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EMPLOYEES' AWARENESS OF EMPLOYER'S FLEXIBLE WORKING ARRANGEMENTS

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ABSTRACT

This paper uses the linked data from employees and employers in the 1998 British Workplace Employee Relations Survey (WERS). The employee survey's findings about employees' awareness of their employer's flexible working arrangements are compared with their employer's survey data about entitlements to such provisions. The range of possible reasons for the mismatch is described. Multivariate logistic regression analysis is used to test out a number of hypotheses about why employees and employers may agree (or disagree) in their responses. Random effects techniques, used to allow for unobserved heterogeneity between employers, were found to indicate significant differences between employers. These may be due to cultural differences between workplaces or recruitment patterns that made the employees more uniform..

1. Introduction

The first wave of interest in flexible working arrangements (known also as family-friendly, work-life balance or work-life integration policies) recognised their importance for offering flexibility to workers, parents and others, to help reconcile work and (family) life in a pressured 20th century global business environment (Bailyn, 1993; Bailyn et al 1997, 1998; Kamerman and Kahn, 1987) However, almost along side this recognition came the concern with issues of employee access and take up, the gatekeeper roles of line managers and changing workplace cultures if working patterns were to change substantially for a sizeable group of workers (Lewis, and Lewis, 1996; Lewis and Taylor, 1996). It is one thing for employers to offer employees flexibility, but if the availability is not communicated, or other conflicting messages are sent with the communication, or line managers are not well informed and trained in implementing company policies, employees' knowledge about policies and take up of any provisions will be expected to be low. That employees are not always aware of their employers' policies is well known and noted in qualitative empirical studies (for example, see Gill, 1996) including recent studies of work-life balance policies (Yeandle et al, 2002; Bond et al, 2002). It is unusual to examine this issue using quantitative survey data.

A recent British data set, the 1998 Workplace Employee Relations Survey (WERS), offered a rare opportunity to examine the overlap between employees' and employers' responses on the topic of flexible working arrangements because it contained information from employers and from samples of their employees on the same subject. In particular, we are able to examine questions of how much employees know

about their employers' policies; what determines their level of understanding; and whether some employees and some workplaces are more likely than others to have correct knowledge or awareness. This paper examines these questions about the overlaps and mismatches between employer and employee responses in these WERS data and generates and tests some hypotheses to explain the levels of agreement observed.

The paper describes the WERS data in Section 2. Some of the descriptive results from this survey are presented in Section 3. Discussion of the reasons for the mismatch between employees and their employer along with hypotheses about the mismatch are presented in Sections 4 and 5. Section 6 presents a model and the results of its estimation are presented in Section 7. The conclusions are presented in Section 8.

2. The WERS data

The Workplace Employee Relations Survey (WERS 98) data were collected from October 1997 to June 1998 for the British Department of Trade and Industry as a nationally representative sample of British establishments with a minimum of 10 employees. The data consisted of interviews with managers and workers in over 2191 workplaces and questionnaires from 28,323 employees from these same workplaces. The establishment response rate obtained was 80 per cent. This means that the survey as a whole represented 15.8 million employees or approximately three-quarters of all employees in employment in Britain in 1998. Incorporating employees into the survey was also a new innovation. The technical details of the survey are described in Airy et al (1999) and an overview of the survey findings is provided in Cully et al, (1999). As well as its past wide coverage of the nature of collective representation and

bargaining, it included new questions, among which were those covering flexible working arrangements.

Flexible working arrangement questions in WERS

Samples of approximately 25 employees in each of the 2191 establishments were asked to fill in a questionnaire. The response rate to this employee survey was 64%. The questionnaire covered whether their employer made any of six family-friendly provisions available to them, namely:

- Parental leave (non-statutory since survey before the Statutory provision);
- Job sharing;
- Working at or from home during normal working hours;
- Workplace or other nursery or help with child care;
- Scheme for time off for emergencies (paid or unpaid coded); and
- Flexi time.

Employers were asked whether they offered only their non-managerial employees an entitlement to any of the list of provisions. Employees from the full range of occupation titles were included in the employee samples.

3. Flexible working in the WERS data.

Extent of employer provision

On the extent of offering non-managerial employees entitlement to flexible working arrangements, WERS employers gave the following responses for 1998:

34% offered parental leave (non-statutory since survey before the Statutory provision);

27% offered job sharing;

33% offered working at or from home during normal working hours;

5 % offered a workplace or other nursery or help with child care;

24% offered a scheme for time off for emergencies; and

27% offered flexi time.

Where there was earlier data for comparison the WERS data found slight increases since 1996 (Forth et al, 1997) but neither flexitime, job sharing, parental leave or childcare services were either widely or universally available in 1998. ¹

Employee coverage

WERS employee responses on their access to flexible working arrangements are displayed in Table 1. Public sector employers were, on the whole, more generous in all aspects of flexible employment benefits, including the provision of childcare subsidies. In all respects women beneficiaries outnumbered the men. However, almost a half (46%) of all employees did not receive any access to such flexibility.

The WERS data allowed us to investigate the determinants of employees' perceptions of their access to flexible working arrangements. A range of employee and employer characteristics were used as potential explanatory variables through logistic regression models and the full set of results are reported in Dex and Smith (2001). Overlapping

Table 1. Perceptions of access to flexible working arrangements, by sector and gender.

	Private sector	Private sector	Public sector	Public sector	All employees
	Men % of employees	Women % of employees	Men % of employees	Women % of employees	% of all employees
Flexitime	24	36	37	39	32
Job sharing scheme	6	15	23	34	16
Parental leave	21	30	35	33	28
Working at or from home	10	6	13	9	9
Workplace nursery/child care subsidy	2	3	6	9	4
None of these	57	42	40	34	46

Base: All employees in workplaces with 25 or more employees.

Figures are weighted and based on responses from 25,491 employees.

Source. Cully et al (1999)

analysis of this issue using the same data set is also now available in Budd and Mumford (2001).² The results of modelling the determinants of employees believing they had access to various types of family-friendly provisions found that employees' perceptions were associated with a mixture of:

- the constraints of the job;
- the gender of the worker (females more likely);
- the child care responsibilities (parents more likely);
- traditional values as reflected in gender working groups;
- the potential for flexibility in the job without particular arrangements being needed (higher occupations less likely in some cases); and
- some cherry picking, giving additional fringe benefits to particularly valued workers.³

Overall, the conclusions from the analyses of Dex and Smith (2001) agree with those of Budd and Mumford (2001); that individual characteristics captured most of the variation in employees' beliefs about their access to this set of flexible working arrangements.

However, the exact determinants varied according to which of the flexible provisions was under consideration a point that Budd and Mumford do not stress.⁴ The nature of the work was particularly relevant to whether employees had access to working at or from home and whether they had flexitime. Many types of job are not suited to being done partly or wholly at home. Those working in craft jobs are also regularly less likely to have access to these types of flexible working arrangements, but this is often in association with a wholly male working environment. It might mean that traditional values and their associated working arrangements are part of the explanation.

The case of emergency leave is interesting in that the workers with access to leave were those less likely to get access to the other types of provision. Professionals and managers did not have specific leave provision, perhaps because they already have sufficient flexibility in their jobs to cope with emergencies.

The cherry picking question gained some support from the fact that workers with recent training, those with degrees and sometimes with longer job duration were often more likely to have access to these arrangements.

There have been some recent multivariate analyses of EU and US sources of employees reported in Evans (2001) and Bardoel et al (1999).⁵ Evans concluded that

the findings for the EU corresponded to those found in Australia and the UK; namely that public sector firms, or those with equal opportunities policies had the most advantages; permanent and long tenure employees were more likely to report family leave benefits, as were professional workers (except for sick leave). Craft, elementary, plant and machine workers all reported having access to relatively few family-friendly arrangements. This finding overlaps with the US study solely of female workers by Deitch and Huffman (2000). Until the availability of the WERS data there were hardly any British multivariate studies to explain which employees had flexible working arrangements because of the lack of suitable data.

Take up

Analysis of the number of employees being offered family-friendly options frequently gives an exaggerated impression about the distribution of benefits and in addition there is a wide divergence between entitlement and use as shown in various national statistics. (Office of National Statistics and EOC, 1998).⁶ WERS found that in 25 per cent of 1998 establishments with some family-friendly practices, no employees had taken them up (Cully et al, 1999).

