Work––life conflict: Is work time or work overload more important?

Natalie Skinner and Barbara Pocock

Asia Pacific Journal of Human Resources 2008 46: 303
DOI: 10.1177/1038411108095761.

Work–life conflict: Is work time or work overload more important?

Natalie Skinner and Barbara Pocock
Centre for Work + Life, Hawke Research Institute,
University of South Australia, Adelaide, South Australia, Australia

Work time in the form of long hours or control over work scheduling (flexibility) dominates much of the debate, and organisational policies and interventions, around sustaining a healthy work–life relationship. In this study we challenge this assumption, and argue instead for the importance of the quantity of work (work overload). Using data collected in a national Australian study, we found that work overload was the strongest predictor of full-time employees' work–life conflict. Work hours, their fit with preferences, and control over work scheduling also demonstrated small to moderate associations with work–life conflict. This study indicates that time-based work–life policies, procedures and interventions are necessary, but not sufficient, for addressing work–life conflict. Effective management of work overload, with its potential to contribute to emotional strain/exhaustion and long work hours, should be considered as a keystone strategy to support a healthy work–life relationship.

Keywords: flexibility, overload, work hours, work–life conflict

Introduction

Time is a prominent feature of work–life discussions, policies and strategies, particularly around issues of long work hours and flexibility in work scheduling. In this paper we question whether a time-based approach to work–life issues is sufficient to guide effective policies and interventions. Instead we argue that addressing issues of workload, work overload in particular, should

Correspondence to: Dr Natalie Skinner, Research Fellow, Centre for Work + Life, University of South Australia, GPO Box 2471, Adelaide SA 5001, Australia; fax: +618 8302 4258; e-mail: natalie.skinner@unisa.edu.au

Asia Pacific Journal of Human Resources. Published by SAGE Publications (Los Angeles, London, New Delhi and Singapore; www.sagepublications.com) on behalf of the Australian Human Resources Institute. Copyright © 2008 Australian Human Resources Institute. Volume 46(3): 303–315. [1038-4111] DOI: 10.1177/1038411108095761.

be considered at least of equal priority in work–life policy and practice. The key research question for this paper, therefore, is whether workload is a stronger, or at least equal, factor in work–life conflict as time-related demands. Consideration of this issue is timely in many countries, including Australia, where a new Labor government has proposed some workplace interventions to facilitate the reconciliation of work and family responsibilities, including granting a formal right to employees to request flexible work arrangements until children reach school age. For many human resource practitioners, increasing employee control over their work scheduling may be a central strategy to reduce employees' work–life conflict, and it is certainly one of the most common strategies utilised in Australian organisations (De Cieri et al. 2005; Kelly and Moen 2007) and in European companies (Straub 2007). This paper investigates whether interventions to address workload should also be considered a high priority for HR practitioners seeking strategies to reduce employees' work–life conflict.

In their influential model Greenhaus and Beutell (1985) acknowledge time-based conflict (time pressure, lack of time for family and leisure) as one of three major sources of work–life conflict. The other sources are strain-based conflict (anxiety, fatigue, tension) and behaviour-based conflict (incompatible behavioural expectations between work and home life). In this study we directly compare time- and strain-based sources of work–life conflict, operationalised as long work hours and work overload, respectively. We examine work time from three different perspectives. First, we look at long working hours per se, which we define as working 45 or more hours per week. Second, we look at long working hours as defined by the individual themselves. Specifically, we look at the gap between actual and preferred working hours as a gauge of the extent to which the time spent at work fits with an individual's preference. According to person–environment (P–E) fit theory, stress arises from a poor fit between a person's abilities and needs and the demands and supplies provided by the environment (Edwards, Caplan, and Harrison 1998). From a P–E fit perspective, the extent to which work hours fit with preferences, rather than the number of work hours per se, should be the stronger predictor of work–life conflict. We discuss P–E fit theory as applied to work–life issues in further detail below. Finally, we include control over the scheduling of work as a predictor of work–life conflict, as this is the major focus of many work–life interventions in policy and practice.

