et al. (2003) claim that high involvement practices are themselves family-friendly, implying that the distinction between these two types of practices breaks down or is at least blurred.  Similarly, Wood et al.'s (2003: 227) argued that, "if one takes the *high involvement perspective* to its logical extreme, the high involvement and family friendly practices should meld into a single approach". In which case, family-friendly and high-involvement practices would reflect a common underlying factor.

Following Baylin (1993), it could be argued that any noticeable move towards one of three approaches (family-friendly, high involvement or equal opportunity management) involves the other two. We might then expect if employers are sincere about institutionalizing practices associated with family-friendliness, high involvement and equal opportunity, they will do so in an integrated way, as part of an overall human resource management.  This is the strong version of what Wood et al. called the *equal opportunity perspective*, where family-

friendly, equal opportunity and high involvement practices coexist and the associations between them reduce to a unique dimension. A more limited view, which they also offer, would be that family-friendly and equal opportunity practices form a unity.

In summary, the different measures of family-friendly management that follow from each theory can be empirically tested by factor analysis. Wood et al's (2003) used data on the same seven practices that we study, but from WERS98, to test for each of these factor models. They identified two distinct dimensions: flexible working, which they named family-oriented flexible management, and childcare. As a result, they concluded that the organization adaptation theory better explained the nature of family-friendly management in Britain in 1998.

**The Study**

The evidence from WERS98 rejected strong institutional theory, the high involvement and situational perspectives as explanations for family-friendly management in British workplaces. In 1998, family-friendly management was not an integrated phenomenon, but a family-oriented flexible management was associated with public workplaces, health and financial sectors, large organizations and the presence of a personnel department in the workplace. Some individual practices were associated with unionization, the proportion of women in the workplace and other management practices. In all, it appeared that organizations were exercising some choice while responding to institutional pressures, but were not simply reacting to local problems.

These findings form the baseline for our study and we focus on availability of the seven practices that were investigated at least in one of the previous studies: parental leave, home-work, term-time-only contracts, switch from full-time to part-time work, job share, workplace nursery, and childcare subsidies. Our main concern is on whether there were

changes in family-friendly management in Britain during a period when significant legislation was introduced.

We first consider the correlation between the introductions of these practices during the period 1998-2004 and examine whether changes could be due to a common factor that could reflect a reaction to institutional pressures or new legislation. However, as shown below, there is no evidence in support of this and thus we investigate potential explanations for the introduction of each practice separately.

In order to address family-friendly management as a whole, we consider the correlation in the availabilities of practices in 2004. As we show below, an integrated family-friendly management emerges from the analyses and we then investigate its predictors according to the theories that were described above. By doing so, we do not only replicate Wood et al.'s (2003) analyses on more recent data so that results can be compared, but also extend their work since we also test for potential moderators.

We use the latest wave of a survey that is representative of British workplaces, which is the second in the series that includes these seven family-friendly practices as well as information on equal opportunity policies. We now describe the data and our measures.

The Data

WERS2004 is the fifth in an ongoing series of nationally representative surveys of British workplaces (http://www.wers2004.info/wers2004). It is the first to contain workplaces with less than 10 employees. We basically use data from the panel and management surveys, but a few variables were obtained by linking with employee data. The latter are responses to a questionnaire completed by a random sample of up to 25 employees in the majority of workplaces.

The management survey was based on a face-to-face interview with the senior person at the workplace with day-to-day responsibility for industrial relations, employee relations or personnel matters. In some cases this was a personnel specialist. In others, it was a general manager or a person with a different functional specialty, such as finance. Interviews were conducted with managers in a total of 2,295 workplaces from an in-scope sample of 3,587 addresses, representing a response rate of 64 per cent. The sample covers the private and public sector and all industries with the exception of establishments engaged in primary industries and private households with domestic staff (7 per cent of all workplaces). Establishments with fewer than five employees (60 per cent of all workplaces) are also excluded. The sample was taken from the Inter Departmental Business Register, maintained by the Office of National Statistics.

Of the 2191 workplaces that had been interviewed for the previous wave of the management survey (WERS98), a sample of 1,479 workplaces was selected to be traced for re-interview in 2004. Out of these, 77 per cent responded and conformed to the scope of the survey. As a result the panel has two waves and is composed of 956 workplaces, covering both private and public sectors with 10 or more employees, which are drawn from the population of workplaces in Britain (England, Scotland and Wales) and engaged in activities within Sections D (Manufacturing) to O (Other community services) of the *Standard Industrial Classification* (2003).

The Measures

The introduction of each family-friendly practice is measured as a binary variable that is equal to 1, if a practice became available between 1998 and 2004. Since we do not know when a family-friendly practice was introduced within the period, we measure independent variables in 2004. The only exception is an additive index of high involvement management in 1998

(KR20= 0.55) that we use as a control, which can also be interpreted as a measure of "good or modern management in 1998".

The panel has information on whether the following high involvement practices were available to non-managerial employees in 1998 and 2004: team working, team briefing, functional flexibility, quality circles, suggestion schemes, information dissemination, appraisal, internal recruitment, motivation as a selection criterion, job security and variable pay. Overall their correlations were relatively low (less or equal to 0.27) and we could not successfully fit one and two-factor models to the either the data or subsets of it. As a result, when we test for high involvement management as an explanation for the introduction of family friendly practices, we use either the 11 binary indicators of the availability of each high involvement practice or an additive index (KR20=0.44). The second measure is not reliable, but leads to more parsimonious models and we will focus on the consistency of the results between the two specifications.

Table 1 describes the measures of the potential predictors and controls that are basically drawn from Wood et al (2003: Table 1), but we note a few differences. First, their predictors of the situational perspective were: the proportion of employees with small children (under the age of 4), with children (under the age of 18) and whether the workplace was having difficulties in filling vacancies. The latter is no longer available in WERS and the first variable, which they found to be associated with the provision of childcare, would have led to substantial loss of information due to a very high incidence of missing values. Given that the essence of the situational perspective is the lack of a general pattern, we take that, if this is the dominant explanation then no significant predictor should emerge. Consequently, we eliminate these two variables from our analyses.

Second, we tried to develop more parsimonious regression models. We excluded total quality management, since our preliminary analysis tallied with Wood et al's results that it is

not a significant predictor. We use the same measures of high involvement practices, but rather than estimating a three-class latent model that leads to two independent variables, we opted for a continuous measure based on a latent trait model of the same items.

Finally, for consistency with other measures in this study, rather than having an additive scale to measure job enrichment, we estimated a latent trait model to compute our measure of job enrichment. In doing so, we do not assume that managers are indifferent with regards to their choice of job enrichment practices. The estimated item loadings (i.e. standardised discrimination coefficients that are analogous to the factor loadings in traditional factor analysis) in each of our latent trait model and goodness-of fit statistics are shown in Table A1 (Appendix). We note that the loadings on the three job enrichment items vary from 0.62 to 0.99 and thus our choice of job enrichment measure is clearly justified.

