

**Can a gift-exchange model explain a potential link between employees being able
to work flexibly and organizational performance?**

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Abstract

The present study investigates the links between flexible working, organizational commitment and performance-related outcomes (labour productivity, product or service quality, absenteeism and labour turnover). The focus is on working arrangements that allow employees to exercise their preferences with regards to when and where they work, i.e. the ability to work: flexible hours (flexitime), from home during working hours, the same hours across fewer days (compressed working week), reduced hours (e.g. switch from full-time to part-time work). Employee and workplace data from the Workplace Employment Survey of 2004, which is a representative sample of British workplaces with five or more employees, are used. Both the provision of a flexible working arrangement and the perception of access are analyzed. Results suggest different impacts. Employees' perceptions of being able to work flexitime, from home or compressed weeks are positively associated with workforce commitment, but only the latter is positively related to labour productivity and quality. This link with quality is mediated by workforce commitment, as expected in a gift-exchange context. Having a policy that allows employees to work from home during working hours is directly linked to workforce commitment and labour productivity, the latter association, however, is not mediated by workforce commitment. Allowing employees flexibility of working hours and a compressed week may lead to higher product or service quality, but may not increase commitment. Overall, a policy of allowing work from home appears to be the most attractive arrangement for the employer, as it is positively associated with workforce commitment and may have positive direct and indirect effects on organizational performance.

Introduction

In the UK, the benefits of flexible working have been widely advocated and are reflected on the government's social policy during the last decade. Parents of young or disabled children gained the legal right to request flexible working in 2003 and this has since been extended to carers (2007) and further extended to parents of children under 18 (2009). In all, recent British legislation has supported employees with family responsibilities and was aimed at retaining carers in the workplace. Yet, beyond this family-friendly approach, there is a more general win-win argument, which proposes that flexible working arrangements are beneficial for employers and employees, and consequently should be made available to all employees or be part of the employment package in order to attract and retain skilled labour (Capelli, 2000; Foster, Thompson and Aspinwall, 2009; Kossek and Lee 2008). Not surprisingly, data from the Workplace and Employment Relations Series (WERS) suggest an overall increase in the offering of flexible working options to employees in Britain (Kersley, Alpin, Forth, Bryson, Bewley, Dix & Oxenbridge, 2006; Nadeem & Metcalf, 2007), and Ortega (2009) concluded that flexible working options were being introduced in Europe due to managements' concern with performance.

Yet a systematic review of the academic research (de Menezes and Kelliher, 2009) showed that a clear link between flexible working arrangements and organizational performance is yet to be established. In fact, a large empirical study of firms in the UK, France, Germany and the USA (Bloom & Van Reenen, 2006) concluded that there was no direct link between flexible working practices and firm performance, but that such practices were popular with employees and were not expensive for the organizations. Moreover, a study on family-friendly management in

the UK that focused on a measure that encompassed flexible working options, but emphasized childcare provision (Wood and de Menezes, 2010), found no direct association between family-friendly management and organizational performance. Nonetheless, a positive association between their family-friendly measure and workforce commitment was established; and the links between workforce commitment and two performance outcomes (productivity and quality) was found to be moderated by the level of family-friendly management. In workplaces with high levels of family-friendly management, organizational commitment was higher, but also family-friendly management strengthened the association between higher levels of commitment and greater productivity and quality. These results suggested that family-friendly policies, inclusive flexible working arrangements, signalled to the employees their organizations' concern for them which they reciprocated by becoming more committed.

In a similar vein, Konrad and Mangel (2000) used Akerlof's (1982) gift exchange model to describe the link between work-life programmes and performance. The labour contract was interpreted as a partial gift exchange, which was based on the notion that workers develop a sentiment for the firm so that they may reciprocate the firm's flexibility by performing above normal standards. According to this interpretation, employers may be willing to provide additional benefits because of the potential effect of the terms of exchange on the traditional norms. Such reciprocity, as discussed by Konrad and Mangel (2000), implies that there may be an indirect link between flexible working arrangements and performance (in their case productivity) via workforce commitment.

A plethora of studies have linked employee commitment to organizational performance. More recently, Jafri (2010) showed that committed employees are more

innovative; Yee, Yeung and Chen (2010) observed that employee commitment is related to service quality, which in turn impacts customer satisfaction and customer loyalty, ultimately leading to firm profitability. In this context, the role that employee commitment plays in the link between human resource management practices and organizational performance is an empirical question of interest to both researchers and managers. The general expectation is that people management practices are linked to attitudinal outcomes that can impact on performance (e.g. Purcell and Kinnie, 2007). Nevertheless when we focus on flexible working arrangements, the mechanisms or mediators in the potential link with organizational performance are yet to be established (Casper et al., 2007; de Menezes and Kelliher, 2009) and until recently have been neglected by most of the literature on the performance impact of management practices in organizations.