We have deliberately used the terminology work–life rather than work–family. 'Life' activities outside paid work include activities in the household and with friends, family and community. In this way, our definition of 'life' subsumes 'family' issues. While there are important policy reasons for specifically focusing upon the effects of changes at work on family life (and vice versa), especially the well-being of children and of working parents, it should be recognised that all workers, regardless of their personal circumstances, desire and have a right to a healthy relationship between their paid work and the rest of their lives.

Long work hours

In this study we focus on full-time employment, as we are particularly interested in the relationship between long full-time hours and work–life conflict. There is good evidence that long (full-time) work hours are likely to increase the risk of work–life conflict (Frone, Yardley, and Markel 1997; Byron 2005; Wharton and Blair-Loy 2006; Allan, Loudoun, and Peetz 2007). We have deliberately described long hours as a risk factor for, rather than an absolute determinant of, work–life conflict. Barnett (1998) argued that the impact of long hours depends on the subjective meaning of those hours and a person's life circumstances (see also Thornthwaite 2004). Individuals in highly engaging, interesting and fulfilling jobs may choose and enjoy long hours (e.g. Wallace 1997). Parents may choose to work long hours to support their family. For example, in an Australian study of full-time working fathers, Weston et al. (2004) found that a significant minority of fathers working very long hours (60+) were highly satisfied with their hours (25%) and around 40 percent did not desire fewer hours. Berg, Kalleberg, and Appelbaum (2003) found that involuntary overtime, rather than length of work hours, was the stronger predictor of employees' views that the company was helping them to balance work and family. Furthermore, the impact of long work hours may also depend on cultural meanings of work (e.g. Spector et al. 2004).

> *Hypothesis 1*: Work–life conflict will increase with longer (full-time) work hours.

Work hours fit with preferences

There is not a consistent definition of long work hours in the research literature. While it is unrealistic to expect a universal definition of long hours applicable to all occupations, industries and countries, the meaning of 'long hours' can differ quite substantially. On this basis, it could be argued that assessing the extent to which actual work hours match preferred work hours is a more sensitive and accurate measure of the degree to which work hours are experienced as too long or excessive. This argument is consistent with a person–environment fit perspective on the work–life relationship. Edwards and Rothbard (2005) argue that a mismatch between job demands and the individual's capacity to meet these demands is at the core of work–life conflict, with the proviso that this mismatch between demands and abilities will be experienced as stressful only if it results in a failure to fulfil valued needs (e.g. needs for socialising, family time, affection).

Not surprisingly, working more hours than preferred is associated with increased work–life conflict (Thornthwaite 2004; Weston et al. 2004), and having an unsuitable work schedule has been found to predict job role quality, marital role quality, psychological distress, and burnout (Barnett, Gareis, and

Brennan 1999; Gareis, Barnett, and Brennan 2003). It is interesting to note that dissatisfaction with working hours, regardless of the number of hours worked, has been shown to be a significant predictor of work–family strain and well-being (Weston et al. 2004).

Hypothesis 2: Work–life conflict will increase as the gap between actual and preferred hours worked increases, in the direction of working more hours than preferred.

Hypothesis 3: Work hours fit with preferences will be a stronger predictor of work–life conflict compared to work hours.

Work overload

There are many dimensions to work demands, such as time pressure (tight deadlines), high speed of work, and the quantity of work (work overload). In this study we focus on work overload, as this has been identified as one of the strongest and most consistent predictors of work–life conflict (Geurts and Demerouti 2003). Work overload is likely to have a dual effect on work–life conflict (Frone, Yardley, and Markel 1997): high workloads are likely to increase work hours, and also to contribute to feelings of strain and exhaustion. Frone, Yardley, and Markel (1997), for example, found that workload was positively associated with work hours, and both demonstrated moderate positive associations with work–life conflict. There is also evidence that workload may be a stronger predictor of work–life conflict than work hours (Wallace 1997; Allan, Loudoun, and Peetz 2007). To our knowledge, there has not been any previous research directly comparing workload and work hours fit with preferences as predictors of work–life conflict. Given the potential dual pathways via which work overload may influence work–life conflict, we expected that work overload would be the stronger predictor of work–life conflict.