The discrepancy between use and availability was, in some instances, due to better working conditions being offered to a privileged section of the workforce, in higher grades or selected departments (Thomson, 1996). A micro study of one company in the UK showed that managers were not even-handed in granting additional family or maternity leave or pay to their employees. They tended to regard family-friendly practices not as necessary supports but as discretionary benefits (Lewis and Taylor, 1996).

The use and availability discrepancy is confirmed by Forth et al (1997). They found that while between a quarter and a third of new mothers who were professional workers were entitled to a broad range of family-friendly arrangements, this applied only to 8 or 9 per cent of those involved in sales and similar occupations.

In WERS, those employers who gave non-managerial employees an entitlement to some sort of policy were asked what proportion of their employees had taken up any of these entitlements during the last 12 months. The WERS data on take up of family-friendly working arrangements by employees was limited therefore since employers were asked about this but not in a way that differentiated the different arrangements, except in the case of working at or from home.⁷

The replies for the eligible WERS employer sample about levels of take up over the past year indicated that the vast majority of employers with some entitlement had some level of take up. But for the most part it was a small proportion only:

- 18 per cent said no-one had used the entitlement;
- 65 percent replied ‘a small proportion’;
- 11 per cent replied ‘up to a quarter’; and
- 7 per cent replied ‘a quarter or more’.

The highest usage over the past year (of any entitlements) was found for establishments with a workplace nursery (94% had some usage; 17% had a quarter or more employees use an entitlement) and financial help for child care (93% had some usage; 14% had a quarter or more employees use an entitlement). This may be linked

to these provisions being more visible than others in the establishment. The lowest usage was in establishments offering the ability to change hours or parental leave (84% had some usage).⁸

Clearly the levels of take up in these establishments are not high and in many cases are likely to be off-the-cuff responses without any backing from carefully collated record keeping.⁹ Of course, it can be the case that individual employers do not have many of the categories of employee who would benefit from some of these provisions. However, the results would also be consistent with employees failing to be aware of their employers' provision.

4. Extent of employer/employee mismatch

Our main focus in this paper is on the comparison between employee perceptions and employer claims about their provisions. There are a number of reasons why employees' and employers' responses about the employee entitlements may not match. There are reasons relating to these particular WERS data, as well as some more general reasons why organisations' policies and practices do not always overlap.

The WERS questions allow for mismatch in several ways. First the employer questions applied only to non-managerial employees so only non-managerial employee responses are relevant for a comparison. Secondly, employers were asked if any non-managerial employees were offered these arrangements. This leaves the possibility open that some non-managerial employees were not offered the arrangements, but the employer questions do not allow us to identify them.

There can, in addition, be genuine ambiguity about the meaning attached to a particular working practice (in survey questions) which makes employees and employers were uncertain to the extent of having different views about whether the organisation offers the particular working arrangement.

Also, if the working arrangement is practiced informally, or subject to line manager discretion, then both employer and employee could be genuinely uncertain of the status or availability to particular individuals of specific practices.

However, it would probably be unrealistic to expect that every employee in an establishment would have correct knowledge about its policies and practices. We would expect some variation in the extent of the mismatch by the type of arrangement under consideration. We would expect a larger degree of mismatch where there is ambiguity in the question asked; and where informal practices are more likely. We would expect mismatches to be lower where the meaning of the survey questions is less uncertain; where the visibility of the practice is higher; and where more employees have used the provision.

The largest mismatch because of ambiguity in the questions asked, other things equal, is likely to be the case of parental leave. At the time of this survey parental leave was not well defined since there were no statutory arrangements in Britain and it is easily confused with maternity or paternity leave. Other recent attempts to examine employer' awareness of legislation show that there are sizeable pockets of ignorance of statutory duties and their details (DTI, 2001). This should be born in mind in

examining these data. The uncertainty over the meaning of parental leave probably attached to employers and employees alike.

At the other end of the spectrum, in the case of help with child care, we would expect the lowest levels of mismatch because this is less ambiguous, costs money to the employer and is probably a more visible provision as far as the employee is concerned.

Flexitime could also be at the low end of the mismatch spectrum since it is usually a highly visible organisational arrangement. On the other hand, there is some ambiguity about what is meant by flexi time. The meaning can encompass either a formal scheme, or more informal flexibility for individuals to choose their hours of work.

Job sharing is relatively low in ambiguity but also not common. We expect the extent of mismatches to lie in the middle ranges for this arrangement.

The practice of working at home and leave to handle emergencies are both relatively invisible and likely to be practiced informally some of the time. For these reasons we would expect the extent of mismatch to lie in the middle ranges but towards the higher end.

The extent of mismatch for non-managerial employees is set out in Table 2. As we expected the highest agreement between employers and employees occurs for nursery child care (89% agreement) mostly because such provision is not on offer. Home work also has a high level of agreement (82%) for the same reason. Working at home

Table 2. Share of WERS non-managerial employees who agree or disagree with employers' statements about specific family-friendly working arrangements at the establishment.

	Employer and employee both say have provision	Employer says has provision, says not	Employer and employee both say no provision	Employer says no provision, says has.	Total percent %	N
Flexi time	16.5	13.7	52.2	17.6	100	19452
Job sharing	11.4	28.5	55.1	4.9	100	19351
Parental leave	21.3	47.8	25.9	4.9	100	19355
Working at or from home	2.3	14.4	80.0	3.3	100	19351
Nursery or help with child care costs	2.2	9.9	86.8	1.1	100	19351
Leave for emergencies	24.2	40.1	20.8	14.9	100	27986

was not expected to have such a high level of agreement. It suggests that working at home is not used informally to the extent we anticipated. The lowest levels of agreement were predictably for parental leave (47%) and leave to deal with emergencies (45%). The latter was a little lower than we expected. The extent of agreement for job sharing and flexi time were, as we expected, in the middle ranges.

The figures in column two of the results in Table 2 give an indication of the extent of employee lack of awareness of the policies. We can see that this lack of knowledge is highest in the case of parental leave and leave to handle emergencies. Compared with the other arrangements, it would appear that these two arrangements may be less relevant to large subgroups of the workforce, and possibly less visible if an employee has not had need for them. The figures in column 4 of Table 2 probably give a measure of the extent of informal practices in establishments. On the basis of these figures, informal practices are most likely in the case of taking leave to deal with emergencies and flexi time hours. This seems intuitively plausible.

5. Determinants of employee awareness - Hypotheses

The WERS data allow us to go beyond presenting the extent of matching between employer and employee knowledge of establishment practices. We are able to start to consider the potential causes of employees having correct understanding or misunderstanding. Theorising from a number of subject areas helps to formulate hypotheses about systematic relationships we might expect to see. We are able to test

them out in the WERS data. Theories about the diffusion of innovations and employers' economic reasoning about business costs, information costs, and individual employees' incentives are all relevant and provide a basis for generating hypotheses.

Hypothesis H1. Correct awareness of employees is likely to grow as the extent of people taking up the policy or those in the relevant groups grow, akin to a diffusion process..

Hypothesis H2. Correct awareness of employees will be greater where there are instituted channels of communication.

The outline of some of the determinants of the diffusion process of new innovations in management by Miller and Garnsey (2000) has relevance to the formulation of our hypotheses. The numbers with correct understanding might be correlated with the numbers of employees with direct experience, having taken up the opportunities, and the numbers in relevant category groups who would benefit. The speed of the diffusion process will also rest on institutional factors; for example the establishment's communication channels and how effective they are. These might be correlated with size, ownership, HR policies and style, union presence or ethos and culture. In this way, these diffusion factors can overlap with factors that institutionalist theorists draw attention to.

Hypothesis H3. Correct awareness of employees will be greater where there are economic incentives for the employer to communicate or where the costs of employers communicating their policies are lower.

We would expect there to be greater economic incentives for employers to communicate their policies and provisions:

- the lower the costs to the employer of employee take up;
- the higher any business benefits from employee take up;
- the lower the costs of communication.

These factors are likely to reduce, therefore, the extent of mismatch between employer and employee responses. Communication costs for any particular new arrangement will be lower when there is an existing and effective system of communication in place in the establishment.

Hypothesis H4. Employee awareness will be greater where the employee has an individual incentive to know about their employer policies, being in a category where benefits are greater, or benefits are targeted.