The present study aims to address this gap by investigating the association between flexible working arrangements, workforce commitment and performance related measures at the workplace level. It uses employee and workplace data from the Workplace and Employment Relations Survey of 2004 (WERS2004), which is a large sample that covers workplaces across the economy. Both the provision of FWAs in the workplace and the employees' perceptions of access to these are analyzed. The focus is on working arrangements that allow employees to exercise their preferences with regards to when and where they work, i.e. the ability to: work flexible hours (flexitime), work from home, work the same hours across fewer days, reduce work hours (e.g. switch from full time to part time work).

In the subsequent sections, the background and hypotheses are set; the data and methodology are described, and results are reported. Finally, conclusions and implications for future research are drawn.

Background and Hypotheses

The association between employee commitment and performance has been subject of intense scrutiny and there is significant evidence in support of a positive relationship (e.g. Benkhoff, 1997; Van Steenbergen and Ellemers, 2009; Yee et *al.*, 2010). In addition, perceived organizational support has been found to have a strong and positive effect on organizational commitment; a moderate positive effect on employee performance; and a strong negative effect on intention to leave (Miller and Lee, 2001; Riggle, Edmondson and Hansen, 2009). Several authors have therefore advocated the provision of work-life balance options as a means of eliciting commitment from their workforce (e.g. Berg, Kalleberg and Appelbaum, 2003; Hunton and Norman, 2010; Konrad and Mangel, 2000; Osterman, 1995; Pierce and Newstrom, 1980) thus assuming it has the desired effect that the increased commitment in turn increases performance. In the human resource literature such prescriptions are based on the High Commitment (Wood and de Menezes, 1998) and High Involvement (Lawler, 1986) models, which predict that, through cultivating employee commitment rather than simply providing extrinsic pay rewards, work-life balance options will not only affect attitudinal outcomes (low absenteeism and labour turnover) but will also translate into positive organizational outcomes (high labour productivity, better financial performance, higher product or service quality).

Social exchange theory (Blau 1964) provides an alternative explanation. It describes the relationship between two parties on a continuum whose extremes are *economic exchange*, which is limited to quantifiable resources, and *social exchange* that are unspecified obligations left to the discretion of both parties (Cropanzano and Mitchell 2005). In this context, by offering employees choice over working arrangements, the employer may stimulate attitudes such as increased loyalty, effort, attendance and punctuality. Indeed, Kelliher and Anderson (2010) in a study of professional workers that worked flexibly identified that such workers were happier with their jobs though they worked more intensively. The authors proposed social exchange theory as an explanation for workers reciprocating effort for being able to work more flexibly. The basic idea is then that the opportunity to alter traditional working patterns in line with employee preferences may trigger positive sentiments towards the organization that may boost overall performance.

According to Konrad and Mangel (2000), the provision of flexible working would be perceived as a gift and thus employees would become more committed and prepared to put the additional effort that would lead to higher performance and quality. In this gift exchange context, it is hypothesized that:

H1. Flexible working arrangements are positively associated with commitment.

H2. Flexible working arrangements are positively associated with labour productivity and quality, and negatively associated with absenteeism and labour turnover.

H3. Workforce commitment is positively associated with organizational performance.

H4. Workforce commitment mediates the association between flexible working arrangements and performance related outcomes. That is, in addition to the previous

hypotheses, at least a part of this association between a working arrangement and a performance related outcome is due to its association with commitment.

Yet one may argue that as flexible working options are becoming more commonplace, “what constitutes a gift?” becomes a key question. It may be that only a perceived above average offering would trigger the desired positive sentiments on the workforce. Still, a positive association between workforce commitment and organizational performance is assumed, but rather than focusing on the provision of flexible working arrangements, the potential effects of their prevalence should be considered. In which case, the overall perception of access to a flexible working arrangement needs to be investigated in the chain towards performance.

The present study tests the above hypotheses using data on both the provision and perceptions of access to flexible working arrangements.

The Data

WERS2004 is the fifth in an ongoing series of nationally representative surveys of British workplaces (<http://www.wers2004.info/wers2004>) that is available via the Economic and Social Data Service (<http://www.esds.ac.uk>). It contains several instruments, of which most of the variables that are used in the present study are from the management survey and a few variables are obtained by linking with the employee survey.