Table 1

Analysis Procedure

Throughout the study, missing values are assumed to be at random because we did not find any variable that explains their occurrence and thus we have no grounds to believe that they are informative. Missing values are excluded in pairs during the latent variable analyses, which essentially models the correlation matrix, by doing so, we retain the information on the association of variables that are outside the pairs in other elements of the correlation matrix. Cases with missing values are excluded in the regression analyses, where weights provided in the datasets (http://www.wers2004.info/) are used to account for the sample design.

*Assessing potential explanations for making family-friendly practices available between 1998 and 2004*

In order to assess significant factors that are associated with the introduction of each practice, we estimate weighted binary logistic regressions, where the dependent variable is the

indicator that a practice has been introduced between 1998 and 2004. The explanatory variables and controls in the model were described above. A practical issue is that the panel is considerably smaller than the cross-section, so when we include two variables – consultative management and educated workforce - that rely on linked information from the WERS employee survey that cover a subset of the 2004 cross-section, we then lose over 25% of the cases in the panel. Hence, we estimate models with and without these two variables.

As mentioned earlier, we consider two alternative measures of high involvement: (1) an index that measures high involvement management in 2004, (2) 11 binary indicators of individual practices. The latter specification is significantly larger and, due to the exclusion of all cases with missing values, may lead to significant reduction in sample size.

*Assessing family-friendly management using the WERS2004 Cross-section*

We first assess the strength of the correlation in the availability of practices. If this is significant, we use latent variable analysis to determine whether this correlation is due to common factor(s) (Bartholomew and Knott, 1999: 1-39). The model we use is the logit-probit model, which basically estimates a factor model for binary data. We test for one or more factors.

We assess the quality of fit, by examining the Chi-square statistic for observed response patterns (all combinations of practices that are available in the data), or the percentage of $G^2$ (the log likelihood ratio statistic for complete independence): the closer the latter is to 100% the better the fit. Following Bartholomew et al. (2000), we compare the observed (O) and expected (E) response patterns for pairs and triplets of items. This is done by computing the statistic $[(O-E)^2/E]$, where O and E are respectively the observed and expected frequencies for each response pattern. The nearer this statistic is to zero for all pairs and triplets of variables, the better the fit of the model. When a significant number of these

statistics are large (>5), there are residual associations between items that are not due to the common factor. Furthermore, if the same item (here, an indicator that the practice is available) is found in those pairs and triplets responsible for large residuals, it can be excluded from the model and be treated separately in further analysis of practices.

Predictors of family-friendly management are then assessed by weighted regression analyses, where the dependent variable is any factor identified by the latent variable models. We first estimate a regression model with the theoretical predictors and controls as independent variables, to which we add interactions that follow from potential moderations. We then sequentially eliminate non-significant interactions, so that in our final model we have only the significant interactions.

**Results**

We consider the increase in the availability of the practices from 1998 to 2004. According to the panel data, which covers workplaces of 10 or more employees, weighted frequencies indicate that while the availability of several practices increased in the period, e.g. the possibilities to work from home increased by 12.3% and to have term-time-only contracts raised by 13.5%, others remained as in 1998. Among these, the most noticeable are related to childcare, which when comparing the availability in 2004 to that in 1998, we find no significant difference (for workplace nursery the P-value is 0.42 and for childcare subsidies the P-value is 0.29). The in-sample observed relative proportions of workplaces that introduced these practices are also low - 7% for workplace nursery and 11% for childcare - and differ significantly from other practices, of which parental leave is the most available (42%) and the others range from 21% to 25%. In all, the increase in parental leave is likely to reflect legislation, but since childcare provision remained rare and less common than flexible working options, it appears that actual changes might not have reflected the new work values

that were being advocated by the Government. Hence, we now look at alternative explanations.

*Potential explanations for the introduction of family-friendly practices between 1998 and 2004*

We address the correlation between the introductions of the family friendly practices. The Spearman rank correlation coefficients (rho) are generally low and are shown in table A2 (Appendix). The strongest associations are between workplace nursery and childcare subsidies (rho=0.22) and between parental leave and switch from full to part-time work (rho=0.23). A few of these introductions are independent of each other, e.g. parental leave and either term-time only contracts or childcare subsidies. A very weak negative association (P-value=0.001) is observed between making available the switch from full to part-time work and introducing childcare subsidies (rho=-0.07). Not surprising, given the low correlation, a one-factor model did not fit the data. These changes do not reflect a common factor that might have been related to the new legislation.

We therefore modelled the introduction of each practice separately. Table 2 summarises the results from three of our four regression models for each practice. We omit the larger specification that includes separate high involvement practices, educated workforce and consultative approach, because its findings are generally confirmed by at least one of the other models. Significant regression coefficients are indicated by asterisks and at first glance we observe that predictors differ between practices.

Table 2

Although in Table 2 we observe some differences between industry sectors, institutional pressures may be less important than it is generally argued. In most cases there is

no difference between public and private workplaces, the exceptions are job-share ($0.001 < $P-values$< 0.05$), childcare subsidies ($0.01 < $P-values$< 0.05$) that became more available in public workplaces whereas the introduction of term-time only contracts ($0.001 < $P-values$< 0.01$) was more likely to have been in the private workplaces. The employment level is only associated with the introduction of two out of the seven practices (job-share and workplace nursery). The size of the total organization of which the workplace is part is a potential explanation for four of the introductions, but these associations vary with practice. It may be worth noting that we kept the reference category equal to whole sale and retail as in Wood et al (2003). Hence, the negative association that we observe in relation to the introduction of term-time-only contracts may be due to the fact that many students work in wholesale and retail.

In contrast to previous findings from WERS98, the organization adaptation perspective does not emerge as the main explanation for these introductions: the concern for family-work balance is only associated with the introduction of one practice (work from home:$0.001 < $P-values$< 0.05$); the proportion of female workers is independent of all but one introduction (term-time only contracts, but this association is negative); all introductions are independent of having union representation; there is basically no support for an association with having a consultative approach (out of the 28 models: two showed a positive association with introducing work from home and term-time only contracts; two showed a negative association with opening a workplace nursery ($P$-values$< 0.01$)); similarly there is little support for a link with an educated workforce (in three models of introductions, its coefficient was significant: childcare subsidies ($P < 0.001$) and switch from full to part-time work). Equal opportunity is only positively associated with introducing childcare subsidies ($0.001 < $P-values$< 0.05$).

Finally, introductions appear to be linked with high involvement management in various ways, but only the introduction of childcare subsidies seems to be linked with a

workplace being highly involved in 1998. For example: high involvement management or team-working or internal recruitment are associated with the introduction of parental leave (0.01<P-values<0.05); the introduction of job share is positively associated with high involvement management or functional flexibility; the opening of a workplace nursery is associated with having quality circles and job security (0.001<P-values<0.05); introducing childcare subsidies is linked to dissemination of information (0.01<P-values<0.05).

All in all, we seem to have found more support for a link between family-friendly practices and high involvement management than previously observed on British data. We now consider the WERS2004 cross-section, where we replicate previous analyses (Wood et al, 2003) and compare our results to their findings, as well as address potential moderations.