Employees with longer job tenure, a permanent as opposed to a temporary job and full-time compared with part-time hours would all be expected to have more accurate knowledge.

Employees in more marginalised groups may be expected to be less aware; for example, those who are less educated, part time, on temporary contracts, foreign language employees, ethnic minorities or possibly those with ill health. Being in a relevant

category to benefit, for example, carers, parents, and possibly those with ill health, may lead to increases in levels of knowledge about policies affecting such groups. Again the benefits compared with costs of finding out about organisations' provisions will be greater for those who may benefit. Women may have greater incentives than men to understand the provisions correctly since they are more often the carers.

That employees will read and digest any written information about policies may be more likely among the highly educated.

Our hypotheses suggest, therefore, that the determinants of employee awareness are a mixture of their own individual characteristics and their workplace characteristics.

In principle there are two kinds of agreement. Employers and employees can both agree that there is a provision; or that there is none. Only the agreement that there was a policy is presented in detail in this paper although both were estimated and summarized below.

6. Determinants of employer and employee agreement

We constructed a model in order to test out the above hypotheses. We were interested in whether individual i out of $1 \dots k$ non-managerial employees working in establishment j of the $1 \dots w$ WERS workplaces thought that his or her employer offered policy m out of $1 \dots 6$ policies given that employer j said that the policy m was an entitlement in that workplace.

If Y is the observed value of employee i thinking the policy m is available, conditional on j 's employer saying it was, then.

$$Y_i = 1 \text{ iff } \sum_k \mathbf{b}_k X_{k,i} + \sum_w \mathbf{g}_w Z_{w,j_i} + u_i + v_{j_i} > 0$$

where

X is the set of employee characteristics and associated parameter values β

Z is the set of workplace characteristics, workplace j number $1, \dots, w$ with the associated parameters γ .

u_i is an error term assumed to have a logistic distribution, varying from employee to employee.

In addition to the observed variations between organizations, we were aware that there was likely to be unobserved variations which might affect the outcomes of employee awareness. Cultural factors in the workplace which are difficult to measure can influence whether employees gain correct information about their employers' policies as confirmed in Lewis and Lewis (1996) and Thomson et al (1999); whether employees are encouraged to meet and talk to each other and to line managers, for example over lunch; whether there is culture of approachability among managers. It might also be the case that employees in any particular workplace have things in common that distinguish them from other workplaces. The fact that the sample consisted of a number of employees from each

workplace allowed for the inclusion and estimation of the establishment-specific error term, v_{ji} , assumed to have a normal distribution (mean zero) thereby allowing for workplace-specific heterogeneity to be controlled. In this way the model becomes multilevel and was estimated using logistic regression using the `xplogit` command in STATA version 7, allowing for random effects to capture the unobserved workplace-specific variation.

There could be selection effects from considering the conditional model of employers who said they had a policy (or those who did not). For example, if this subset of employers were more likely to employ workers with characteristic C than those who do not have the policy, then our findings may over-emphasize the effects of agreement for group C. Since the number of potential selection criteria and characteristics we could consider is extremely large, we have been forced to ignore this issue.

A set of six models were estimated, one for each of the 6 types of flexible working arrangements. The approach in each case was first to estimate a null multilevel model containing only a constant to get an estimate of the level 2 (workplace) variance component. Following this, a model with only individual level predictors was estimated to see how much between-workplace heterogeneity is explained by employee characteristics. Lastly the workplace-level predictors were included to see how much (unobserved) workplace heterogeneity was left.

The explanatory variables included reflect the hypotheses outlined above. They also include a range of structural, workforce and human resources policies based on the employer questionnaire and characteristics of employees based on the employee questionnaire (Table 3).

Table 3. List of variables included and type of measure being captured.

Measures of Diffusion	Measures of Employer incentives and communication	Measures of personal characteristics
Size of establishment	Take up	Age
Size of organisation	Number of policies	Gender
Nature of ownership	Other HR policies and practices *	Marital status
Public/private	Availability of HR specialist	Children
Union status	Policies viewed as costly, or worth it	Education
Workforce profile	Employee Occupation	Health
Number of policies		Ethnic minority
Other HR policies and practices		Employee Occupation
		Contract
		Hours
		Extent of discretion
		Job tenure
		Effort
		Earnings
		Union member
		Representation
		Views of employers' policies and ethos.

The precise measures available in the WERS data to capture these effects are described in Appendix 1. The derivation of the measure of high commitment management practices, of the sort described in Huselid (1995), Osterman (1995) or Wood (1999) was somewhat more complicated than the other variables. Since high commitment management

practices are meant to gain their high commitment from employee involvement and setting up good communication channels it seemed important to include some measure of this approach in this model. A factor analysis was carried out on a set of relevant variables and the factor score of the one factor with an eigenvalue greater than one was used as a potential explanatory variable in this analysis. The variables included are also described in Appendix 1.

7. Results

The results for the 6 types of flexible arrangement are displayed in Table 4.

Diffusion

Having a higher proportion of women employees as potential users of the arrangements was associated with increased agreement only in the case of job share and acted to reduce the level of agreement on parental leave, homework and leave for emergencies. These results tended to refute the diffusion hypothesis (H1) as it related to women employees. In fact these results may indicate that employers put less effort into communicating the benefits relating to women where they are a larger share of the workforce because of cost disincentives, thus supporting H3.. However, in the cases of parental leave, job share and child care higher levels of employee take up acted as a diffusion mechanism and raised the level of agreement giving support to H1.

There was little evidence that smaller establishments or organizations would diffuse information about policies more effectively. In these results, organizations of medium

size had occasional advantages for increasing agreement on a few working arrangements, contrary to our expectations. However, working in an owner controlled establishment did increase the level of agreement over parental leave, leave for emergencies and flexitime. Being foreign-owned did not have any significant effects.

Having a recognised union appeared to aid the diffusion process for parental leave, job share and leave for emergencies and where workers felt represented there was a further increase in agreement over the job share arrangement. Being a union member was associated with higher probabilities of agreement for parental leave, job share, child care and leave for emergencies.

Being in the public sector was only on the margins of significance in two out of the 6 working arrangements.

The positive support for the diffusion hypothesis (H1) is partial in these results. It is restricted mainly to levels of take up and through the union's influence and applied only to subsets of the six working arrangements. The communication aspect of the diffusion hypothesis are discussed below.

Employer communication and incentives

Employers who had established channels of communication through high commitment management practices, employee involvement, Investor in People awards, a higher number of flexible working arrangements or equal opportunities policies did not show

any associations with increased employee awareness. The presence of an HR specialist in the establishment was associated with raised levels of agreement only in the case of homeworking (and on the margins for job share) and was associated with lower levels of agreement in the case of flexitime. In this way, our results agree with Budd and Mumford (2001) that unions appear to have greater influence than HR professional on communication in workplaces. Similarly, employers who thought the flexible working arrangements were worth it to the business were not associated with higher probabilities of agreement and those who thought the arrangements were costly, in two cases of child care and parental leave had higher probabilities of agreement, contrary to our hypothesis. As mentioned above higher levels of take up in the case of parental leave, job share and child care acted as diffusion mechanisms and raised the level of agreement, rather than as disincentives to employers because of incurring greater costs.

However, employees thinking their employer had good communication or a family-friendly ethos was systematically associated with higher probabilities of agreement for all arrangements, albeit by very small increases. Also where employees were themselves union members, or felt represented these both were associated with a higher probability of agreement about some policies, notable parental leave, job share and, to a lesser extent, leave for emergencies.

The evidence is mixed for employer incentives, based around their costs and communication channels, being important in the levels of awareness and agreement between employer and employee as H2 and H3 suggested. The employer's view about

their own communication channels being in place had no visible effect. However employees thinking their employer had good communication or had a family-friendly ethos did influence the levels of awareness albeit to a very small extent. Unlocking the key to how this employee perception is generated is clearly an important practitioner question.

Personal characteristics and incentives.

Being a potential user of the working arrangements was important in increasing the probability of being correctly aware of employer's policies. This was particularly the case for parental leave, job share, child care and leave for emergencies where being female, and having a child in the age range 0-4 had higher probabilities of agreement in many cases. In some of these 4 arrangements, being married also increased the probability of agreement and being single or without children reduced it.