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. Interviews were conducted with managers in a total of 2295 workplaces from an in-scope sample of 3587 addresses, representing a response

rate of 64 percent. 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. Establishments with fewer than five employees are also excluded. The sample was taken from the Inter Departmental Business Register, maintained by the Office of National Statistics.

The employee survey covers a sample of 22,451 employees, which correspond to a 61 per cent response rate. The data were collected via an eight-page, self-completion questionnaire distributed within workplaces where WERS surveyors had conducted the management interview. In workplace, the aim was to include up to 25 employees to complete the questionnaire. Employee questionnaires were distributed in 86 percent of the workplaces where the WERS surveyors had conducted the management interview.

The WERS2004 sample design departs from the simple random sampling that underpins most standard statistical procedures (e.g. correlation and regression analysis). As a result, if one wishes to obtain unbiased population estimates, the standard weights that are included in the two datasets are required in the analysis.

The Measures

In the management survey it was asked whether “the following working time arrangements were available for any employees at this workplace”: “working at or from home in normal working hours”, “ability to reduce working hours (e.g. switching from full-time to part-time employment)”, “flexitime (where an employee has no set start or finish time but an agreement to work a set number of hours per week or per month)”, “working compressed hours (e.g. a 9 day fortnight / 4 ½ day week)”. Consequently, the

provision of each flexible working arrangement at a workplace is measured as a binary variable that is equal to 1 if employees are entitled, and zero otherwise. The perception of access to each working arrangement is measured by the proportion of employees who, in the employee survey, responded that the arrangement was available to them.

Organizational commitment is measured by the average response to three items (Cronbach's $\alpha = 0.85$), which correspond to the concepts of affective and normative commitment (Allen and Meyer, 1990) and are coded on a five-point scale in the employee survey: "I share many values of my organisation", "I feel loyal to my organisation", "I am proud to tell people who I work for". The *level of commitment in a workplace* is therefore measured by the weighted average of this scale in each workplace.

The measures of *labour productivity* and *quality* rely on an assessment by the managerial respondent according to five-point scales that range from "a lot below average" to "a lot better than average". The performance related human resources outcomes included in WERS2004 are: *labour turnover*, which is measured as the proportion of employees who resigned from the establishment in the 12 months prior to the interview, and *absenteeism*, which is measured as the percentage of work days lost through employee sickness or absence in the workplace over the last 12 months. Given that these two measures have distributions that are skewed and long-tailed, a logarithmic transformation was applied and the data were also adjusted in the case of the few workplaces where it is equal to zero so that their information would not be lost by re-scaling the data.

The control variables are characteristics of the workplace that have been consistently linked to performance related outcomes: industry (12 dummy variables, construction sector

is the reference category), public sector, workplace size (logarithm of the number of employees).

The Statistical Analysis

Weighted regression models are estimated using Stata. These are ordered-logit regression models where the dependent variable is categorical (labour productivity, quality); otherwise, weighted least squares are used. The establishment weight that is provided in WERS2004 is the weighting variable. A few workplaces had less than three employee respondents and were identified as outliers, so they are excluded from the analysis.

The inclusion of variables that may reflect the greater likelihood of take up of the working arrangements by particular groups such as those with small children, women and professionals or might be associated with performance, as in previous studies (e.g. Konrad and Mangel, 2000; Lee, Mac Dermid and Buck, 2000), was also considered. However, the respective proportions in the workplaces were generally found to be insignificant and thus below the focus is on parsimonious models that allow for a larger coverage of workplaces. It is noteworthy that using variables from the employee survey reduces sample sizes, since the questionnaires were distributed to 86% of workplaces in the management survey and the response rate was 61%.

Results

The in sample non-parametric correlations between the provision of the four working arrangements range from 0.17 (reduced working hours and flexitime) to 0.30 (flexitime and home-working), thus suggesting a weak positive association in the provision of

flexible working arrangements. Similarly, there is a weak association between performance related outcomes, and labour turnover is unrelated to labour productivity. The stronger bivariate associations relate to workforce commitment, whose correlation coefficients with performance related outcome vary from -0.05 (with labour turnover) to 0.22 (with quality). Given these observations, we have no strong grounds to combine variables and large effects, as in most nationwide studies, are not expected in the results that follow.