Hypothesis 4: Work–life conflict will increase with higher perceived work overload.

Hypothesis 5: Work overload will be a stronger predictor of work–life conflict than work hours and work hours fit with preferences.

Work schedule control

Reviews and meta-analyses have identified control over work scheduling as a buffer against negative work–life spillover (Byron 2005; Eby et al. 2005). In a previous study using AWALI data (Skinner and Pocock) and other research (Wallace 2005; Grönlund 2007), work hours and schedule control have been

found to exert independent additive, and not interactive, effects on work–life conflict. Specifically, work schedule control did not moderate the relationship between work hours and work–life conflict. In both studies workload was the strongest predictor of work–life conflict (although see Hughes and Parkes 2007 where control was found to mediate the hours–conflict relationship; however workload was not measured). Therefore in this study the focus was on comparing the main effects of work overload, schedule control, work hours, and their fit with preferences. This is the first study to our knowledge that has directly compared these three predictors of work–life conflict.

Hypothesis 6: Work–life conflict will decrease with greater control over work scheduling.

Hypothesis 7: Work overload will be a stronger predictor of work–life conflict than control over work scheduling.

Method

Sample and data collection

This paper reports on findings from the 2007 Australian Work and Life Index (AWALI). AWALI 2007 is a national survey of 1435 Australian workers conducted through computer-assisted telephone interviews. The concepts and methodology underpinning AWALI have been described in detail elsewhere and a full report of descriptive findings is also available (Pocock, Skinner, and Williams 2007). Respondents were selected by means of a stratified random sample process, which included a quota set for each capital city and non-capital city area. Of the individuals contacted to take part in the survey 40 percent agreed to participate. The current study examines a sub-set of the AWALI sample of 887 full-time employees (594 men, 293 women). The majority were aged between 18–34 (31.1%) or between 35–54 (51.2%). Half of the respondents (51.0%) were in managerial or professional occupations. The majority were married or in a de facto relationship (63.8%), and around 40 percent of respondents had children.

Measures

Actual work hours

Respondents reported their work hours in response to the question 'how many hours per week do you usually spend in paid work, including any paid or unpaid overtime?' Definitions of standard and long full-time hours vary within and between countries. The Australian Bureau of Statistics defines full-time hours as 35 or more hours per week. The average full-time work week was 41.7 hours

for Australians around the time of data collection for this study (Australian Bureau of Statistics (ABS) 2007). On this basis we defined standard full-time hours as between 35 and 44 hours, and long hours as 45 or more hours per week.

Preferred work hours

Preferred work hours were reported in response to the question 'if you could choose the number of hours you work each week, and taking into account how it would affect your income, how many hours would you choose to work?' A good fit was defined as one hour or less difference between actual and preferred hours per week (changing this definition to two hours or less made little difference to our analysis).

Work overload and work schedule control

Work overload was assessed by the item 'it often seems like you have too much work for one person to do', which was a modified version of an item originally sourced from Dougherty and Pritchard's (1985) role overload measures. Work schedule control was assessed by two items (averaged): 1) 'you have a lot of freedom to decide when you do your work' from the HILDA survey (Watson and Wooden 2002); and 2) 'your working times can be flexible to meet your needs' (Cousins et al. 2004). Four-point response scales (strongly disagree to strongly agree) were used for the three items.

Work–life conflict

Work–life conflict was assessed by five questions that addressed negative spillover and conflict from work to life: 1) general interference (work interferes with responsibilities or activities outside work), 2) time strain (work restricts time with family and friends), 3) work-to-community conflict (work restricts connections and friendships in the community), 4) satisfaction with overall work–life 'balance', and 5) feeling rushed or pressed for time.[1] A four-point response scale (strongly disagree to strongly agree) was used for the satisfaction question. All other index questions had a five-point response scale: never (1), rarely (2), sometimes (3), often (4), almost always (5). The satisfaction scale was reverse scored so that higher scores indicate less satisfaction.