The evidence about the awareness of those in more marginalised positions in the workforce was mixed (H4). The coefficients were not significant for ethnic minorities, those with ill health or in temporary jobs. Working part-time hours was associated with a lower probability of agreement in 5 out of the 6 working arrangements (not homework) and longer employment tenure was associated with higher probabilities of agreement in two cases, parental leave and job share. In addition, workplaces with a high proportion of female part-time workers also further reduced the level of agreement over job share, leave for emergencies and flexitime.

Compared with employees in semi or unskilled jobs (as operative assembly or other occupations), those in higher grade jobs were more likely to agree and be aware of their employers' policies. In fact, occupational status was the largest and most significant influence in the results across 5 out of 6 of the arrangements, making agreement considerably more likely as occupational status increased. Leave for emergencies was the exception. After taking occupational status into account, having a degree qualification was mostly not significant and higher earnings were often associated with a lowering of the probability of agreeing, after controlling for occupational status. These variables were all capturing a similar effect, one which generally gave support to the hypothesis that higher qualified employees would be more aware of their employers' policies, other things held constant.

Those who thought of themselves as working hard also had a higher probability of agreeing with their employer that parental leave, job share and flexitime were available. This variable may be capturing employees who were more positive about the organisation and more committed to it. We did not specifically draw up an hypothesis about this group, but the results are not difficult to rationalise. We conclude, therefore, that employees who are more committed to the organisation and who work hard for it, are more likely to be aware of its policies.

Hypothesis 4 gained support from these results therefore, but in a way that varies across the arrangements, because they varied in their relevance to different workforce groups.

Table 4. Results from random effects models of likelihood of agreement between employer and employee responses about family-friendly policies, given employer says has a policy.

Explanatory variables	Parental leave Employee characteristics		Parental leave Employee + employer characteristic		Job share Employee Characteristics		Job share Employee + Employer characteristics		Homework Employee characteristics		Homework Employee + Employer characteristics	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Employee characteristics												
Age	-0.263	(0.02)**	-0.253	(0.02)**	-0.103	(0.03)**	-0.112	(0.03)**	0.071	(0.06)	0.092	(0.06)
Female	0.044	(0.05)	0.109	(0.05)*	0.513	(0.08)**	0.488	(0.09)**	-0.439	(0.16)**	-0.327	(0.16)**
Single	0.433	(0.27)	0.408	(0.28)	0.638	(0.36)*	0.514	(0.38)	1.040	(1.12)	0.924	(1.15)
Separated/div	0.586	(0.27)**	0.536	(0.28)*	0.520	(0.37)	0.387	(0.39)	0.967	(1.13)	0.833	(1.16)
Married	0.597	(0.26)**	0.562	(0.27)**	0.753	(0.36)**	0.639	(0.37)*	1.117	(1.11)	1.007	(1.14)
Child 0-4	0.173	(0.07)**	0.182	(0.073)**	0.237	(0.11)**	0.227	(0.11)**	0.003	(0.23)	-0.039	(0.22)
Child 5-11	0.038	(0.07)	0.043	(0.07)	-0.043	(0.10)	-0.036	(0.10)	0.459	(0.20)**	0.438	(0.22)**
No kids	-0.215	(0.06)**	-0.211	(0.06)**	0.121	(0.10)	0.129	(0.10)	0.301	(0.20)	0.242	(0.21)
Degree	-0.438	(0.06)**	-0.375	(0.07)**	-0.022	(0.09)	-0.066	(0.09)	0.342	(0.17)**	0.424	(0.17)**
Poorhealth	0.072	(0.09)	0.077	(0.09)	0.130	(0.14)	0.154	(0.14)	-0.001	(0.28)	0.075	(0.29)
Ethnic	-0.192	(0.11)*	-0.199	(0.11)*	-0.164	(0.16)	-0.174	(0.16)	-0.289	(0.33)	-0.443	(0.34)
Job associate man/prof/tech	2.005	(0.08)**	1.952	(0.08)**	3.016	(0.13)**	2.969	(0.14)**	5.458	(0.38)**	5.387	(0.39)**
Job clerical/secretarial	1.792	(0.07)**	1.707	(0.07)**	3.608	(0.14)**	3.522	(0.14)**	4.940	(0.41)**	4.924	(0.43)**
Job craft/skilled	1.047	(0.09)**	1.002	(0.10)**	1.659	(0.23)**	1.756	(0.24)**	3.846	(0.51)**	3.732	(0.52)**
Job Personal services+sales	1.467	(0.08)**	1.499	(0.08)**	2.424	(0.15)**	2.471	(0.00)**	5.299	(0.42)**	5.253	(0.44)**
Temporary	-0.165	(0.13)	-0.163	(0.13)	0.021	(0.17)	0.024	(0.18)	0.112	(0.39)	0.208	(0.39)
Part time	-0.412	(0.07)**	-0.409	(0.07)**	0.232	(0.10)**	0.275	(0.10)**	0.026	(0.24)	0.124	(0.25)
High discretin	-0.199	(0.07)**	-0.107	(0.07)	-0.187	(0.13)	-0.145	(0.13)	0.161	(0.21)	0.298	(0.21)
Training	0.120	(0.05)**	0.093	(0.05)*	0.258	(0.07)**	0.232	(0.08)**	0.086	(0.16)	0.131	(0.17)
Job tenure 1-2 yrs	0.195	(0.08)**	0.218	(0.08)**	0.027	(0.13)	0.044	(0.13)	0.052	(0.25)	-0.044	(0.26)
Job tenure 2-5 yrs	0.213	(0.07)**	0.206	(0.07)**	0.305	(0.11)**	0.259	(0.11)**	0.103	(0.22)	0.132	(0.22)
Job tenure 5+	0.314	(0.07)**	0.293	(0.07)**	0.382	(0.11)**	0.296	(0.11)**	0.261	(0.21)	0.195	(0.21)
Good comm-unication	0.037	(0.01)**	0.043	(0.01)**	0.043	(0.01)**	0.041	(0.01)**	0.067	(0.02)**	0.082	(0.02)**
Works hard	0.154	(0.03)**	0.138	(0.03)**	0.093	(0.04)**	0.094	(0.04)**	0.046	(0.08)	0.025	(0.08)
Annual earn	-0.038	(0.00)**	-0.043	(0.00)**	-0.013	(0.01)*	-0.009	(0.01)	0.064	(0.01)**	0.058	(0.01)**
Union member	0.350	(0.05)**	0.258	(0.06)**	0.212	(0.07)**	0.148	(0.08)*	-0.237	(0.15)	-0.196	(0.17)
Represented	0.154	(0.07)**	0.139	(0.07)*	0.235	(0.11)**	0.233	(0.11)**	0.049	(0.24)	-0.154	(0.26)
Thinks employer FF	0.505	(0.05)**	0.520	(0.05)**	0.332	(0.07)**	0.315	(0.07)**	0.486	(0.13)**	0.459	(0.13)**