On the association between flexible working arrangements and workforce commitment

We consider the link between the provision of flexible working arrangements and commitment, through regression models where the level of commitment is the dependent variable, the provision of a specific working arrangement is the independent and the controls are as specified above. The provision of flexitime (P-value= 0.08) and compressed work weeks (P-value=0.46) are unrelated to the level of commitment in the workplace. As shown in Table 1, being able to work from home (P-value= 0.00) is positively associated with the level of commitment in the workplace, but being able to work reduced hours (e.g. switch from full-time to part-time work) is negatively associated with workforce commitment. In consequence, hypotheses 1 and 3 are rejected for flexitime, compressed work weeks and reduced work hours. Hypothesis 1 is only supported in the case of being able to work from home.

By replacing the independent variable in the models by the proportion of employees who perceive that the flexible work arrangement is available to them, a stronger association with workforce commitment can be observed. As summarized in Table 1, the perceptions of access to flexitime (P-value=0.00), compressed work weeks

(P-value= 0.02) and work from home (P-value= 0.00) are positively associated with workforce commitment. The perception of being able to work reduced hours, however, is unrelated to workforce commitment (P-value = 0.06). Consequently, hypotheses 1 and 3 remain rejected in the case of reduced work hours and there is stronger support for hypothesis 1 in the case of being able to work from home.

Table 1

On the association between flexible working arrangements and performance-related outcomes

The provisions are unrelated to absenteeism and labour turnover. In regards to absenteeism, P-values are equal to 0.7(flexitime), 0.8 (compressed work weeks), 0.1 (work from home) and 0.45 (reduced hours). For labour turnover, P-values are: 0.64 (flexitime), 0.76 (compressed work weeks), 0.32 (work from home) and 0.25 (reduced work hours).

Being able to work from home is positively associated with labour productivity (P-value = 0.00, as shown in Table 2, column 2), but the availability of the three other working arrangements are unrelated to labour productivity (P-values: 0.15 (flexitime), 0.12 (compressed work week), 0.32 (reduced hours)). By contrast, as shown in the third and fourth columns of Table 2, the provision of flexitime (P-value = 0.02) and compressed work weeks (P-value= 0.00) are positively associated with quality. Being able to work from home (P-value= 0.29) or reduce work hours (P-value= 0.76) are unrelated to quality.

Table 2

These results offer no support for hypothesis 2, as far as desired human resources outcomes and the provision of flexible working arrangements are considered. There is indication that different flexible working arrangements may have distinct impacts on productivity and quality: being able to work from home may increase productivity, working flexitime or compressed weeks may be linked to higher quality. Overall there is little support for hypothesis 2, as far as the provisions of flexible working arrangements are considered.

When we replace the independent variable by the perception of access to the working arrangement, the lack of associations with both labour turnover and absenteeism remain, with the exception of a negative association between compressed work weeks and absenteeism (P-value= 0.02) that is observed. The perception of being able to work from home is positively associated with both productivity (P-value= 0.00) and quality (P-value= 0.01). The perceptions of access to the other three working arrangements are unrelated to these two outcomes and thus provide no support for hypothesis 2.

All in all, these results imply that being able to work from home is positively associated with productivity, but the prevalence of this working arrangement is what may affect quality.

On the association between workforce commitment and performance related outcomes As shown in Table 3, workforce commitment is positively associated with labour productivity (P-value= 0.001) and quality (P-value= 0.00), negatively associated with absenteeism (P-value= 0.007), but unrelated to labour turnover (P-value= 0.89).

Consequently, there is significant support for hypothesis 3, which is the underlying assumption of the gift exchange model. Nonetheless this hypothesis is not supported by labour turnover, which may be surprising as retention is a common argument for flexible working policies.

Table 3

On the potential mediation of workforce commitment

Following the little support for hypothesis 2, let us first consider the association between working from home and labour productivity, which is supported by both measures and a positive link with workforce commitment was also established. When workforce commitment is added to the model that is summarized in the second column of Table 2, it can be observed that both independent variables - workforce commitment (P-value= 0.01) and being able to work from home (P-value= 0.01) - are positively associated with productivity ($F(15, 1524) = 4.04, \text{Prob} >F = 0.00$). Hence, the indirect effect via workforce commitment is not significant and there is no support for hypothesis 4 in regards to the link between the ability to work from home and labour productivity. Similarly, when workforce commitment is added to the model in column 4 of Table 2, both the provision of compressed work weeks (P-value= 0.03) and workforce commitment (P-value= 0.00) remain positively associated with quality. Again, no support for hypothesis 4 is found.