In this paper we do not report on these five questions separately; instead we average responses on the five questions to develop a single work–life index. The scale has a satisfactory internal consistency (Cronbach's alpha = 0.81).

[2] Item sources for the work–life index are as follows. Items 1, 2, and 3 were sourced and adapted from a measure developed by Frone, Russell, and Cooper (1992). Item 4 (satisfaction with work–life balance) was developed by the research team. Item 5 (time pressure) was sourced from the Australian *Time use survey* conducted by the Australian Bureau of Statistics (1998).

Principal components factor analysis extracted a single factor, with factor loadings for all items above 0.60. In support of the construct validity of the scale, previous studies have demonstrated positive associations between scores on the index and a range of factors commonly associated with work–life conflict such as long work hours, work demands and work schedule flexibility (Pocock, Skinner, and Williams forthcoming; Skinner and Pocock). The work–life index is a standardised scale with the mean set at 100 and a standard deviation of 15 (standardisation was necessary due to variations in response scale ranges). Higher scores on the index indicate higher levels of conflict.

Results

Descriptive statistics

Table 1 provides an overview of respondents' actual and preferred work hours, and their fit with preferences. The average work week was 45 hours per week, and the preferred work week was around 39 hours. Around half of respondents preferred fewer work hours, only a small minority preferred increased hours. The latter group was retained in the analysis as removal of these respondents made no difference. Although men worked longer hours than women on average, women were more likely to desire a decrease in their work hours and reported the shortest preferred work hours.

Respondents did not report particularly high work overload ($M = 2.86$, SD = 1.09, men $M = 2.83$, SD = 1.09; women $M = 2.92$, SD = 2.64), and indicated a moderate degree of control over their work scheduling ($M = 2.62$, SD = 1.03; men $M = 2.62$, SD = 1.03; women $M = 2.64$, SD = 1.03).

Table 1 **Current and preferred work hours, hours mismatch and hours fit with preferences**

	Current work schedule		Hours mismatch			Preferred hours
	Hours	% hours fit	Hours	% prefer more	% prefer less	
Men	46.14	40.4	5.52	10.0	46.9	40.64
	(9.56)	(234)	(11.78)	(58)	(287)	(11.94)
Women	43.44	33.4	7.88	3.3	63.3	35.57
	(7.62)	(102)	(9.99)	(10)	(193)	(8.77)
All	45.21	37.3	6.34	7.6	53.2	38.89
	(9.03)	(376)	(11.25)	(68)	(479)	(11.21)

Note: For current and preferred hours, and hours mismatch, means and standard deviations are given in parentheses. For hours fit with preferences, percentage and number of participants are shown in parentheses.

Work–life conflict: comparing work overload, work hours, and hours fit with preferences

A multiple regression analysis was conducted to investigate the relationship between work–life conflict and the four predictors: work overload, work schedule control, work hours and their fit with preferences (table 2). All variables were entered simultaneously. For all full-time employees the strongest association with work–life conflict was demonstrated by work overload, followed by work schedule control, work hours, and work hours fit. In support of hypotheses 1, 4, and 6, work–life conflict increased with long work hours, higher workloads and less flexibility. Contrary to hypothesis 3, work hours fit with preferences did not demonstrate a consistent positive association with work–life conflict. However, the findings were supportive of hypotheses 5 and 7 that work overload would be the strongest predictor of conflict, but do not support hypothesis 3 that work hours fit would be a stronger predictor of conflict than length of work hours. The model accounted for 26 percent of the variance in work–life conflict.