** /* significant at 95/90% confidence levels.

Explanatory variables	Parental leave Employee characteristics		Parental leave Employee + employer characteristic		Job share Employee characteristics		Job share Employee + employer characteristic		Homework Employee characteristics		Homework Employee + employer characteristic	
	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.	Coeff.	S.E.
Employer characteristics												
Org up to 500			0.169 (0.11)				-0.091 (0.18)					-0.493 (0.32)
Org 501-2000			0.153 (0.09)				-0.119 (0.18)					0.063 (0.30)
Org 2001-10k			0.248 (0.11)**				0.145 (0.19)					-0.136 (0.38)
Org 50k+			0.009 (0.13)				0.086 (0.19)					-0.503 (0.37)
Estab 25-49			0.009 (0.13)				-0.225 (0.23)					0.382 (0.43)
Estab 50-99			-0.051 (0.13)				-0.016 (0.23)					-0.211 (0.45)
Estab 100-199			0.071 (0.14)				-0.036 (0.24)					-0.075 (0.43)
Estab 200-499			0.255 (0.13)*				0.204 (0.23)					-0.161 (0.44)
Estab 500+			0.155 (0.15)				-0.017 (0.25)					-0.100 (0.45)
Foreign			0.171 (0.10) *				-0.282 (0.25)					-0.192 (0.27)
Owner			0.264 (0.13) *				0.205 (0.37)					0.475 (0.44)
Public			-0.070 (0.07)				0.564 (0.13)**					-0.188 (0.24)
Recognised union			0.210 (0.08)**				0.328 (0.16)**					0.067 (0.23)
Takeup 10-24%			0.176 (0.09)*				0.242 (0.15)					-0.168 (0.29)
Take up 25%+			0.254 (0.12)**				0.440 (0.19)**					0.405 (0.26)
High fem PT			-0.080 (0.07)				-0.332 (0.12)**					-0.375 (0.30)
% females			-0.396 (0.13)**				0.628 (0.26)**					-1.107 (0.49)**
High Commit Management			0.002 (0.04)				-0.101 (0.09)					-0.024 (0.15)
Employee involved			0.009 (0.01)				-0.022 (0.03)					-0.045 (0.04)
Ethos			0.033 (0.07)				-0.045 (0.12)					-0.223 (0.21)
Investor in People			0.111 (0.06)*				0.179 (0.11)					0.168 (0.22)
Equal Opps medium			0.073 (0.13)				-0.371 (0.32)					0.175 (0.37)
Equal Opps high			0.000 (0.13)				-0.266 (0.31)					0.018 (0.35)
HR specialist at Estab			0.049 (0.07)				0.227 (0.12)*					0.493 (0.23)**
HR specialist at HO			0.089 (0.06)				0.017 (0.11)					-0.054 (0.20)
FF Costly			0.188 (0.08)**				-0.041 (0.14)					-0.099 (0.25)
Family Friend Worth it			0.083 (0.06)				0.132 (0.12)					0.013 (0.22)
Number of ff policies			0.025 (0.02)				-0.010 (0.80)					0.072 (0.06)
Constant	-2.653 (0.32)**		-3.240 (0.40)**			-6.091 (0.47)**	-6.353 (0.71)**			-10.941(1.33)**		-10.123(1.54)**
N	17019		15983			11796	9509			4720		4418
Loglikelihood	-7471.9		-6992.3			-5227.3	-3381.9			-997.6		-913.6
Sigma_u	0.620 (0.03)		0.557 (0.03)			1.015 (0.06)	0.897 (0.05)			1.016 (0.11)		0.815 (0.11)
rho	0.104 (0.00)		0.086 (0.00)			0.239 (0.01)	0.197 (0.01)			0.239 (0.01)		0.168 (0.01)

** /* significant at 95/90% confidence levels.

Table 4 continued Likelihood of agreement between employer and employee responses about family-friendly policies, given employer says has a policy.

Explanatory variables	Child care Employee characteristics		Child care Employee + employer characteristic		Emergencies Employee characteristics		Emergencies Employee + employer characteristic		Flexitime Employee characteristics		Flexitime Employee + employer characteristic	
	Coeff.	S.E	Coeff.	S.E	Coeff.	S.E	Coeff.	S.E	Coeff.	S.E	Coeff.	S.E
Employee characteristics												
Age	-0.173 (0.07)**		-0.160(0.07)**		-0.002 (0.02)		0.002 (0.02)		0.047 (0.03)		0.054 (0.04)	
Female	0.827 (0.19)**		0.838(0.20)**		-0.039 (0.05)		0.039 (0.06)		-0.089 (0.09)		-0.077 (0.09)	
Single	0.215 (0.86)		0.237(0.87)		-0.373 (0.22)*		-0.434 (0.23)*		0.044 (0.36)		0.026 (0.94)	
Separated/div	0.435 (0.86)		0.379(0.82)		-0.373 (0.22)		-0.463 (0.23)**		-0.006 (0.36)		-0.061 (0.38)	
Married	0.162 (0.84)		0.175(0.84)		-0.230 (0.21)		-0.306 (0.22)		-0.001 (0.34)		-0.032 (0.36)	
Child 0-4	0.589 (0.22)**		0.608(0.23)**		0.244 (0.08)**		0.187 (0.08)**		0.194 (0.12)		0.164 (0.12)	
Child 5-11	0.010 (0.22)		-0.025(0.22)		0.092 (0.07)		0.097 (0.07)		0.038 (0.11)		0.029 (0.11)	
No kids	-0.231 (0.21)		-0.227(0.22)		0.094 (0.07)		0.048 (0.07)		-0.027 (0.11)		-0.038 (0.11)	
Degree	-0.071 (0.19)		-0.143(0.19)		-0.289 (0.06)**		-0.210 (0.07)**		-0.086 (0.09)		-0.121 (0.10)	
Poorhealth	-0.489 (0.32)		-0.448(0.32)		0.093 (0.10)		0.104 (0.11)		-0.057 (0.15)		-0.060 (0.16)	
Ethnic	-0.061 (0.35)		0.025(0.35)		0.039 (0.12)		-0.000 (0.12)		0.259 (0.18)		0.282 (0.19)	
Job associate man/prof/tech	3.291 (0.29)**		3.208(0.29)**		-0.005 (0.08)		-0.027 (0.08)		3.733 (0.13)**		3.755 (0.14)**	
Job clerical/secretarial	3.480 (0.30)**		3.338(0.31)**		-0.089 (0.07)		-0.111 (0.08)		3.997 (0.13)**		3.943 (0.13)**	
Job craft/skilled	2.147 (0.45)**		1.961(0.46)**		0.443 (0.11)**		0.358 (0.12)**		1.630 (0.18)**		1.702 (0.19)**	
Job personal services+sales	2.643 (0.38)**		2.821(0.41)**		0.112 (0.08)		0.193 (0.08)**		1.992 (0.15)**		1.937 (0.16)**	
Temporary	-0.036 (0.38)		0.095 (0.38)		-0.034 (0.12)		-0.014 (0.12)		0.261 (0.20)		0.332 (0.21)	
Part time	-0.428 (0.23)*		-0.413 (0.24)*		-0.305 (0.07)**		-0.288 (0.07)**		-0.481 (0.12)**		-0.427 (0.12)**	
High discretin	0.048 (0.30)		0.131 (0.33)		-0.052 (0.07)		-0.030 (0.08)		-0.144 (0.15)		-0.094 (0.16)	
Training	-0.024 (0.17)		-0.068 (0.18)		-0.138 (0.05)**		-0.136 (0.06)**		0.152 (0.08)*		0.181 (0.08)**	
Job tenure 1-2 yrs	-0.121 (0.28)		-0.114 (0.28)		0.071 (0.09)		0.096 (0.09)		-0.024 (0.14)		-0.034 (0.14)	
Job tenure 2-5 yrs	0.116 (0.24)		0.074 (0.25)		0.059 (0.08)		0.066 (0.07)		0.106 (0.12)		0.078 (0.12)	
Job tenure 5+	0.178 (0.24)		0.158 (0.25)		0.072 (0.07)		0.076 (0.08)		0.240 (0.04)**		0.210 (0.12) *	
Good comm-unication	0.064 (0.02)**		0.069 (0.02)**		-0.034 (0.01)**		-0.030 (0.01)**		0.038 (0.01)**		0.035 (0.01)**	
Works hard	0.044 (0.09)		0.033 (0.09)		0.030 (0.03)		0.014 (0.03)		0.211 (0.05)**		0.207 (0.05)**	
Annual earn	-0.014 (0.01)		-0.017 (0.02)		-0.014 (0.00)**		-0.020 (0.00)**		-0.083 (0.01)**		-0.085 (0.01)**	
Union member	0.299 (0.17)*		0.336 (0.18)*		0.114 (0.05)**		0.117 (0.06)*		-0.010 (0.08)		-0.011 (0.09)	
Represented	0.031 (0.24)		0.102 (0.24)		-0.086 (0.07)		-0.131 (0.08)		-0.004 (0.12)		-0.066 (0.13)	
Thinks employer FF	0.232 (0.14)		0.283 (0.15)*		-0.024 (0.05)		-0.034 (0.05)		0.502 (0.08)**		0.512 (0.08)**	