Given that the provision of flexitime was unrelated to workforce commitment, there are no grounds to investigate hypothesis 4 in the case of the association between the availability of flexitime in the workplace and quality. In conclusion there is no

support for hypothesis 4, as far as the provisions of flexible working arrangements are considered.

With regards to the prevalence of flexible working arrangements, only the perception of being able to work from home is positively associated with performance (quality and labour productivity) as shown in the last two columns of Table 2. The inclusion of workforce commitment, as an independent variable in these models, shows that the link with productivity is not mediated by workforce commitment. Both the perception of being able to work from home (P-value= 0.007) and workforce commitment (P-value= 0.029) are positively associated with labour productivity (F(15,1417)= 2.43, Prob>F=0.00, sample size=1432). Yet the perception of access to home-working (P-value= 0.286) is no longer associated with quality (F(15,1524)= 4.04, Prob>F=0.00, sample size=1539), while workforce commitment remains positively associated (P-value = 0.00), thus the link between the perception of access to home-working and quality is mediated by workforce commitment.

Summary and Conclusion

This study considered different flexible working arrangements and their link to organizational commitment and performance at the workplace level. It differs from most of the literature where the emphasis has been on the family-friendly agenda, work-family conflict, and work-life balance at the individual level. Given the focus on performance and recent results that suggest flexible working arrangements might be provided due to performance concerns (Martinez-Sanchez, Perez-Perez, Luis-Carnicer and Vela-Jimenez, 2007; Ortega, 2007), the different working arrangements were analyzed separately and results confirmed distinct potential effects.

The wider the perceived spread of flexitime, compressed working weeks and being able to work from home in a workplace the more committed is its workforce, but the indirect effects on performance that would characterize a gift-exchange were only identified in the link between the perception of being able to work from home and quality. With regards to having a flexible working policy, flexitime and a compressed working weeks are positively associated with product or service quality, but are unrelated to workforce commitment. Both relationships cannot be explained by a gift-exchange model. Since the perceived spread of access to such policies is what is positively associated with workforce commitment, one may conjecture that there is some mismatch between flexible working policies and their execution.

The ability to reduce working hours is negatively associated with workforce commitment and the perception of access to this flexibility of work is unrelated to performance. This might be an unexpected result, but may also indicate that in some workplaces this policy may be employer driven or is coupled with a wage penalty. Indeed, the “part-time pay penalty” has been a topic of considerable research (e.g. Hirsch, 2005; Manning and Petrongolo, 2008) and there is empirical evidence of the existence of a part-time penalty in the UK: “in 2003 women working part-time in the UK earned, on average, 22 per cent less than women working full-time” (Labour Market Trends, August 2005: 321). Under these circumstances, the ability to work part-time would not be seen as a gift since the employee would be paying for it.

The most consistent results concerned home-working. The greater the proportions of employees who believe that they can work from home in a workplace, the more likely quality effects are through employee commitment. Yet, in comparison with the other working arrangements, the perception of being able to work from home

was the lowest on average (16% in the sample, while highest related to having access to flexitime and reduced hours that were both equal to 48% on average). This fact may suggest that the greater the perceived prevalence of a flexible working arrangement, the less likely it is perceived as a gift. In which case, longitudinal analysis of individual and group level data is required.

As for the relationship between the ability to work from home and labour productivity, both measures supported a positive association, which is interesting from a managerial perspective since on one hand there may be less of control over the worker, but on the other hand there may be an increase in productivity as well as reduced costs for the employer. For the employee, research have shown positive effects (better work-life balance and well-being) as well as higher demands, but overall recent assessments are more positive with respect to the benefits of home-working (Moore, 2006; Redman, Snape and Ashurst, 2009). Nonetheless these findings contrast with a recent longitudinal study of remote workers (Hunton and Norman, 2010), where alternative tele-working conditions were evaluated in relation to a control group who were not allowed to work remotely and was associated with higher levels of commitment except for those who worked exclusively from home. Since the average frequencies of home-working in the workplaces are not recorded in WERS2004, this is an issue for further investigation.

The lack of association with labour turnover and absenteeism may be surprising, but with regards to labour turnover, out of the 28 studies on its potential link with performance that were reviewed by de Menezes and Kelliher (2009), 54% found no effect. It could also be that these outcomes are contingent on other factors like labour market conditions or support for flexible working in the organization.

A limitation of this study is its cross-sectional nature. The data also rely on a single manager's assessment of the performance of the workplace, though there is evidence that managers' ratings of performance measures in WERS are consistent with the assumed more objective audited accounting data (Forth and McNabb, 2006) for single sites, which enabled the comparison to be made.