Separate analyses for men and women revealed some gender differences. The model accounted for slightly more variance in the work–life conflict of women (R^2 Adj. = 0.29) compared to men (R^2 Adj. = 0.25). Work overload, work hours, and work schedule control were significant predictors of conflict in both groups. It is interesting to note that work overload was a stronger predictor of conflict for men compared to women, although there was no significant difference in their overall ratings of work overload. Work hours fit with preferences was a significant predictor of work–life conflict only for women.

A note of caution is appropriate when interpreting these findings. The variables were measured on different units and scales, and this may influence the relative strength of association each variable demonstrates with the work–life conflict measure.

Table 2 **Multiple regression of work–life conflict on job characteristics**

Model	All	Men	Women
Work hours	.16**	.16***	.18**
Work hours fit	.08*	.04	.15**
Work schedule control	–.21**	–.20***	–.22***
Workload	.35**	.38***	.28***
Adjusted R square	.26	.25	.29
F	75.53***	46.93***	31.43***
N	846	565	281

**$p < .01$ ***$p < .001$

Discussion and conclusions

In this paper we have examined and challenged a time-based perspective on the work–life relationship. We did this by examining work time from two different perspectives: 1) the management and experience of work time (length of work hours, their control and fit with preferences), and 2) by comparing these time-based factors with the quantitative demand of work overload. In general our findings support our argument that time-based approaches to managing the work–life relationship are necessary but not sufficient to ensure a healthy work–life relationship. While long work hours and a lack of control over work scheduling demonstrated small to moderate associations with work–life conflict that is consistent with expectations and previous studies (Byron 2005), work overload clearly emerged as the strongest predictor of work–life conflict. This may reflect the potential dual effect of a high work overload on time strain and emotional/psychological strain, both of which are likely to have a negative impact on life outside of work (Frone, Yardley, and Markel 1997). High workloads have also been identified as an important block to the uptake of work–family policies (Waters and Bardoel 2006).

Contrary to expectations our analyses were not consistent with a person–environment fit perspective on the relationship between work hours and work–life conflict. The length of work hours rather than fit with preferences was the stronger predictor of work–life conflict. Around 70 percent of the respondents who were working longer than standard full-time hours (35–44 hours per week) desired a reduction in their work hours, which may account for this finding to a large extent. Further, work hours fit was a significant predictor of work–life conflict only for women. This result may reflect the wider gap between women's actual and preferred work hours. It may also be explained by the tendency for women to have a greater role in caring and other domestic responsibilities, hence work hours that are a poor fit with demands outside of work have a greater influence on work–life conflict. It is important to acknowledge that our study did not constitute a rigorous test of person–environment fit theory which includes complex and non-linear relationships between a person's needs and abilities and the demands and supports (supplies) in the environment (Edwards and Rothbard 2005). A deeper investigation of the implications of P–E fit theory for the work hours–strain relationship is an appropriate task for future research.

There are good reasons for employers to develop work–life policies, procedures and interventions that address both work time and workload demands. Providing work–life policies and programs that are perceived by employees to be accessible and helpful is likely to provide many organisational benefits including reduced turnover (Forsyth and Polzer-Debruyne 2007). There is also good evidence that highly demanding jobs that lack control over work scheduling have detrimental outcomes for both the health and well-being of individuals and their families (van der Doef and Maes 1999).

Similar outcomes have been observed for long work hours (Michie and Williams 2003; Caruso 2006). There is also evidence that dissatisfaction with work hours is associated with impaired mental health and relationship difficulties with partners and children (Barnett 2006). Perhaps most compelling, a Swedish study found that working overtime of more than 5 hours a week is associated with an increased risk of mortality particularly for women (Nylén, Voss, and Floderus 2001).