** /* significant at 95/90% confidence levels.

Explanatory variables	Child care Employee characteristics		Child care Employee + employer characteristic		Emergencies Employee characteristics		Emergencies Employee + employer characteristic		Flexitime Employee characteristics		Flexitime Employee + employer characteristic	
	Coeff.	S.E	Coeff.	S.E	Coeff.	S.E	Coeff.	S.E	Coeff.	S.E	Coeff.	S.E
Employer characteristics												
Org up to 500			-0.077 (0.48)				-0.015 (0.11)					0.088 (0.25)
Org 501-2000			-0.629 (0.45)				0.179 (0.10)*					0.703 (0.24)**
Org 2001-10k			-0.725 (0.53)				0.057 (0.12)					0.970 (0.26)**
Org 50k+			-1.074 (0.60)*				0.143 (0.11)					0.972 (0.26)**
Estab 25-49			-1.718(0.86)**				0.107 (0.13)					0.191 (0.31)
Estab 50-99			0.072 (0.77)				0.052 (0.13)					-0.105 (0.30)
Estab 100-199			0.358 (0.76)				0.198 (0.14)					0.513 (0.30) *
Estab 200-499			0.379 (0.71)				0.277 (0.14)*					0.190 (0.31)
Estab 500+			0.712 (0.75)				0.283 (0.16)*					-0.314 (0.32)
Foreign			-0.019 (0.47)				0.171 (0.13)					0.435 (0.27)
Owner			0.223 (0.88)				0.228 (0.12)*					0.653 (0.34)*
Public			0.113 (0.36)				0.047 (0.09)					0.295 (0.16) *
Recognised union			0.014 (0.38)				0.091 (0.09)					0.011 (0.21)
Take up 10-25%			0.875(0.38)**				-0.191 (0.12)					-0.249 (0.21)
Take up 25%+			0.922(0.38)**				-0.120 (0.15)					0.079 (0.25)
High fem PT			-0.153 (0.35)				-0.194 (0.08)**					-0.516 (0.16)**
% females			0.004 (0.67)				-0.379 (0.15)**					0.120 (0.32)
High Commit Management			0.153 (0.24)				0.061 (0.05)					0.164 (0.11)
Employee involved			-0.036 (0.06)				-0.009 (0.02)					0.047 (0.03)
Ethos			0.374 (0.28)				-0.015 (0.08)					0.029 (0.15)
Investor in People			0.029 (0.27)				0.113 (0.07)					0.174 (0.14)
Equal Opps medium			0.097 (1.02)				-0.176 (0.12)					-0.082 (0.32)
Equal Opps high			-0.078 (1.00)				-0.325 (0.12)**					-0.173 (0.31)
HR specialist at Estab			0.403 (0.32)				-0.126 (0.08)					-0.576 (0.16)**
HR specialist at HO			0.209 (0.27)				0.191 (0.08)**					-0.048 (0.14)
FF Costly			0.573(0.29)**				-0.091 (0.10)					0.176 (0.19)
Family Friend Worth it			-0.222 (0.31)				-0.091 (0.07)					0.006 (0.15)
Number of ff policies			-0.096 (0.08))				0.018 (0.02)					-0.028 (0.05)
Constant	-5.954 (1.07)**		-5.536(1.82)**		1.381 (0.28)**		1.734 (0.38)**		-3.280 (0.47)**			-4.092 (0.73)**
N	3290		3091		9389		8788		7691			7181
Loglikelihood	-868.8		-800.5		-5985.3		-5564.2		-3062.9			-2813.7
Sigma_u	1.565 (0.16)		1.284 (0.14)		0.589 (0.04)		0.508 (0.04)		1.172 (0.06)			1.071 (0.06)
rho	0.427 (0.01)		0.334 (0.01)		0.095 (0.00)		0.073 (0.00)		0.294 (0.01)			0.258 (0.01)

** /* significant at 95/90% confidence levels.

Of the various hypotheses put forward, those relating to individual characteristics and incentives are by far the best supported from these results.

Diagnostics

The diagnostic statistics associated with each model are displayed in Table 5. The likelihood ratio tests are significant in all cases, as were all rho values (Table 4) confirming that random effects were significant and present in all of the models. The likelihood ratios were all very large, compared to a model without random effects suggesting that the random effects models were a huge improvement over models without random effects. These results all show that there is evidence of unobserved variations between workplaces that influence the extent to which their employees are aware of the entitlements and availability of flexible working arrangements. These unobserved effects could be related to workplace cultures, unobserved policies and ethos or to workplaces tending to employ workers with common (but unobserved) characteristics. We are unable to disentangle these unobserved effects any further.

Table 5. Results of log likelihood and likelihood ratio tests

Type of arrangement		Constant only model	Individual characteristics only model	Individual + workplace characteristics
Parental leave	-2 x loglikelihood	19716.6	14943.8	13984.6
	Likelihood ratio test rho=0: chibar2(01) (p)	548.82 (0.00)	218.84 (0.00)	150.89 (0.00)
Job share	-2 x loglikelihood	10454.6	7285.8	6763.8
	Likelihood ratio test rho=0: chibar2(01) (p)	928.23 (0.00)	384.7 (0.00)	259.07 (0.00)
Homework	-2 x loglikelihood	2961	1995.2	1827.4
	Likelihood ratio test rho=0: chibar2(01) (p)	148.66 (0.00)	74.65 (0.00)	33.22 (0.00)
Child care	-2 x loglikelihood	2410	1737.6	1601
	Likelihood ratio test rho=0: chibar2(01) (p)	250.52 (0.00)	201.26 (0.00)	123.16 (0.00)
Emergencies leave	-2 x loglikelihood	14359.8	11970.6	11128.4
	Likelihood ratio test rho=0: chibar2(01) (p)	355.91 (0.00)	182.75 (0.00)	112.12 (0.00)
Flexitime	-2 x loglikelihood	10502	6125.8	5627.4
	Likelihood ratio test rho=0: chibar2(01) (p)	1046.39 (0.00)	526.68 (0.00)	383.45 (0.00)

The decline in the likelihood ratio test is far greater between the constant-only model and the individual characteristics model compared with the fall in ratio between the latter two stages, with the exception of child care. This suggests that, in most cases, the individual's characteristics played the largest part in determining employees' correct awareness of employers' policies, greater than workplace characteristics. However, workplace characteristics did play a role in explaining the variation. In the case of child care, workplace characteristics played the greater role in determining whether employees were (correctly) aware of their employer's provision of child care. That child care

stands out from the others is perhaps not surprising, given this policy had the largest overall level of agreement and it is relatively rare to have this provision.

Correct awareness where there is no policy

We also estimated, using the same methods and approach, a set of models for the conditional probability of the employee agreeing that the employer did not offer this provision, given that the employer also said there was no provision. We do not present all of the results due to space constraints but there are some summary points worth making about this alternative set of results. The same effects were visible in the agree-no-policy results as were found in the agree-has policy results. Specifically, random effects models were to be preferred, random effects were all significant, and the individual characteristics were more important in explaining the awareness differences than the workplace characteristics although workplace characteristics still explained some of the variation. Both sets of results were subject to influence from the fact that employers may select employees from work groups that overlap with their organizations' policy provisions (or lack of them).

8. Conclusions

This examination of employee's awareness of their employers' policies has some interesting implications. Modern human resources policies and strategies often start out from the premise that they can communicate with employees and influence their behaviour and motivation. These results confirm that it is possible for human resource strategies to be successful in informing employees about workplace policies. However, the results also suggest that the main influences on awareness derive from the workers themselves and their characteristics. By comparison with individuals' characteristics, workplace strategies, as measured directly in our data, were far less important as determinants of employee awareness. The implications of these results for practitioners who would like more leavers to

pull might appear relatively limited therefore. However, we need to remember that a few of the variables classified here as individual characteristics have links to employers' policies and strategies. Significant effects on employees' levels of awareness and agreement were noted when they felt their employer had good communication with employees or had a family-friendly ethos. There would appear to be implications here for human resource specialists. Unfortunately, this study does not offer clear guidance on how to generate these views in employees. The evidence for there being unobservable workplace effects is a further result that does not hold out immediate policy implications for business. While we can guess at what these unobservables may be, we cannot be sure. However, these and earlier results do point to cultural factors in workplaces as having an effect that is worth further investigation.

According to our findings from these British data, it is also worth noting that unions, either through being recognised in the workplace or through informing individual members, where they had an effect, have tended to assist in the awareness and communication process. Moreover the positive effect on communication of unions was more systematic than that of having an HR specialist in the workplace. There is no evidence here of the stereotyped dichotomy and opposition between unions and high commitment HR management practices.

Another important aspect of these results and worthy of note is the differences between the specific working arrangements in the significant determinants of employee awareness. The main point to learn from this is that we should not be tempted to draw too many conclusions from the analysis of any one arrangement or policy as there is often a temptation to do. As well as it being the case that companies are likely to adopt particular types of flexible arrangements that suit them and their workforce, it appears to be the case that the communication strategies for informing employees about these policies also vary and their type and in their success rates.