*The nature of family-friendly management in British workplaces in 2004*

All pairs of the family-friendly practices are significantly correlated, but the strength is not high, as it ranged from 0.07 (childcare subsidies and parental leave) to 0.36 (job sharing and switching to part time work). A latent trait model, which assumes that the correlation between the manifest variables, in this case the availabilities of practices, is explained by an underlying factor, could be fitted to the variables that reflected the family-oriented flexible management in Wood et al.'s study of WERS98. The percentage of the log-likelihood ratio statistic that is explained by the model is equal to 81% and the correlation between all pairs of practices is explained by this factor. Hence, a good fit was achieved and the parameter estimates are summarised in Table 3 (columns 2 and 3). Nevertheless, we must also test if the other dimension remains as in 1998.

We combined the two childcare support practices and created Wood et al's measure of their second dimension of family-friendly management. This childcare variable was scored one if the workplace had either one or the two practices (nursery, childcare subsidies) and

zero if it had none. We added this variable to our set of items and estimated a one-factor latent trait model, which fitted the data well (percentage of $G^2$ explained = 77%) and thus the availability of all practices reflect a common factor. We note that these results were confirmed by a similar model of the panel data in 2004 and rejected by the previous wave (panel 2008, which agrees with Wood et al (2003)). This implies that childcare is no longer discrete from family-oriented flexible management as it was in 1998. In consequence, family-friendly management became an integrated phenomenon that encompasses flexible working and childcare.

Although the correlation between this broader measure of family-friendly management and the high involvement management measure is not weak (r = 0.4), the correlation between individual practices of each type are generally weak (rho<0.2). Neither a one- nor a two-factor model fitted the data (% $G^2$ explained = 40). Consequently, we have not support for an integrated management that encompasses high involvement and family-friendliness. Similarly, the correlation with the equal opportunity measure is slightly higher (r= 0.5), but we still could not fit a one-factor model to the data that included indicators of availabilities of the two types of practices (% $G^2$ explained <50). It may be worth mentioning that had we deleted three items (job share, switch from full to part-time work and review of selection procedures), we would have fitted a model that explains some of the coexistence of practices (% $G^2$ explained = 55). Hence, there may be a move in the direction of an embryonic equal opportunity perspective, but so far this perspective remains rejected by the WERS data.

The key difference from 1998 is the integration with childcare. Although childcare is unlikely to be available in the average workplace (the estimated probability of it being available in the average workplace in the sample, as shown in Table 3, is equal to 0.1), it clearly discriminates between workplaces (factor loading = 0.88 in comparison to parental

leave whose loading is 0.43, also shown in Table 3) and is thus a strong indicator of family-friendly management.

Table 3

*Predictors of Family-Friendly Management*

We focus on the general family-friendly management measure, which is our dependent variable and is measured by the score for each workplace based on the model that is summarised in the fourth column of Table 3. Not surprisingly, a One-Way ANOVA showed that, out of 12 industrial sectors, the construction sector had significantly lower levels of family-friendly management and thus it is our reference category. The coefficients of our three models, their respective P-values and fit statistics are shown in Table 4, where the significant predictors are highlighted.

Table 4

The second column (Main effects) replicates the models that were obtained from WERS98 (Wood et al (2003), Tables 8 and 9). This column shows that size (employment level) is a strong predictor, but public workplaces (P-value = 0.10) have on average the same level of family-friendly management as those in the private sector. Only small organizations with less than one hundred employees have lower levels of family-friendly management. Of the industrial sectors, the financial sector is marginally associated with family-friendly management (P-value = 0.06), but healthcare workplaces are not (P-value = 0.28) and, perhaps unexpectedly, utilities (electricity, gas and water sector) are higher on family-friendly management (P-values = 0.00). There is no association with: the concern for family work balance, having neither a consultative approach nor union representation nor an educated

workforce (P-values>0.05). The proportion of the organization's employees who are women and having a personnel department in the workplace remain positively associated with family-friendly management. High involvement management (P-value=0.00) and equal opportunity (P-value=0.01) are positively associated with family-friendly management.

We now refer to the third column of Table 4, where we assess the potential moderations. Most interactions are insignificant. Two of the three that are significant in our final model (column 4) are in the opposite direction than one might have expected. The exception is the interaction between high involvement management and the health sector, which is positively associated with family-friendly management (P-value= 0.01) and suggests that in the health sector, high involvement management is more likely to coexist with family-friendly management.

To sum up, WERS2004 supports institutional theory, insofar as family-friendly management is an integrated phenomenon that encompasses childcare as well as flexible working and is associated with large workplaces. The proportion of female employees and having a personnel department remain significant predictors, but in contrast to WERS98, management values are no longer significant. Family-friendly management remains associated with equal opportunity and thus there is support for a less extreme version of the equal opportunity perspective. A key change is the link with high involvement management, which is stronger than in previous findings based on WERS98.

**Discussion and Conclusion**

Our results on potential explanations for the introduction of the family-friendly practices in the period 1998-2004 are diverse. First, the offering of parental leave and the ability to switch to part-time work may reflect legislation, in as much as these introductions are associated with small and medium-sized organizations. Second, there is evidence of a link

with high involvement management, most noticeably that practices that are associated with work organization or motivational supports may co-exist with family-friendly practices and thus may be perceived as pre-requisites for a successful implementation. In particular, teamworking and functional flexibility were linked to introduction of different flexible working arrangements in the period. Similarly, using motivation as a selection criterion and variable pay are more likely to be implemented when the switch from full to part-time has been made available. Furthermore, having adopted high involvement management in 1998 was linked with the introduction of workplace nursery, which may indicate that as high involvement management evolves work-life balance comes to the agenda. An alternative explanation that we may offer is that "good employers" or "modern" companies in 1998 might have been more likely to consider childcare provision.

The cost of childcare may still deter their spread. Childcare subsidies are more likely to have been made available in the public and financial sectors. Economies of scale may have favoured the introduction of workplace nurseries, because the size of the workplace was a significant predictor. In addition, the positive association with variable pay may suggest that some managers view childcare support as a fringe benefit.

Overall we observed a range of different patterns that conform to more than one theory on the determinants of family-friendly management. Yet, our results reject the predominance of situational factors and the view that these introductions were due to New Labour's employment policies. The latter might have led to the expectation that predictors based on institutional theory and equal opportunities would dominate, which is not the case in our data. For example, becoming able to work from home seems to be better explained by management's concern for family-work life balance and awareness than from institutional pressures. In fact, this introduction was less common when the workplace was part of a very large organization. By contrast, the introduction of childcare subsidies may have been

influenced by governmental or societal pressures for it is positively associated with the public sector, equal opportunity management and an educated workforce.

The analysis of the cross-section has enabled us to assess integration as well as evolution. Divergences from the 1998 results suggest that changes have occurred. First, family-friendly management became an integrated phenomenon that reflects upon workplaces offering childcare support as well as flexible working arrangements. However, childcare support remains unlikely to be available in the workplace. We can therefore conclude that family-friendly management in Britain became a more holistic approach, but has yet to become available to all. This approach is positively associated with: the size of the workplace; utilities and financial services sectors; in-site personnel department, the proportion of female employees, high involvement management, equal opportunity, the composition of the workforce (proportion of: technical and professional employees, administrative employees and part-timers). The key changes between 1998 and 2004 are: (1) the association with the employment level and high-involvement, (2) the independence from the health and public sectors.