Our findings also have implications for government action and labour regulation in Australia and New Zealand. Steps to reduce long or unsafe working hours remain important to worker well-being. The 1993 European Union Working Time Directive which requires statutory limits to be placed on work hours is an approach that could be applied to Australia and New Zealand. Similarly, adopting similar 'right to request' laws as set out in the UK Employment Act 2002, which provide entitlements to request flexible working conditions such as reduced hours, telecommuting, or changes to work scheduling, would increase Australian and New Zealand workers' capacity to get a better fit between their actual and desired hours of work. Measures to address problems of work overload are perhaps more difficult. High workloads can result from a range of factors, including workplace cultures and also labour-market shortages in particular industries or professions. Governments in Australia and New Zealand provide a range of practical resources to support employers and employees to address work–life issues. Placing greater emphasis on work demands/workload factors in these types of resources would at the very least raise the profile of work demands as a work–life issue, in addition to the traditional focus on time-related factors.

Implications for HR practitioners

The findings of this paper highlight the importance of a multifaceted approach to addressing work–life conflict issues in the workplace. Implementing strategies that enable employees to have more control over their working time and scheduling is likely to be necessary but not sufficient to effectively address work–life conflict. However, developing and implementing strategies to address work overload is challenging when work intensification is becoming a common phenomenon across countries, occupations, and industries (see Green 2004 for a review). At the very least, regular monitoring of workloads can enable an evaluation of the extent to which this is a significant workplace issue (Gilbreath and Montesino 2006). In an ideal world, an intervention to address workload issues would go to the source of the problem and alleviate workload by increasing resources and reducing demands (e.g. increase staff, reduce time pressure, increase time and task control). In reality, with deadlines, budgets and productivity targets, this is not always possible. From an effort–recovery theory perspective one approach is to ensure, at the very least, that employees are able to take sufficient breaks and rests from periods of intense activity (Meijman and

Mulder 1998), for example, by strongly encouraging employees to take holiday leave, or by implementing flexi-time systems that include caps on the amount of time owing that can be accumulated before it is used.

Study limitations

AWALI provides a snapshot of the work–life relationship experienced by Australians. It is a tool designed to benchmark levels of work–life conflict, and to identify those likely to be most at risk of work–life conflict and its associated consequences for personal, familial, and community well-being. AWALI necessarily relies on self-report data from a limited number of questions, and hence lacks the more subtle and nuanced analysis that may be produced from larger scale quantitative surveys or qualitative studies. We hope that findings from AWALI will be used to guide and inform such studies in the future.

Conclusion

The factors that sustain or impede a healthy work–life relationship are multi-faceted, and likely to differ depending on an individual life circumstances, values and priorities. There are many theories and models that encompass this complexity (e.g. Frone, Yardley, and Markel 1997; Pocock 2003). In this study we looked more broadly at the question of the relative importance of time and workload-based demands on work–life conflict. Our findings support the argument that the work–life relationship is about more than just the amount of time spent at work, and also includes the quality of that work experience, which we assessed in terms of workload in this study. Future studies could include more detailed analysis of the independent and interactive effects of particular types of time demands (e.g. long hours, unsocial work times) and workload demands (e.g. speed, time pressure, quality requirements) on work–life conflict. Regardless of how work overload is defined and measured, ensuring the effective management of workloads should be considered a priority for work–life policies, which are also likely to benefit employees' health, well-being, and effectiveness in the workplace.

Natalie Skinner (PhD) is a research fellow at the Centre for Work + Life at the University of South Australia. After completing her thesis in psychology, she has focused in her work on health and well-being in the workplace, including research on stress, burnout and work–life issues. Her interests also include strategies to enhance the process of translating research into practice.

Barbara Pocock is the director of the Centre for Work + Life at the University of South Australia. Her most recent books are *The labour market ate my babies: Work, life and a sustainable future* (2006), and *Kids count: Better early childhood education and care in Australia* (edited with Elizabeth Hill and Alison Elliot; 2007).

References

Allan, C., R. Loudoun, and D. Peetz. 2007. Influences on work/non-work conflict. *Journal of Sociology* 43(3): 219–39.

Australian Bureau of Statistics (ABS). 1998. *Time use survey, Australia – Users' guide*. Cat. no. 4150.0. Canberra: ABS.