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Appendix Table A1. WERS Variable Definitions

Variable	Mean	SD	Definition and WERS source variable
<i>Employers' Family-friendly practice variables:</i>			
Parental leave	0.434	0.496	Entitlement to non-managerial employees of parental leave 0/1 (ifamily1-80)
homework	0.182	0.386	Entitlement to non-managerial employees of working at or from home in normal working hours 0/1 (ifamily1-8)
jobshare	0.389	0.488	Entitlement to non-managerial employees of job sharing schemes 0/1 (ifamily1-8)
nursery	0.079	0.27	Entitlement to non-managerial employees of workplace nursery or nursery linked with workplace 0/1 (ifamily1-8)
childcare	0.068	0.251	Entitlement to non-managerial employees of financial help/subsidy to parents for child care 0/1 (ifamily1-8)
flexitime	0.272	0.445	Employer has flexitime for some non-managerial employees 0/1 (jtimear1-8)
Emergency leave	0.402	0.49	If employee has need to take time off at short notice, there is special leave or leave without pay to cover this 0/1, (ifmoff)
Number of policies	2.857	1.972	Number of family-friendly policies, up to 9.
Costly	0.109	0.311	Entitlement to family-friendly policy has meant substantial or moderate additional costs answered if non-managerial employees have taken any entitlement. 0/1 (icosts)
Worth it	0.481	0.5	Entitlement to family-friendly policies has been cost effective answered if non-managerial employees have taken any entitlement 0/1. (iworthit)
Take up 1	0.077	0.266	Proportion of non-managerial employees taken up entitlement during the last 12 months, up to one quarter of the workforce (ifamprop)
Take up 2	0.050	0.218	Proportion of non-managerial employees taken up entitlement during the last 12 months, one quarter or more of the workforce (ifamprop)
<i>Structural and performance variables</i>			
Estab 0-24	0.12	0.325	Reference group. Establishment size 0-24 employees, (Zallemps)
Estab 25-49	0.181	0.385	Establishment size 23-49 employees, 0/1 (Zallemps)
Estab 50-99	0.179	0.384	Establishment size 50-99 employees 0/1 (Zallemps)
Estab 100-199	0.177	0.381	Establishment size ≥100 employees and less than 199, 0/1 (Zallemps)
Estab 200-499	0.208	0.406	Establishment size ≥200 employees and less than 499, 0/1 (Zallemps)
Estab 500plus	0.136	0.342	Establishment size ≥500 employees 0/1 (Zallemps)
Org 10-499	0.351	0.477	Reference group. size of organisation 10-499 employees, (Auktot)
Org 500-1999	0.144	0.351	size of organisation 500-1999 employees, 0/1 (Auktot)
Org 2k-9999	0.211	0.408	size of organisation 2000-9999 employees, 0/1 (Auktot)
Org 10k-49999	0.15	0.357	size of organisation 10000-49999 employees, 0/1 (Auktot)
Org 50k+	0.144	0.351	size of organisation 50000 + employees, 0/1 (Auktot)
public	0.309	0.462	Public sector organisation 0/1 (astatus)
foreign	0.103	0.304	foreign controlled: If private sector – foreign owned/controlled <u>or</u> predominantly foreign owned (51% or more) 0/1 (astatus and acontrol)
owner	0.129	0.335	owner controlled: If private sector but not PLC, and single individual or family have controlling interest over the company (i.e. at least 50 percent ownership) 0/1 (astatus and acontrol)
Recognised union	0.559	0.497	union recognised by management for negotiating pay and conditions for any section of the workforce in the establishment, (erecog01-10) and has employees as members (Eanyemp), 0/1

<i>HR practice and workforce variables</i>			
Ethos	0.186	0.389	Manager thinks it is up to individual employees to balance work/family responsibilities: strongly agrees or agrees = 1/0 (aphras04)
IiP award	0.335	0.472	workplace/organisation accredited as an Investor in People 0/1 (baward)
HR specialist at establish	0.377	0.485	HR specialist at establishment, 0/1. (brelate)
HR specialist at HO	0.535	0.499	HR specialist at Head office (if multi-site) 0/1 (bsepar)
Consults on FF and EO	0.425	0.495	Whether workplace consultation committee discusses welfare services and facilities (eg. child care) or equal opportunities, 0/1 (dwhich01 to dwhich12)
Employee involvement	12.89	2.361	Scale from aggregation of 4 manager attitude questions scored on 5 point scale strongly agree to strongly disagree. Those at the top are best placed to make decisions (aphras05) We do not introduce any changes here without first discussing the implications with employees (aphras08) Most decisions at this workplace are made without consulting employees (aphras10) We frequently ask employees at our workplace to help us in ways not specified in their job (aphras01)
No Equal Opps	0.142	0.35	Reference group No equal opportunity policy – (ipolicy, iwwhynt1-7) Workplace (or organisation of which it is a part of) does <u>not</u> have a formal written policy on equal opportunities or managing diversity excluding those establishments which have a policy but have not written it down <u>or</u> who aim at being an equal opportunities employer.
Equal Opps medium	0.340	0.474	Workplace has a formal written policy on equal opportunities or managing diversity <u>or</u> workplace has a policy but not written it down No further action taken. 0/1 (ipolicy, iwwhynt1-7, ipract1-7)
Equal Opps high	0.514	0.5	Workplace has a formal written policy on equal opportunities or managing diversity <u>or</u> workplace has a policy but not written it down <u>and</u> one of following done by workplace or applies to workplace: Collect statistics on posts held by men and women Monitor promotions by gender, ethnicity etc. Review selection and other procedures to identify indirect discrimination Review the relative pay rates of different groups 0/1, (ipolicy, iwwhynt1-7, ipract1-7)
% female employees	0.498	0.284	Proportion of female to total employees in establishment (zfemfull+zfemprt/zallemps)
High female part time	0.376	0.485	Percent of part time in female workforce > %. (Zfemprt/zfemfull+zfemprt)
Discretion high	0.215	0.411	To what extent do employees in largest occupational group have discretion over how they do their work. Answer = a lot 0/1 (cdiscret)

<i>High Commitment Management Practices – Factor Analysis variables</i>			
			High Commitment Management Practices – first factor eigenvalue>1. Factor score. Variables included, dummy variables 0/1
teams	0.743	0.437	≥ 40% of employees (in largest occupational group) working in formally designated teams
briefing	0.894	0.308	System of briefing for any section or sections of the workforce
committee	0.328	0.469	At least one committee of managers and employers at workplace primarily concerned with consultation rather than negotiation <u>and</u> committee is very/fairly influential on management's decisions affecting the workforce
qualcirc	0.477	0.5	Groups at workplace that solve specific problems or discuss aspects of performance or quality

survey	0.482	0.5	Management conducted a formal survey of employees' views or opinions during the past five years
			Other ways in which management communicates or consults with employees at establishment:
othcons1	0.388	0.487	Regular meetings with entire workforce present
othcons2	0.686	0.464	Systematic use of management chain/cascading of information
othcons3	0.286	0.452	Suggestion schemes
othcons4	0.636	0.481	Regular newsletters distributed to all employees
manviews	0.234	0.661	Management's general attitude towards trade union membership among employees at establishment – scaled variable, -1 not in favour of it, 0 neutral, 1 in favour of it
N	2191		