In assessing the significance of these differences, we redid the regression analyses using as a dependent variable the measure based on the same items as in Wood et al (2003: family-oriented flexible management). Several predictors tally with their study on WERS98, i.e.: healthcare, financial services, having a personnel department and the proportion of female employees were positively related to family-oriented flexible management. However, high involvement management and the size of the workplace became positively associated. Given that WERS98 was restricted to workplaces with ten or more employees, we redid the analysis excluding workplaces with less than ten employees. The results remained consistent with our findings, which we can conclude to be robust.

Given the stronger association with high involvement management that we observed, we refer to Osterman (1995), who defines the internal labour market perspective as an alternative to the high commitment perspective on family-friendly management. Practices such as internal promotion and job security guarantees, which are associated with internal labour markets, are often treated as key motivational supports for high involvement management (Appelbaum et al., 2000). However, previous analysis based on WERS98 (de Menezes and Wood, 2006) showed that job security guarantees for non-managerial staff and internal recruitment, measured by internal applicants being given preference when applying for vacancies within the organization, were distinct from the flexible working and skill acquisition practices that form the high involvement management measure that we used here. Further analysis of WERS2004 cross-section confirmed this pattern. We investigated Osterman's view, by testing for the association between the internal labour market and family-friendly management. Results showed that giving priority to internal recruitment is positively associated with family-friendly management (P-value= 0.02), but offering job security guarantees is not (P-value = 0.09) nor there is an interaction effect between the two practices on family-friendly management. Our analysis of the introductions of family-friendly practices, however, showed a link between job security guarantees and the provision of workplace nursery, but also that job security was negatively associated with term-time only contracts. To sum up, there is very limited support for Osterman's internal labour market perspective.

All in all, high involvement management emerged as a strong perspective to describe family-friendly management in Britain of 2004, but there is also support for institutionalism, equal opportunities and adaptive organizations. It may be that Labour's encouragement for the development of new values at work has been more attractive to those workplaces that adopt high involvement management or that these were part of those "modern" firms targeted by the

Government. Nevertheless, our results may also confirm recent findings (Bloom and Van Reenen, 2006; Ortega, 2009) that organizations are more likely to be family-friendly due to performance concerns. Indeed, when we compare with previous findings, the most significant negative result persists: management values are neither associated with family-friendly management nor moderate the relationship between institutional measures. It may be that some management take the view that precisely because they adopt practices that are aimed at helping employees balance their work and family life, the employee should then take responsibility for the achievement of the right equilibrium. Alternatively, family-friendly management may not be underpinned by the strength of managers' normative assumptions about family matters.

The strength of the present study is that it is based upon large representative samples of British workplaces and draws from both cross-sectional and two-point data. It replicates previous work in as much as it is concerned with assessing changes, but also expands the empirical evidence and thus provides a broader view of family-friendly management in the UK. A weakness of the analysis is that most measures are based on a single source.

The rise of high involvement management as potential explanation for family-friendly management may suggest that family-friendly management balances some of the demands that have been associated with high-performance work systems. In this context, further work is needed on exploring the link with performance, in which case measures of the take up and strength of practices are likely to be more important than in the present study. As one of the goals of high involvement management is to develop a committed workforce, future research should also focus on the association between family-friendly management and commitment.

**References**

Appelbaum, E., Berg, P., and Kalleberg, A.L. (2000). *Balancing Work and Family*: *Effects of High-Performance Work Systems and High Commitment Workplaces*. Report to the U.S. Department of Labour, Washington.

Bailyn, L. (1993). *Breaking the Mold*. New York: The Free Press.

Bartholomew, D. and Knott, M. (1999) *Latent variable models and factor analysis*. New York: Oxford University Press.

Bartholomew, D., Steele F. and Moustaki, I. (2000). *The Analyses and Interpretation of Multivariate Data for Social Scientist.* Boca Raton: Chapman Hall.

Batt R., and Valcour M.P. (2003). 'Human Resources Practices as Predictors of Work-Family Outcomes and Employee Turnover'. *Industrial Relations*, 42:189-220.

Berg P., Kalleberg A.L., and Appelbaum E. (2003). 'Balancing Work and Family : The Role of High Commitment Environments'. *Industrial Relations*, 42:168-188.

Bevan, S., Dench, S., Tamkin, P. and Cummings, J. (1999). 'Family-friendly employment: The Business Case', *Research Report RR136.* London: Department of Education and Employment.

Bloom, N. and Van Reenen, J. (2006). 'Management Practices, Work-Life Balance, and Productivity: A Review of Some Recent Evidence', *Oxford Review of Economic Policy*, 22, 457–482.

Bloom, N.,Van Reenen, J. and Kretschmmer, T. (2006). Work-Life Balance, Management Practices and Productivity. Discussion Paper. Centre for Economic Performance, London School of Economics and Political Science.

Boxall, P. The Goals of HRM, in P. Boxall, J. Purcell and P . Wright (eds) *Oxford Handbook of Human Resource Management*. New York and Oxford, Oxford University Press: 2006, pp. 48-67.

Budd J.W. and Mumford K. (2004). Trade unions and family-friendly policies in Britain, *Industrial and Labor Relations Review,* 57: 204-222.

Davis, A. E. and Kalleberg, A. L. (2006). 'Family-Friendly Organizations? Work and Family Programs in the 1990's'. *Work and Occupations,* 33: 191-223.

de Menezes, L. M., and Wood S. (2006). 'The reality of flexible work systems in Britain'. *International Journal of Human Resource Management*, 17:106-138.

Desai, T., Gregg, P', Steer, J. and Wadsworth, J. (1999). 'Gender and the labour market', pp. 168-184, in P. Gregg and J. Wadsworth (eds), *The State of Working Britain,* Manchester: Manchester University Press.

Dex, S. and Scheibl, F. (1999). 'Business Performance and Family-friendly Policies'. *Journal of General Management*, 24:22-37

Dex, S. and Forth, J. (2009). 'Equality and Diversity at Work' in Brown, W., Bryson A., Forth J. and Whitfield K. (Eds), *The Evolution of Modern Workplace*, Cambridge:Cambridge University Press.

DiMaggio, P. and Powell, W. (1983). 'The Iron Cage Revisited: Institutional Isomorphim and Collective Rationality in Organizational Field'. *American Sociological Review*, 48:147-160.

DTI (2000). Work and Parents: Competitiveness and Choice, London: Department of Trade and Industry.

Goodstein, J. (1994). 'Institutional Pressures and Strategic Responsiveness: Employer Involvement in Work-Family Issues'. *Academy of Management Journal,* 37:350-382.

Goodstein, J. (1995). 'Employer involvement in eldercare: An organizational adaptation perspective'. *Academy of Management Journal*, 38: 1657-1671.

Ingram, P. and Simons, T. (1995). 'Institutional and resource dependence determinants of responsiveness to work family issues'. *Academy of Management Journal,* 38: 1466-1482.