Australian Bureau of Statistics (ABS). 2007. *Australian labour market statistics*, April. Cat. no. 6105.0. Canberra: ABS.

Barnett, R.C. 1998. Toward a review and reconceptualization of the work/family literature. *Genetic, Social & General Psychology Monographs* 124(2): 125–82.

Barnett, R.C. 2006. Relationship of the number and distribution of work hours to health and quality-of-life (QOL) outcomes. *Research in Occupational Stress and Wellbeing* 5: 99–138.

Barnett, R.C., K.C. Gareis, and R.T. Brennan. 1999. Fit as a mediator of the relationship between work hours and burnout. *Journal of Occupational Health Psychology* 4(4): 307–17.

Berg, P., A.L. Kalleberg, and E. Appelbaum. 2003. Balancing work and family: The role of high-commitment environments. *Industrial Relations* 42(2): 168–88.

Byron, K. 2005. A meta-analytic review of work–family conflict and its antecedents. *Journal of Vocational Behavior* 67(2): 169–98.

Caruso, C.C. 2006. Possible broad impacts of long work hours. *Industrial Health* 44(4): 531–36.

Cousins, R., C.J. Mackay, S.D. Clarke, C. Kelly, P.J. Kelly, and R.H. McCaig. 2004. 'Management standards' and work-related stress in the UK: Practical development. *Work and Stress* 18(2): 113–36.

De Cieri, H., B. Holmes, J. Abbott, and T. Pettit. 2005. Achievements and challenges for work/life balance strategies in Australian organizations. *International Journal of Human Resource Management* 16(1): 90–103.

Dougherty, T.W., and R.D. Pritchard. 1985. The measurement of role variables: Exploratory examination of a new approach. *Organizational Behavior and Human Decision Processes* 35: 141–55.

Eby, L.T., W.J. Casper, A. Lockwood, C. Bordeaux, and A. Brinley. 2005. Work and family research in IOB/OB: Content analysis and review of the literature (1980–2002). *Journal of Vocational Behavior* 66(1): 124–97.

Edwards, J.R., R.D. Caplan, and R.V. Harrison. 1998. Person–environment fit theory: Conceptual foundations, empirical evidence, and directions for future research. In *Theories of organizational stress*, ed. C.L. Cooper, 28–67. Oxford: Oxford University Press.

Edwards, J.R., and N.P. Rothbard. 2005. Work and family stress and wellbeing: An integrative model of person-environment fit within and between the work and family domains. In *Work and life integration: Organizational, individual and cultural perspectives*, eds E.E. Kossek and S.J. Lambert, 211–42. New York: Routledge.

Forsyth, S., and A. Polzer-Debruyne. 2007. The organisational pay-offs for perceived work–life balance support. *Asia Pacific Journal of Human Resources* 45(1): 113–23.

Frone, M.R., M. Russell, and M.L. Cooper. 1992. Antecedents and outcomes of work–family conflict: Testing a model of the work–family interface. *Journal of Applied Psychology* 77(1): 65–78.

Frone, M.T., J.K. Yardley, and K.S. Markel. 1997. Developing and testing an integrative model of the work–family interface. *Journal of Vocational Behavior* 50(2): 145–67.

Gareis, K.C., R.C. Barnett, and R.T. Brennan. 2003. Individual and crossover effects of work schedule fit: A within-couple analysis. *Journal of Marriage and Family* 65(4): 1041–54.

Geurts, S.A.E., and E. Demerouti. 2003. Work/non-work interface: A review of theories and findings. In *The handbook of work and health psychology*, eds M.J. Schabracq, J.A.M. Winnubst and C.L. Cooper, 279–312. New York: John Wiley & Sons.

Gilbreath, B., and M.U. Montesino. 2006. Expanding the HRD role: Improving employee well-being and organizational performance. *Human Resource Development International* 9(4): 563–71.

Green, F. 2004. Why has work effort become more intense? *Industrial Relations* 43(4): 709–41.