To sum up, the present study has added economy-wide evidence to a potential business case for the provision of flexible working arrangements that may help employees achieve a better work-life balance. Out of the four forms of work flexibility analyzed home-working may lead to higher productivity, and its prevalence may be linked to higher quality due to the commitment that it may generate in the workforce.

References

- Akerlof, G. A. (1982). Labor contracts as partial gift exchange. *Quarterly Journal of Economics*, **97**, 543-569.
- Allen, N. J. and Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitments to the organisation. *Journal of Occupational Psychology*, **63**, 1-8.
- Berg, P., Kalleberg, A. L. and Appelbaum, E. (2003). Balancing work and family: The role of high-commitment environment. *Industrial Relations*, **42**, 168-188.
- Benkhoff, B. (1997). Ignoring Commitment Is Costly: New Approaches Establish the Missing Link Between Commitment and Performance. *Human Relations*, *50*(6), 701-726.
- Blau, P. M. (1964). *Exchange and power in social life*. New York: John Wiley.
- 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.
- Capelli, P. (2000). A market driven approach to retaining talent. *Harvard Business Review*, **Jan-Feb**, 103-111.
- Casper, W. J., Eby, L. T., Bordeaux, C., Lockwood, A. and Lambert, D. (2007). A review of research methods in IO/OB work-family research. *Journal of Applied Psychology*, **92**, 28-43.
- Cropanzano, R. and Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of Management*, **31**, 874-900.
- de Menezes, L.M. and Kelliher, C. (2009). Towards Models to Test for a Business Case: A Review of the Flexible Working-Performance Link, Academy of Management Meeting 2009.
- Foster Thompson, L. and Aspinwall, K. R. (2009). The recruitment value of work/life benefits. *Personnel Review*, **38**, 195-210.
- Forth, J., R. McNabb. (2006). Financial Performance Data in WERS 2004, Employment Research Unit 21st Annual Conference: Perspectives from WERS 2004, Cardiff University, Cardiff, UK.

- Hirsch, B. (2005). Why do Part-time workers earn less? The role of worker and job skills. *Industrial & Labor Relations Review*, 58(4), 525-551.
- Hunton, J., & Norman, C. (2010). The Impact of Alternative Telework Arrangements on Organizational Commitment: Insights from a Longitudinal Field Experiment. *Journal of Information Systems*, 24, 67-90.
- Jafri, M. (2010). Organizational Commitment and Employee's Innovative Behavior. *Journal of Management Research*, 10, 62-68.
- Kelliher, C. and Anderson, D. (2010). Doing more with less? Flexible working practices and the intensification of work, *Human Relations*, 63, 83-106.
- Kersley, B., Alpin, C., Forth, J., Bryson, A., Bewley, H., Dix, G. and Oxenbridge, S. (2006). *Inside the workplace: Findings from the 2004 Workplace Employee Relations Survey*. Oxon: Routledge.
- Konrad, A. and Mangel, R. (2000). The impact of work-life programs on firm productivity. *Strategic Management Journal*, 21, 1225-1237.
- Kossek, E. and Lee, M. D. (2008). Implementing a reduced-workload arrangement to retain high talent: A case study. *The Psychologist-Manager Journal*, 11, 49-64.
- Lee, M. D., MacDermid S.M. and Buck M. (2000). Organizational Paradigms of Reduced-Load Work: Accommodation, Elaboration and Transformation. *Academy of Management Journal*, 43, 1211-1226.
- Lawler, E. E. III (1986). *High Involvement Management*. San Francisco: Jossey-Bass.
- Manning A. and Petrongolo B. (2008). The Part-time Penalty for Women in Britain. *Economic Journal*, 118, F28-F51.
- Martinez-Sanchez, A., Perez-Perez, M., Luis-Carnicer, P. and Vela-Jimenez, M. (2007). Telework, human resource flexibility and firm performance. *New Technology, Work and Performance*, 22, 208-223.
- Miller, D., and Lee, J. (2001). The people make the process: Commitment to employees, decision making, and performance. *Journal of Management*, 27, 163-189.
- Moore, J. (2006). Homeworking and work-life balance: Does it add to quality of life? *European Review of Applied Psychology/Revue Europeenne de Psychologie Appliquee*, 56, 5-13.