Kossek, E., Dass, P., and Demarr, B. (1994). 'The Dominant Logic of Employer-Sponsored Work and Family Initiatives: Human Resource Managers' institutional Role'. *Human Relations*, 47:1121-1149.

Milliken, F.J., Martins, L. and Morgan, H. (1998). 'Determinants of an organization's responsiveness to work-family issues: An integration of competing theories'. *Academy of Management Journal*, 41: 580-592.

Morgan, H. and Milliken, F. (1992). 'Keys to action: Understanding differences in organizations' responsiveness to work-and-family issues'. *Human Resource Management*, 31: 227-248.

Mumford, K.A. and Budd, J.W. (2006). 'Family-friendly work practices in Britain: availability and perceived accessibility'. *Human Resource Management*, 45: 91-110.

Nadeem S. and Metcalf H. (2007). 'Work-life Policies in Great Britain: What Works, Where and How?', Employment Relations Research Series 77, London: Department for Business Enterprise and Regulatory Reform.

Oliver, C. (1991). 'Strategic responses to institutional processes'. *Academy of Management Review*, 16:145-179.

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

Ortega, J. (2009). Why do employers give discretion? Family versus performance concerns. *Industrial Relations*, 48: 1-24.

Smith-Perry J.E. and Blum, T.C. (2000). 'Work-Family Human Resource Bundles and Perceived Organizational Performance'. *Academy of Management Journal*, 43:1107-1117.

Whitehouse G., Haynes M., Mac Donald, F. Arts, D. (2007). 'Reassessing the "family-friendly workplace": Trends and influences in Britain 1998-2004', Employment Relations Research Series 76, London: Department for Business Enterprise and Regulatory Reform.

Wood, S. (1999). 'Family-Friendly management: testing the various perspectives'. *National Institute Economic Review*, 168:99-116.

Wood, S., de Menezes, L. and Lasaosa, A. (2003). 'Family-Friendly Management in Great Britain: Testing Various Perspectives'. *Industrial Relations*, 42: 221-250.

**TABLE 1**
**POTENTIAL PREDICTORS OF FAMILY-FRIENDLY MANAGEMENT**

**Institutional perspective**

*Employment level*
Logarithm of the total number of full- and part-time employees in the workplace.

*Size of the total organisation of which the workplace is a part.*
Categorical variable indicating the total number of employees in the company of which the establishment is a part. (In the case of the single-site workplace, this is the category that includes the employment level.)

*Industry*
Health and Financial sector dummy variables are potential predictors. Hence, 11 dummy variables are used to indicate the industry sector. The reference category, following Wood et al. (2003) is wholesale and retail.

*Public*
Whether the workplace belongs to the public sector, regardless of its industry group.

**Organizational adaptation perspective**

*Employers' concern for their employees' balance between work and family life*
The management's concern for family issues, measured on the basis of a question in which respondents were asked, 'It is up to individual employees to balance their work and family responsibilities': 1 = strongly agree, 2 = agree, 3 = Neither agree nor disagree, 4 = disagree, 5 = strongly disagree. Following Wood et al (2003), this variable is recoded and is equal to 1 for values 3 to 5 and equal to 0 otherwise.

*Consultative approach*

A scale that measures the extent to which management consults with its workforce, created from a question asking whether the organisation had employee-management committees or regular meetings of employees and managers to discuss five issues: health and safety, productivity, training, technology and work organisation (KR20 = 0.857).

*Personnel department*
There is a personnel specialist who spends at least 25% of his or her time on personnel matters.

*Union representation*
At least one union is recognised at the workplace.

*The proportion of female employees*
The percentage of regular (full and part-time) employees who are female.

*Educated workforce*

A binary variable that is equal to one if more than half the employees have at least a university degree.

*Proportion of technical and professional employees*
The percentage of employees in the workplace belonging to the professional and technical occupational group.

*Proportion of managerial employees*
The percentage of employees in the workplace who are managers.

**High Involvement perspective**

*Importance accorded to employee commitment*

Based on the agreement index to the statement "Employees are led to expect long-term employment in this organisation" and recoded so that: 1 means strongly disagree, 2 disagree, 3 neither agree nor disagree, 4 agree and 5 strongly agree.

*Importance given by management to human resources*
Variable measuring if (a) the strategic plan includes employee's development and (b) the person responsible for employee relations was involved in the plan design. It can take the values 0, 1 or 2.

**High-involvement management**
Latent trait score based on a model of binary items that indicate that following practices are available to non-managerial employees: team working ,functional flexibility, quality circles, suggestion schemes, training in interpersonal skills, team briefing, induction, information disclosure, appraisal

**Job enrichment**
Latent trait score based on a model of binary items that indicate that following practices are available to non-managerial employees: job discretion, job variety, job control.

**Equal opportunity perspective**

*Equal opportunity orientation*
        A latent trait score that measures the strength of equal opportunity policy, which is based on the latent trait analysis of the following practices: monitoring of promotions by gender, ethnicity, etc.; review of selection and other procedures to identify indirect discrimination; review of relative pay of different groups; and adjustments to accommodate disabled employees.

**Control variables**

*Change in employment size*
Measures the relative difference between the total of employees (full and part-time) employed at the workplace at the time of the interview and one year before.

*Composition of the workforce*
Variables indicating the proportion of employees in the workplace belonging to the following occupational categories: routine and skilled; operational; clerical and secretarial; professional and technical, and managerial.

*Number of part-timers*
Proportion of employees who work part-time.