	<i>Mean</i>	<i>SD</i>	<i>Employee questionnaire variables</i>
Good manager scale	0	0.959	composite scale normalised (5 items – scale 1, very good, to 5, very poor): (B8) How good managers at this establishment are at the following: - 'Keeping everyone up to date about proposed changes' - 'Providing everyone with the chance to comment on proposed changes' - 'Responding to suggestions from employees' - 'Dealing with work problems you or others may have' - 'Treating employees fairly'
Job is hard work	0.773	0.419	Strongly agrees or agrees with statement. 0/1 'My job requires that I work very hard' (A8a)
Annual pay	16.17	8.708	How much pay received in current job (12 categories recoded and transformed to mid-point annual pay in thousands)
age	4.34	1.41	mid point categorical variable /10.
female	0.51	0.49	gender dummy variable – 1, female 0, male
Poor health	0.05	0.23	Has a long-standing health problem or disability which limits what work can do, 0/1 (D7)
Ethnic minority	0.05	0.21	Belongs to a non-white group on list of 8 (D8)
Single	0.22	0.41	single 0/1 (D4)
Widowed/separated/divorced			Reference group. Either widowed, separated or divorced. (D4)
Married or cohab	0.69	0.46	living with spouse or partner 0/1 (D4)
Child 0-4	0.14	0.34	respondent has any children aged 0 to 4 years 0/1 (D3)
Child 5-11	0.19	0.39	respondent has any children aged 5 to 11 years 0/1 (D3)
Child 12-18	0.20	0.40	respondent has any children aged 12 to 18 years 0/1 (D3)
Nokids			Reference group. respondent has no children 0/1
Degree	0.25	0.44	respondent's highest educational qualification is a degree or postgraduate degree or equivalent 0/1 (D5)
Training	0.63	0.48	During the last 12 months employee has had 5 or more days training paid for or organised by employer, 0/1 (B2)
Part time hours	0.20	0.39	Usually works less than 30 hours per week (A3)
Temp or fixed term	0.07	0.26	Job is temporary or fixed term, 0/1 (A2)
Discretion	0.47	0.49	Has a lot of influence over 'How you do your work' 0/1 (A9c)
Job Tenure			Reference group. Years in total at this workplace less than 1. 0/1 (A1)
Job tenure 1-2 years	0.12	0.33	Years in total at this workplace 1- less than 2. (A1)
Job tenure 2-5 years	0.23	0.42	Years in total at this workplace 2- less than 5. (A1)
Job tenure 5+	0.48	0.49	Years in total at this workplace more than 5. (A1)

years			
Job associate professional/technical	0.10	0.15	Associate professional and technical employee (reference category) 0/1 (D9)
Job clerical/secretarial	0.21	0.40	Clerical or secretarial employee 0/1 (D9)
Job craft/skilled	0.08	0.27	Craft or skilled service employee 0/1 (D9)
Job personal services+sales	0.15	0.35	Personal and protective service or Sales 0/1 (D9)
Job unskilled/operative	0.18	0.30	Reference group 0/1 Operative assembly or other occupations (D9)
Ethos	0.53	0.49	Strongly agree or agree with statement. Managers here are understanding about employees having to meet family responsibilities. 0/1 (B5b)
Good communication	11.33	3.86	Composite scale (1 to 20) constructed from 5 replies – 1, never to 4, frequently): (B7) How often asked by managers for views on workplace issues? <ul style="list-style-type: none"> - Future plans for the workplace - Staffing issues, including redundancy - Changes to work practices - Pay issues - Health and safety at work
Union member	0.40	0.49	Is a member of a trade union or staff association 0/1 (C1)
Represented	0.10	0.31	representation at work – member of a trade union or staff association <u>and</u> frequently in contact with worker representatives 0/1 (C3)
Parental	0.28	0.45	If you personally needed parental leave would it be available at this workplace? 0/1 (B3)
Job share	0.18	0.38	If you personally needed job share would it be available at this workplace? 0/1 (B3)
Working at of from home	0.11	0.32	If you personally needed to work at or from home would it be available at this workplace? 0/1 (B3)
Flexitime	0.34	0.47	If you personally needed flexible working hours (flexitime) would it be available at this workplace? 0/1 (B3)
Nursery or Child care	0.04	0.19	If you personally needed a workplace nursery or help with the cost of childcare would it be available at this workplace? 0/1 (B3)
Emergency leave	0.64	0.48	If you needed to take a day off work at short notice for example, to look after a sick family member, how would you usually do it? Use paid leave =1/0 (B4)
N	28215		

Notes

¹ A large-scale employer survey in 1996, (Forth et al, 1997; Callendar et al, 1997), found one quarter of the mothers returning after maternity leave reported that flexitime was available to them and one fifth of them had made use of it since the birth of their children. By contrast, only 12 per cent of fathers had used this provision. The same survey noted that the convenience of working from home

was available to just over one tenth of the mothers with 8 per cent reporting that they had worked from home at some time since their child was born. The proportion of fathers who had used this arrangement was about the same as for mothers. Large private establishments were more generous in allowing working from home than the public sector. This privilege was available to 48 per cent of managers but only 4 per cent of women in protective and personal services. Similarly, men in higher grades were far more likely to be able to work at home than ordinary operatives or men working in personal and protective services. Felstead et al's (2000) analysis of homeworking in the Labour Force Survey found that homeworkers were more likely to be low paid, especially if women, female, especially if non-manual, and women with children. They were less likely to be ethnic minorities except if they were women when they were more likely to be homeworkers. Job sharing, which usually involves splitting a full-time job between two people, was available to only one quarter of mothers and used by less than one in ten (Forth et al).

² We became aware of the paper by Budd and Mumford (Dec 2001) in January 2002 after completing a first draft of this paper, to find we had been working on similar questions without being aware of each other's work. We have revised this paper to incorporate some reference to this other work, although it uses different dependent variable definitions in some cases, and a substantially different independent variable set, albeit with some overlaps.

³ The precise results overlap with those of Budd and Mumford where the variables coincide, for example in the proportion of female employees but also differed for some independent variables in some specific policies eg effects of establishment size (measured in different ways by Dex and Smith and Budd and Mumford) on homeworking and of being a union member on flexitime and childcare.

⁴ Instead Budd and Mumford prefer to draw attention to variables that had an effect across a range of flexible arrangements.

⁵ The EU data reported in Evans (2001) are from the Second European Survey of Working Conditions and consist of logit models for sick child leave, maternity leave, parental leave and child day care. Unfortunately, the significance levels of the coefficients are not reported. It is difficult, therefore to draw specific comparisons with our data. We can only summarise the main conclusions reported by Evans (2001).

⁶ Reliable sources of information about the dissemination of family-friendly practices are scarce and incomplete. The Labour Force Survey is the most long-standing collection of national information on the use of non-standard working time. The Workplace Industrial Relations Survey (WIRS), (Casey et al, 1997) is confined to the use of flexible working. The Maternity Rights Survey (Callender et al, 1997) provides the basic population sample of mothers and fathers after childbirth in Forth et al (1997). The National Child Development Study (NCDS) has limited information of parental working hours and their impact on family responsibilities (Ferri and Smith, 1996). In addition, The Workplace Employee Relations Survey (WERS),(Cully et al,1998) has some information on access to family-friendly arrangements but not on use, while the British Social Attitudes Survey (BSAS), provides useful material about the gap between access and use (Thomson, 1996). Other surveys of employers, such as Equal Opportunities Review (1995), Incomes Data Services (1995) and CBI (1998) provide differing results from employees' surveys.

⁷ Certainly more detail on this topic is provided in the more recent baseline work-life balance survey (Hogarth et al, 2000) but occurring after the WERS survey data were collected.

⁸ In the case of working at or from home, a separate question about usage of home workers in the establishment was asked later in the WERS questionnaire. In the total sample, 43 per cent of establishments claimed to have some employees working at home some of the time, but for 39 per cent, the reply was 'hardly any' or 'a small proportion' of their employees used this arrangement. Only 4 per cent of the whole sample allowed one tenth or more of their staff to ever work at home during

normal working hours. As indicated above, the percentage of WERS establishments claiming to use home workers was higher, at 43 per cent, than the percentage of establishments saying that some non-managerial employees had an entitlement to work at or from home, at 18 per cent. The gap is likely to be due to the fact that managerial employees are included in the 43 per cent whereas they are not in the 18 per cent. These figures suggest that usage or take up of home working by British establishments who allow this practice is very small and that entitlement is greater for managerial employees than for non-managerial employees.

⁹ There is plenty of anecdotal evidence from case studies that organizations fail to keep records about some of the basic data on absence and reasons for absence that underpins some of these provisions. In the authors own recent empirical work among a range of small (over 30 in total) and larger (approximately 10 in total) companies, none kept the sort of individual records that would be required to measure take up accurately. IPD (2000) also supports this impression. When asked in the first Pilot to the WERS survey whether any of the 135 establishments had attempted to measure the costs of their policies, hardly any had made such attempts. Again basic record keeping is the precondition for being able to calculate the costs of the policies. The question was then dropped from the survey, presumably because too few positive responses would have been collected to make it worth keeping.