- Nadeem, S. and Metcalfe, H. (2007). *Work-life policies in Great Britain: What works, where and how?* London: Department for Business, Enterprise and Regulatory Reform.
- Ortega, J. (2009). Why do employers give discretion? Family versus performance concerns. *Industrial Relations*, **48**, 1-24.
- Osterman, P. (1995). Work/family programs and the employment relationship. *Administrative Science Quarterly*, **December**, 681-701.
- Pierce, J. L. and Newstrom, J. W. (1980). Toward a conceptual clarification of employee responses to flexible working hours: A work adjustment approach. *Journal of Management*, **6**, 117-134.
- Purcell, J. and Kinnie, N. (2007). HRM and business performance. In Boxall, P., Purcell, J. and Wright, R. (eds), *Oxford Handbook of Human Resource Management*. Oxford: Oxford University Press, 533-552.
- Redman T, Snape E, Ashurst C. Location, location, location: does place of work really matter?. *British Journal of Management*, **20**,171-181.
- Riggle, R., Edmondson, D., and Hansen, J. (2009). A meta-analysis of the relationship between perceived organizational support and job outcomes: 20 years of research. *Journal of Business Research*, **62**, 1027-1030.
- Van Steenbergen, E., & Ellemers, N. (2009). Feeling Committed to Work: How Specific Forms of Work-Commitment Predict Work Behavior and Performance Over Time. *Human Performance*, **22**, 410-431.
- Wood, S. and de Menezes, L. (1998). High commitment management in the UK: evidence from the Workplace Industrial Relations Survey and Employers' Manpower and Skills Practices Survey. *Human Relations*, **51**, 485-515.
- Wood, S. and de Menezes, L.M. (2010). Family-friendly management, organizational performance and social legitimacy, *International Journal of Human Resource Management* (forthcoming)

Table 1: The Association with Workforce Commitment

	Regression Coefficients (P-values)				
Provision of:					
Flexitime					
Compressed Work Week					
Work from Home	0.21 (0.00)				
Reduced Work Hours		-0.10(0.02)			
Perceived Availability of:					
Flexitime			0.27(0.00)		
Compressed Work Week				0.20(0.02)	
Work from Home					0.57(0.00)
Reduced Work Hours					
Controls					
Size of workplace	-0.19 (0.00)	-0.15(0.02)	-0.15(0.02)	-0.16(0.00)	-0.15(0.00)
Public workplace	-0.19 (0.00)	-0.19(0.01)	-0.12(0.02)	-0.18(0.01)	-0.18(0.00)
Manufacturing	-0.19 (0.11)	-0.22(0.05)	-0.20(0.07)	-0.22(0.06)	-0.19(0.00)
Electricity, gas and water	-0.37 (0.00)	-0.31(0.00)	-0.37(0.00)	-0.36(0.00)	-0.38(0.00)
Construction (reference category)					
Wholesale and retail	-0.09 (0.38)	-0.13(0.17)	-0.15(0.12)	-0.17(0.06)	-0.08(0.39)
Hotels and restaurants	-0.07 (0.56)	-0.09(0.45)	-0.17(0.12)	-0.20(0.07)	-0.09(0.40)
Transport and communication	-0.24 (0.13)	-0.25(0.13)	-0.23(0.14)	-0.28(0.07)	-0.24(0.07)
Financial services	-0.41 (0.00)	-0.40(0.00)	-0.41(0.00)	-0.43(0.00)	-0.36(0.00)
Other business services	-0.09 (0.38)	-0.06(0.49)	-0.08(0.37)	-0.10(0.28)	-0.11(0.24)
Public administration	-0.33 (0.05)	-0.28(0.08)	-0.41(0.02)	-0.34(0.04)	-0.31(0.04)
Education	0.42 (0.00)	0.42(0.00)	0.46(0.00)	0.41(0.00)	0.46(0.00)
Health	0.11 (0.3)	0.14(0.16)	0.08(0.39)	0.06(0.51)	0.10(0.31)
Other community services	0.08 (0.52)	0.09(0.41)	0.07(0.56)	0.05(0.66)	0.03(0.76)
F	(14,1633)=19	(14,1633)=20	(14,1633)=20	(14,1632)=20	(14,1633)=21
Prob > F	0.00	0.00	0.00	0.00	0.00
R-Squared	0.19	0.16	0.18	0.16	0.24
Sample size	1647	1647	1647	1646	1647