**TABLE 2**

**Introduction of Family-Friendly Practices:** Coefficients Weighted Binary Logistic Regressions [+]

| | Parental Leave | | | Home Work | | | Term-Time Only Contracts | | |
|---|---|---|---|---|---|---|---|---|---|
| **Institutional** | | | | | | | | | |
| Employment level of workplace | 0.05 | 0.02 | -0.06 | -0.09 | -0.09 | -0.99 | -0.30 | 0.002 | -0.21 |
| Part of a larger organization | -1.03** | -1.27** | -1.02* | 0.57 | 0.62 | 0.07 | 0.14 | 0.22 | 0.33 |
| Size of the total organization | | | | | | | | | |
|   <100 employees | 1.0* | 0.74 | 1.07* | -0.54 | -0.48 | -0.09 | -1.87** | -2.36** | -2.44** |
|   100 - 999 employees | 1.42** | 1.27** | 1.90** | -0.13 | -0.35 | 0.10 | -0.85 | -0.77 | -0.63 |
|   1000 - 4999 employees | 0.41 | -0.003 | 0.93 | -0.33 | -0.39 | -0.46 | -1.37** | -0.91 | -0.82 |
| 5000 - 49999  employees (ref.) | | | | | | | | | |
|   50,000+ employees | -0.79 | -0.73 | -1.00 | -1.26* | -1.34* | -0.65 | -0.03 | 0.11 | 0.55 |
| Public workplace | -0.16 | -0.25 | 0.28 | 0.29 | 0.34 | -0.21 | -1.39** | -1.52** | -1.45** |
| Electricity, gas and water | | | | | | | | | -2.29* |
| Construction | | -1.38* | | 2.12** | 1.85* | 1.87* | -1.74* | -1.97* | -2.38** |
| Financial services | | | | -3.07*** | -3.09*** | -3.83*** | | | |
| Education | | | -1.42* | | | | | | |
| Health | | | | | | | -2.56*** | -2.09** | -2.98*** |
| Other community services | | | | | | | -2.07* | | |
| | | | | | | | | | |
| **Organization adaptation** | | | | | | | | | |
| Concern for family-work balance | -0.19 | -0.31 | -0.06 | 1.00* | 1.12* | 1.22** | -0.28 | 0.02 | -0.54 |
| Consultative approach | | 0.07 | | | | 0.95* | | | 0.66* |
| Personnel department | 0.29 | 0.66 | 0.21 | -0.13 | -0.21 | 0.40 | -0.15 | -0.48 | 0.42 |
| Union representation | -0.21 | -0.29 | -0.32 | 0.18 | 0.03 | 0.54 | 0.18 | 0.58 | 0.07 |
| Educated workforce | | 0.11 | | | | -1.45 | | | 1.69* |
| Proportion of female employees | 0.01 | 0.11 | 0.004 | -0.01 | -0.01 | 0.004 | -0.17* | -0.01 | -0.03** |
| | | | | | | | | | |
| **High involvement** | | | | | | | | | |
| High involvement index | 2.78* | | 1.98 | 1.64 | | 2.22 | 2.01 | | 1.20 |
| Team working | | 0.78* | | | 0.21 | | | 1.38** | |
| Team briefing | | -0.32 | | | -0.50 | | | 1.47 | |
| Functional flexibility | | -0.03 | | | 0.69 | | | -0.37 | |
| Quality circles | | -0.20 | | | -0.06 | | | -0.52 | |
| Suggestion schemes | | -0.12 | | | -0.44 | | | 0.43 | |
| Information dissemination | | -0.21 | | | 2.01* | | | 0.22 | |
| Appraisal | | 0.11 | | | 0.49 | | | -0.68 | |
| Internal recruitment | | 1.09*** | | | 0.01 | | | -2.2*** | |
| Motivation as a selection criterion | | 0.65 | | | -0.25 | | | 1.08* | |
| Job security | | -0.31 | | | -0.46 | | | 0.28 | |
| Variable pay | | 0.55 | | | -0.11 | | | 0.22 | |
| | | | | | | | | | |
| **Equal Opportunity** | | | | | | | | | |
| Equal opportunity | -0.03 | 0.16 | 0.00 | 0.16 | 0.17 | 0.27 | 0.24 | 0.33 | 0.37 |
| | | | | | | | | | |
| **Controls** | | | | | | | | | |
| Prop. of routine unskilled employees | 0.02* | 0.01 | 0.03** | -0.001 | -0.001 | 0.01 | -0.02* | -0.15 | -0.02 |
| Proportion of operational employees | 0.01 | 0.02** | 0.02 | -0.01 | -0.01 | -0.12 | -0.002 | -0.004 | -0.003 |
| Prop. of technical & profess. employees | 0.01 | 0.01 | 0.01 | -0.01 | -0.01 | -0.001 | 0.01 | 0.01 | 0.002 |
| Proportion of managerial employees | 0.09 | 0.01 | 0.01 | 0.00 | 0.002 | 0.001 | -0.01 | -0.001 | -0.02 |
| Proportion of admin Employees | -0.004 | -0.002 | -0.01 | 0.10 | 0.01 | 0.01 | -0.02* | -0.03* | -0.03* |
| Proportion of part-timers | -0.002 | 0.001 | -0.001 | -0.01 | -0.01 | -0.02 | 0.02* | 0.02* | 0.03* |
| Change in employment size | 0.002 | 0.005 | -0.01 | 0.003 | 0.003 | -0.01 | -0.001 | -0.004 | -0.01 |
| High involvement in 1998 | -0.56 | -0.76 | 1.20 | 2.04 | 2.11 | 1.71 | -1.04 | -0.60 | -1.10 |
| | | | | | | | | | |
| **Constant** | -2.40 | -1.47 | -2.38 | -3.72 | -4.48 | -6.91 | 1.20 | -1.86 | -0.93 |
| **Prob>F** | 0.00 | 0.00 | 0.0001 | 0.001 | 0.01 | 0.004 | 0.00 | 0.00 | 0.001 |
| **N** | 738 | 702 | 557 | 738 | 702 | 534 | 738 | 702 | 556 |

Note: Eleven dummy variables used for industry sectors, the reference category is wholesale and retail as in Wood et al (2003); for simplicity, only those that are significant in the models are reported in the table.