Greenhaus, J.H., and N.J. Beutell. 1985. Sources of conflict between work and family roles. *Academy of Management Review* 10(1): 76–88.

Grönlund, A. 2007. More control, less conflict? Job demand–control, gender and work–family conflict. *Gender, Work & Organization* 14(5): 476–97.

Hughes, E.L., and K.R. Parkes. 2007. Work hours and well-being: The roles of work–time control and work–family interference. *Work & Stress* 21(3): 264–78.

Kelly, E.L., and P. Moen. 2007. Rethinking the clockwork of work: Why schedule control may pay off at work and at home. *Advances in Developing Human Resources* 9(4): 487–506.

Meijman, T.F., and G. Mulder. 1998. Psychological aspects of workload. In *Handbook of work and organizational psychology*, eds P.J. Drenth, T.H and C.J. de Wolff, 5–33. Hove, England: Taylor & Francis.

Michie, S., and S. Williams. 2003. Reducing work related psychological ill health and sickness absence: A systematic literature review. *Occupational and Environmental Medicine* 60(1): 3–9.

Nylén, L., M. Voss, and B. Floderus. 2001. Mortality among women and men relative to unemployment, part time work, overtime work, and extra work: A study based on data from the Swedish twin registry. *Journal of Occupational and Environmental Medicine* 58: 52–7.

Pocock, B. 2003. *The work/life collision*. Sydney: Federation Press.

Pocock, B., N. Skinner, and P. Williams. 2007. Work, life and time: The Australian Work and Life Index 2007. Adelaide: Centre for Work + Life, University of South Australia.

Pocock, B., N. Skinner, and P. Williams. Forthcoming. Measuring work–life interaction: The Australian Work and Life index (AWALI) 2007. *Labour and Industry*.

Skinner, N., and B. Pocock. Job quality and work–life conflict: Examining the interrelationship between work hours, job quality and work–life conflict.

Spector, P.E., C.L. Cooper, S. Poelmans, T.D. Allen, M.P. O'Driscoll, J.I. Sanchez, O.L. Siu, P. Dewe, P. Hart, L. Lu, L.F.R. de Moraes, G.M. Ostrognay, K. Sparks, P. Wong, and S. Yu. 2004. A cross-national comparative study of work-family stressors, working hours, and well-being: China and Latin America versus the anglo world. *Personnel Psychology* 57: 119–42.

Straub, C. 2007. A comparative analysis of the use of work–life balance practices in Europe. *Women in Management Review* 22(4): 289–304.

Thornthwaite, L. 2004. Working time and work–family balance: A review of employees' preferences. *Asia Pacific Journal of Human Resources* 42(2): 166–84.

van der Doef, M., and S. Maes. 1999. The job demand–control(–support) model and psychological well-being: A review of 20 years of empirical research. *Work & Stress* 13(2):87–114.

Wallace, J.E. 1997. It's about time: A study of hours worked and work spillover among law firm lawyers. *Journal of Vocational Behavior* 50(2): 227–48.

Wallace, J.E. 2005. Job stress, depression and work-to-family conflict: A test of the strain and buffer hypotheses. *Industrial Relations* 60(3): 510–39.

Waters, M.A., and E.A. Bardoel. 2006. Work–family policies in the context of higher education: Useful or symbolic? *Asia Pacific Journal of Human Resources* 44(1): 67–82.

Watson, N., and M. Wooden. 2002. The household, income and labour dynamics in Australia (HILDA) survey: Wave 1 survey methodology. HILDA Project Technical Paper Series, no. 1/02. Melbourne: University of Melbourne.

Weston, R., M. Gray, L. Qu, and D. Stanton. 2004. Long work hours and the wellbeing of fathers and their families. Research paper no 35. Melbourne: Australian Institute of Family Studies.

Wharton, A., and M. Blair-Loy. 2006. Long work hours and family life: A cross-national study of employees' concerns. *Journal of Family Issues* 27(3): 415–36.