Table 2: The Association with Performance

	Regression Coefficients (P-values)				
	Productivity	Quality	Quality	Productivity	Quality
Provision of:					
Flexitime		0.38(0.00)			
Compressed Work Week			0.57(0.00)		
Work from Home	0.56 (0.00)				
Reduced Work Hours					
Perceived Availability of:					
Flexitime					
Compressed Work Week					
Work from Home				1.34(0.00)	0.93(0.01)
Reduced Work Hours					
Controls					
Size of workplace	-0.14 (0.35)	0.03(0.84)	-0.02(0.92)	-0.04(0.80)	0.15(0.33)
Public workplace	-0.27 (0.29)	-0.91(0.00)	-0.91(0.00)	-0.24(0.40)	-0.78(0.01)
Manufacturing	0.40 (0.37)	0.02(0.96)	-0.04(0.93)	0.60(0.21)	0.26(0.60)
Electricity, gas and water	-0.42 (0.37)	-0.46(0.41)	-0.44(0.40)	0.24(0.69)	-0.03(0.97)
Construction (reference category)					
Wholesale and retail	0.22 (0.60)	-0.17(0.67)	-0.11(0.79)	0.49(0.29)	-0.13(0.80)
Hotels and restaurants	0.95 (0.03)	0.17(0.70)	0.21(0.62)	1.05(0.03)	0.22(0.70)
Transport and communication	0.65 (0.16)	-0.25(0.64)	-0.27(0.61)	1.00(0.05)	-0.35(0.56)
Financial services	0.37 (0.42)	-0.12(0.83)	-0.11(0.84)	0.42(0.39)	-0.36(0.60)
Other business services	0.75 (0.09)	0.35(0.40)	0.45(0.29)	0.84(0.09)	0.19(0.72)
Public administration	0.66 (0.35)	-0.64(0.26)	-0.57(0.24)	0.81(0.28)	-0.84(0.20)
Education	0.46 (0.33)	0.53(0.25)	0.54(0.20)	0.60(0.24)	0.15(0.78)
Health	0.67 (0.11)	0.55(0.42)	0.55(0.20)	0.96(0.03)	0.34(0.52)
Other community services	0.97 (0.04)	0.06(0.88)	0.11(0.80)	1.07(0.05)	-0.20(0.71)
F	(14,1891)=2.3	(14,2041)=2.9	(14,2041)=3.3	(14,1418)=2.2	(14,1525)=2.2
Prob > F	0.00	0.00	0.00	0.01	0.00
Sample size	1905	2055	2055	1432	1539

Table 3: The Association between Workforce Commitment and Organizational Performance

	Regression Coefficients (P-values)			
	L. Productivity	Quality	Absenteeism	Labour Turnover
Workforce Commitment	0.63 (0.00)	1.01 (0.00)	-0.28 (0.01)	-0.02 (0.89)
Controls				
Employment level	0.1 (0.94)	0.30 (0.05)	0.37 (0.00)	0.47 (0.00)
Public workplace	-0.13 (0.64)	-0.64 (0.02)	0.20 (0.09)	-0.34 (0.03)
Manufacturing	0.71 (0.14)	0.50 (0.29)	-0.18 (0.47)	-0.82 (0.00)
Electricity, gas and water	0.49 (0.41)	0.42 (0.65)	-0.42 (0.07)	-1.39 (0.00)
Construction (reference category)				
Wholesale and retail	0.38 (0.39)	-0.07 (0.88)	0.002 (0.99)	-0.27 (0.23)
Hotels and restaurants	0.98 (0.04)	0.28 (0.60)	-0.09 (0.76)	0.16 (0.52)
Transport and communication	1.09 (0.03)	-0.11 (0.85)	0.16 (0.54)	-0.40 (0.23)
Financial services	0.48 (0.31)	-0.03 (0.97)	0.03 (0.92)	-0.50 (0.10)
Other business services	0.92 (0.06)	0.37 (0.44)	-0.18 (0.45)	-0.54 (0.02)
Public administration	1.00 (0.20)	-0.48 (0.44)	-0.45 (0.24)	-1.20 (0.00)
Education	0.23 (0.64)	-0.32 (0.54)	0.04 (0.89)	-0.64 (0.02)
Health	0.89 (0.05)	0.29 (0.55)	-0.22 (0.45)	-0.43 (0.07)
Other community services	1.07 (0.05)	-0.19 (0.69)	0.90 (0.05)	-0.66 (0.01)
F	(14,1471)=2.3	(14,1525)=4.3	(14, 1329)=3.8	(14, 1446)= 11.6
Prob > F	0.00	0.00	0.00	0.00
R-Squared			0.10	0.12
Sample size	1533	1539	1343	1460