\*: P-value <0.05      \*\*: P-value < 0.01      \*\*\*: P-value < 0.001

**TABLE 2**
**Introduction of Family-Friendly Practices:** Coefficients Weighted Binary Logistic Regressions [+]

| | Switch to Part-Time | | | Job Share | | | Childcare — Nursery | | Childcare — Subsidies | |
|---|---|---|---|---|---|---|---|---|---|---|
| **Institutional** | | | | | | | | | | |
| Employment level of workplace | 0.15 | 0.13 | 0.18 | 0.41** | 0.55** | 0.42* | 0.40* | 0.40* | 0.12 | 0.50 |
| Part of a larger organization | 0.89 | 0.98* | 0.66 | -0.28 | -0.70 | -0.37 | -0.66 | -0.22 | 0.74 | 0.70 |
| Size of the total organization | | | | | | | | | | |
| <100 employees | 0.42 | 0.34 | 0.77 | 0.10 | 0.12 | -0.28 | -1.56 | -1.49 | 0.52 | -1.70 |
| 100 - 999 employees | 0.94* | 0.65 | 1.61** | -0.22 | -0.43 | -0.19 | -1.20 | -0.96 | 0.70 | 0.70 |
| 1000 - 4999 employees | 1.02* | 0.95* | 1.23* | -0.83 | -1.26* | -0.44 | -0.32 | 0.04 | 0.05 | -0.22 |
| 5000 - 49999 employees (ref.) | | | | | | | | | | |
| 50,000+ employees | -0.63 | -0.18 | -0.32 | -0.87 | -1.00 | -1.08 | -1.05 | -0.62 | 0.23 | 0.76 |
| Public workplace | -0.11 | -0.10 | -0.24 | 1.00* | 1.15** | 1.30** | 0.10 | -0.14 | 0.97* | 1.33* |
| Manufacturing | 1.16* | | | | | | | | -2.70** | -2.27* |
| Construction | 1.49* | | | | | | | | | |
| Financial services | | | | | | 1.54* | -3.30** | -3.56** | 1.72* | 2.44** |
| Education | | | | | | | | | 0.86 | 1.76* |
| Health | | | | | | | | | | |
| Transport | | | | | | | 2.46** | 2.49** | | |
| | | | | | | | | | | |
| **Organization adaptation** | | | | | | | | | | |
| Concern for family-work balance | 0.12 | 0.05 | 0.37 | 0.14 | 0.30 | 0.16 | -0.10 | 0.30 | -0.80 | -0.43 |
| Consultative approach | | | -0.04 | | | 0.27 | | | | |
| Personnel department | -0.05 | 0.28 | 0.28 | 0.20 | 0.43 | 0.29 | 1.45* | 1.30* | 0.78 | 0.89 |
| Union representation | -0.10 | 0.07 | 0.17 | -0.09 | 0.33 | 0.24 | -0.09 | -0.66 | -0.17 | -0.09 |
| Educated workforce | | | -1.44* | | | -0.278 | | | | |
| Proportion of female employees | -0.01 | -0.01 | -0.001 | -0.002 | -0.005 | -0.004 | 0.004 | -0.001 | -0.01 | -0.003 |
| | | | | | | | | | | |
| **High involvement** | | | | | | | | | | |
| High involvement Index | -1.08 | | 4.2*** | 3.46* | | 2.11 | 4.92* | | -0.15 | |
| Team working | | 0.59 | | | 0.64 | | | 0.06 | | 0.66 |
| Team briefing | | 0.59 | | | -0.28 | | | ++ | | -1.27 |
| Functional flexibility | | 0.22 | | | 0.78* | | | -0.25 | | -0.82 |
| Quality circles | | 0.18 | | | 0.41 | | | 1.28* | | -0.39 |
| Suggestion schemes | | -0.25 | | | -0.26 | | | 0.27 | | -0.07 |
| Information dissemination | | -0.83 | | | 0.13 | | | 1.40 | | 2.44* |
| Appraisal | | -0.15 | | | 0.45 | | | 1.44 | | -0.17 |
| Internal recruitment | | 0.39 | | | -0.45 | | | 0.63 | | 0.22 |
| Motivation as a selection criterion | | 1.54*** | | | 0.43 | | | -0.73 | | 0.08 |
| Job security | | -0.96 | | | -0.28 | | | 1.55* | | 0.20 |
| Variable pay | | 1.17** | | | 0.37 | | | 0.16 | | -0.89 |
| | | | | | | | | | | |
| **Equal Opportunity** | | | | | | | | | | |
| Equal opportunity | 0.31 | 0.26 | 0.04 | 0.26 | 0.34 | 0.300 | 0.40 | 0.51 | 0.73* | 0.97** |
| | | | | | | | | | | |
| **Controls** | | | | | | | | | | |
| Prop. of routine unskilled employees | -0.03 | -0.10 | 0.002 | 0.01 | 0.001 | 0.02* | 0.01 | .013 | -0.01 | 0.01 |
| Proportion of operational employees | 0.01 | 0.010 | 0.01 | 0.01 | 0.001 | 0.01 | 0.02 | 0.021 | -0.01 | 0.003 |
| Prop. of technical & profess. Employees | 0.01 | 0.01 | 0.02 | -0.01 | -0.01 | -0.004 | 0.02 | 0.02 | 0.003 | 0.02 |
| Proportion of managerial employees | -0.01 | -0.01 | -0.01 | 0.02 | 0.01 | 0.02 | -0.01 | -0.01 | -0.07 | -0.03 |
| Proportion of admin employees | -0.002 | -0.002 | -0.005 | -0.01 | -0.003 | 0.01 | -0.002 | 0.000 | 0.01 | 0.02 |
| Proportion of part-timers | 0.01 | 0.02* | 0.001 | -0.01 | -0.003 | -0.01 | 0.02 | 0.02 | 0.001 | -0.01 |
| Change in employment size | 0.001 | 0.001 | -0.004 | 0.000 | 0.001 | -0.004 | 0.001 | 0.001 | -0.002 | 0.002 |
| High involvement in 1998 | -1.08 | -0.64 | -1.56 | 0.58 | 0.58 | 1.08 | -2.26 | -2.17 | 4.23* | 5.49* |
| | | | | | | | | | | |
| **Constant** | -4.66 | -4.87 | -4.93 | -5.32 | -4.91 | -5.74 | -8.26 | -8.94 | -6.00 | -9.31 |
| **Prob>F** | 0.0108 | 0.0099 | 0.0156 | 0.00 | 0.00 | 0.0001 | 0.00 | 0.00 | 0.00 | 0.00 |
| **N** | 738 | 702 | 534 | 738 | 702 | 557 | 738 | 654 | 738 | 702 |

Note: Eleven dummy variables used for industry sectors, the reference category is wholesale and retail as in Wood et al (2003); for simplicity, only those that are significant in the models are reported in the table.

*: P-value <0.05          **: P-value < 0.01          ***: P-value < 0.001

**TABLE 3**

**Estimated Parameters based on a One-Factor Logit-Probit Latent Trait Model:**
standardised discrimination parameters (Loading) and probability of a practice being
available in the average workplace in the sample (Prob. Avail.)

| | Family-oriented Flexible Management | | Family-Friendly Management | |
|---|---|---|---|---|
| | Loading | Prob. Avail. | Loading | Prob. Avail. |
| Work at home | 0.67 | 0.38 | 0.69 | 0.38 |
| Term-time only contracts | 0.80 | 0.23 | 0.82 | 0.23 |
| Switching to working part-time | 0.91 | 0.91 | 0.91 | 0.92 |
| Job sharing | 0.95 | 0.44 | 0.93 | 0.45 |
| Childcare facilities or subsidies | | | 0.88 | 0.10 |
| Parental leave | 0.42 | 0.47 | 0.43 | 0.47 |
| | | | | |
| **Fit & Reliability** | | | | |
| No of observed response patterns | 47 | | 70 | |
| No of $[(O-E)^2/E)] > 4$ | 0 | | 1 | |
| Maximum $[(O-E)^2/E)]$ | 1.85 | | 4.4 | |
| % $G^2$ explained | 81 | | 77 | |
| Chi-square (degrees of freedom) | 21.5 (18) | | 48.6 (33) | |
| *N* | 2295 | | 2295 | |
| *Reliability R* | 0.68 | | 0.70 | |

**TABLE 4**
**Predictors of Family-Friendly Management**
(Weighted Ordinary Least Squares Models – coefficients and respective P-values)

| Perspective/ Variable | Main effects | Main effects & interactions | Main effects with the significant interactions |
|---|---|---|---|
| **Institutional perspective** | | | |
| Employment level of Workplace | **0.24 (0.00)** | **0.26 (0.00)** | **0.26 (0.00)** |
| Size of the total org. of which the workplace is a part. | | | |
| <100 employees | **-0.19 (0.03)** | **-0.19 (0.02)** | **-0.20 (0.02)** |
| 100 - 999 employees | -0.08 (0.27) | -0.09 (0.22) | -0.10 (0.20) |
| 1000 - 4999 employees | -0.02 (0.76) | -0.03 (0.65) | -0.04 (0.63) |
| 5000 - 49999   employees (ref. category) | | | |
| 50,000+ employees | -0.11 (0.26) | -0.09 (0.34) | -0.11 (0.28) |
| Public workplace | 0.16 (0.10) | 0.00 (0.99) | 0.12 (0.21) |
| Manufacturing | 0.03 (0.78) | -0.03 (0.79) | -0.04 (0.77) |
| Electricity, gas and water | **0.73 (0.00)** | **0.85 (0.00)** | **0.76 (0.00)** |
| Construction (reference category) | | | |
| Wholesale and retail | -0.03 (0.79) | -0.04 (0.69) | -0.04 (0.70) |
| Hotels and restaurants | 0.26 (0.11) | 0.21 (0.19) | 0.22 (0.16) |
| Transport and communication | 0.00 (0.99) | 0.03 (0.83) | 0.01 (0.93) |
| Financial services | **0.33 (0.06)** | **0.46 (0.01)** | **0.46 (0.01)** |
| Other business services | 0.04 (0.73) | 0.03 (0.83) | 0.03 (0.80) |
| Public administration | 0.24 (0.16) | 0.27 (0.13) | 0.27 (0.10) |
| Education | 0.17 (0.31) | 0.16 (0.36) | 1.78 (0.28) |
| Health | 0.14 (0.28) | 0.67 (0.00) | 0.61 (0.00) |
| Other community services | 0.15 (0.30) | 0.15 (0.30) | 0.15 (0.30) |
| **Organizational adaptation perspective** | | | |
| Concern for family-work balance | 0.08 (0.09) | 0.08 (0.53) | 0.07 (0.12) |
| Consultative approach | 0.05 (0.51) | 0.06 (0.47) | 0.06 (0.43) |
| Personnel department | **0.14 (0.02)** | **0.14 (0.02)** | **0.13 (0.02)** |
| Union representation | 0.11 (0.08) | 0.09 (0.17) | 0.09 (0.16) |
| Educated workforce | 0.13 (0.26) | 0.12 (0.28) | 0.13 (0.27) |
| Proportion of female employees | **0.21 (0.04)** | 0.15 (0.51) | **0.26 (0.02)** |
| Employment level x Concern for family-work balance | | -0.01 (0.89) | |
| Public workplace x Concern for family-work balance | | 0.09 (0.47) | |
| Health sector x Concern for family-work balance | | -0.02 (0.88) | |
| Employment level x proportion of  female employees | | 0.03 (0.52) | |
| Public workplace  x proportion of  female employees | | 0.10 (0.63) | |
| Health sector x  proportion of female employees | | **-0.66 (0.01)** | **-0.58 (0.02)** |
| **High Involvement perspective** | | | |
| High involvement management | **0.12 (0.00)** | 0.13 (0.12) | **0.11 (0.00)** |
| Enriched jobs | 0.04 (0.20) | 0.04 (0.21) | 0.04 (0.20) |
| Employment level  x  High involvement management | | -0.02 (0.69) | |
| Public workplace x  High involvement management | | 0.04 (0.61) | |
| Health sector x High involvement management | | **0.22 (0.02)** | **0.23 (0.01)** |
| Electricity, gas and water sector  x  High involvement management | | -0.12 (0.40) | |
| Financial services sector  x  High involvement management | | **-0.43 (0.05)** | **-0.44 (0.04)** |
| **Equal Opportunity Perspective** | | | |
| Equal-opportunity | **0.09 (0.01)** | **0.09 (0.02)** | **0.09 (0.02)** |
| **Controls** | | | |
| Prop. of Routine Unskilled employees | -0.14 (0.32) | -0.10 (0.46) | -0.12 (0.38) |
| Proportion of Operational Employees | 0.10 (0.53) | 0.11 (0.49) | 0.12 (0.47) |
| Prop. of Technical & Professional Employees | **0.27 (0.07)** | **0.28 (0.05)** | **0.28 (0.05)** |
| Proportion of Managerial Employees | -0.07 (0.74) | -0.10 (0.65) | -0.09 (0.65) |
| Proportion of Admin Employees | **0.33 (0.01)** | **0.38 (0.00)** | **0.37 (0.00)** |
| Proportion of Part-time Employees | **0.29 (0.01)** | **0.29 (0.01)** | **0.30 (0.01)** |
| Part of a Larger Organization | -0.01 (0.85) | -0.01 (0.84) | -0.02 (0.80) |
| Change in employment size | 0.00 (0.21) | 0.00 (0.12) | 0.00 (0.13) |
| **Fit** | | | |
| $R^2$ | 0.43 | 0.45 | 0.45 |
| F statistic | $F_{(34,1448)}=25.5$ | $F_{(45,1437)}=23.42$ | $F_{(37,1445)}=24.91$ |
| N | 1482 | 1482 | 1482 |

**TABLE A1**

Summary of Estimated Latent Trait Models – Factor Loadings and Fit Statistics

|  | High-involvement | Job-enrichment | Equal Opportunity |
|---|---|---|---|
| **High Involvement Management Practices** |  |  |  |
| Teamworking | 0.81 |  |  |
| Functional flexibility | 0.38 |  |  |
| Quality circles | 0.78 |  |  |
| Suggestion schemes | 0.64 |  |  |
| Teambriefing | 0.87 |  |  |
| Induction | 0.84 |  |  |
| Training in human resources | 0.74 |  |  |
| Information disclosure | 0.83 |  |  |
| Appraisal | 0.75 |  |  |
|  |  |  |  |
| **Enriched Jobs Practices** |  |  |  |
| Task variety |  | 0.62 |  |
| Method control |  | 0.99 |  |
| Timing control |  | 0.80 |  |
|  |  |  |  |
| **Equal Opportunity Practices** |  |  |  |
| Promotions monitored by gender, ethnicity, etc. |  |  | 0.98 |
| Review of selection to identify indirect discrimination |  |  | 0.95 |
| Review of relative pay of different groups |  |  | 0.89 |
| Adjustments to accommodate disabled employees |  |  | 0.70 |
|  |  |  |  |
| **Fit & Reliability** |  |  |  |
| No of actual response patterns | 396 | 13 | 44 |
| No of $((O-E)^2/E))>4$ | 3 | 0 | 0 |
| Maximum $((O-E)^2/E))$ | 6.74 | 0.2 | 1.2 |
| % $G^2$ explained | 62.57 | 70.9 | 83.0 |
| Chi-square (d.f.) | 262 (109) | 9.5 (2) | 46 (15) |
| Reliability (R*)[*] | 0.65 | 0.55 | 0.62 |
| *N* | 2295 | 2295 | 2295 |

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[*] Barthlomew and Knott (1999, chapter 4).

TABLE A2 – SAMPLE CORRELATIONS[+] OF INTRODUCTION OF FAMILY-FRIENDLY PRACTICES BETWEEN 1998 AND 2004

(Estimates based on WERS2004 Panel)

| | 1 | 2 | 3 | 4 | 5 | 6 |
|---|---|---|---|---|---|---|
| 1.Parental Leave | | | | | | |
| 2. Homework | 0.06 | | | | | |
| 3. Term-time only contracts | -0.03* | 0.09 | | | | |
| 4. Part-time work | 0.23 | 0.11 | 0.09 | | | |
| 5. Job share | 0.17 | 0.10 | 0.07 | 0.04 | | |
| 6. Workplace nursery | -0.09 | 0.05 | 0.14 | 0.02 | 0.03* | |
| 7. Childcare subsidies | -0.06* | 0.10 | 0.06 | -0.07 | 0.02* | 0.22 |

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[+]  Spearman Rank Correlation Coefficients

*  P-value>0.05 (Independent)