## TIME-USE DATA AND WORK-LIFE POLICY DEVELOPMENT

Paul Callister<sup>1</sup> School of Government Victoria University of Wellington

#### **Abstract**

Work-life balance is a relatively recent social policy concern in New Zealand. This research note illustrates how the New Zealand Time Use Survey can provide an understanding of the way New Zealanders manage their work and family lives. It shows that while a significant proportion of individuals undertake some paid work outside of core Monday-to-Friday daylight hours, New Zealand is still far from becoming a 24-hours-a-day, seven-days-a-week society. Equally, while many workers undertake some work at home, home has not become the primary workplace for most New Zealanders. The data also show that, for some workers, long hours of paid work do not automatically mean little time spent with children. Using these and other examples, the paper demonstrates that there needs to be some caution when developing simple indicators of work-life balance. Finally, some suggestions for further time-use research are set out.

## INTRODUCTION

Work-life balance discussions are increasingly coming to the fore in most industrialised countries. In New Zealand, work-life balance has been a key component of research in the Future of Work programme run by the Department of Labour, and, in late 2003, the Department of Labour initiated the New Zealand Work-Life Balance programme. Similarly, the Ministry of Social Development has undertaken a Work, Family and Parenting Study project. The Ministry of Women's Affairs has also had a long interest in the broad areas of family-friendly work practices and work-life balance, and was the key government agency behind the development of New Zealand's Time Use Survey.

#### 1 Acknowledgements

I would like to thank Sylvia Dixon and Susan Singley, who were joint authors of two of the papers upon which this research note draws. I draw on three papers here, one commissioned by the Department of Labour (Callister and Dixon 2001) and two funded by the Foundation for Research, Science and Technology (Callister 2003, Singley and Callister 2004).

#### Correspondence

Email: paul@callister.co.nz

The Time Use Survey was a nationally representative survey that collected data on both paid and unpaid work, and time spent on personal care and leisure activities. It thus provides a useful source of information on how New Zealanders integrate their paid-work commitments with other aspects of their lives. Yet, despite the richness of this data source, New Zealand work–life balance researchers and policy makers have overall made little use of the information collected.

This research note has two aims. The first is to show how a number of work–life issues can be investigated using time-use data. Three issues that are commonly discussed in the work–life balance literature have been chosen as examples:

- Has New Zealand become a 24-hours-a-day, seven-days-a-week society?
- Has the workplace become "home" for many white-collar workers as suggested by Hochschild (1997)? Alternatively, has the home become a workplace for a significant number of workers?
- Do long hours of paid work necessarily mean less time with other family members?

The second aim is to demonstrate that, while there is an obvious attraction in developing simple indicators of work-life balance (for instance, the proportion of employees working 50 or more hours per week), such single-variable measures can be misleading.

Finally, some suggestions are made for further work–life balance research that would use time-use data.

This research note draws on three papers: Callister and Dixon (2001), Callister (2003) and Singley and Callister (2004).

# NEW ZEALAND HAS NOT BECOME A 24-HOURS-A-DAY, SEVEN-DAYS-A-WEEK SOCIETY

Despite the extension in recent decades of retailers' trading hours (facilitated by legislative changes) and the growth of the hospitality industry, we are still far from having paid work spread across 24 hours a day, seven days a week. Yet, for some groups of people, work outside "core" hours is important. As a basic summary statistic, we calculated the proportion of work recorded in the time diaries that was undertaken during Monday to Friday between 8am and 6pm. If work was evenly spread over the whole week, including the weekend, and across 24 hours, then just under 30% of work would be undertaken in these "standard" hours. In fact, 74% of work was undertaken in this time. There was surprisingly little variation in this figure when gender, household type and parental status were considered. Of the remaining working time, 10% was carried out on weekends between 8am and 6pm, and the remaining 16% during evenings, nights and the early hours of the morning.

However, this figure of approximately one-quarter of paid working time being undertaken outside conventional business hours is just one way of measuring out-of-core-hours work, that is, as a proportion of the total amount of work carried out over a day. We can also look at the proportion of workers who do some of their paid work outside these times. In fact, more than 60% of working diary-days from Monday to Friday involved some work outside the core period. However, most was carried out on the boundaries of the core. Very few people work solely during evenings or nights. On weekdays, only 1.7% of working days conformed to this type.

Nor does the international research literature support the notion that, in recent decades, there has been a dramatic shift to a 24-hour-a-day, seven-days-a-week society. There are certainly some studies in the 1990s that do show a small growth of aspects of non-standard hours, such as working in weekends or evenings (e.g., for Britain, Harkness 1999; for the European Union, Evans et al. 2001). Using a number of Canadian time-use surveys, Harvey (1996) shows a growing dispersion of start times, with work starting both earlier and later in the day. This view is supported by research in the United States (Hamermesh 1995). However, further studies show a slight decline in other aspects of non-standard work, such as evening or night work (e.g., for the United States, Hamermesh 1999). Longer-term studies in the Netherlands also question any significant shift in when work is carried out (Breedveld 1998).

While these are broad statistics, the Time Use Survey allows in-depth investigation of issues around core hours that are important for the development of work–life balance policies. For example, the Time Use Survey shows how occupational segregation and, ultimately, pay disparities between women and men could be influenced by something as simple as the daily starting-time for certain jobs. In the early morning, there were large differences between the proportion of men and women who were working. Men were more than twice as likely to be working between 4am and 6am. The male rate was still almost double the female rate in the 6am to 8am period. At a more detailed level, at 7am on a weekday, on average, 20% of male tradespeople were at work; by 7.40am, this had risen to half. In comparison, at 7am, only 11% of female tradespeople were at work; by 7.40am, this had still only risen to 27%. The later start for women, particularly mothers, partly reflects higher rates of part-time work amongst this group. But the later start for mothers might also indicate childcare constraints in the early morning.

While policy makers consider day care, after-school care and even weekend care in terms of supporting working parents, little attention has been given to early-morning care. Even if such care is available, getting young children ready and then transporting them to a centre at perhaps 5.30am or 6am can be stressful for both children and parents.

If particular occupations tend to start work early, this may deter individuals with care obligations from involvement in such occupations. It could even discourage some

people from entering these occupations if they think that they may have early-morning care obligations in the future. In couples, one way around this is for one partner to start later. However, this individual has to be in an occupation where it is possible to start at a later time. While some jobs, such as milking cows or preparing breakfasts in hotels, clearly need to begin early in the morning, a later start for workers in particular occupations, such as the construction industry, may represent a simple "family friendly" policy change by businesses. After-school care for dependent children is likely to be much easier to organise than early-morning care.

As a further illustration of the value of time-use data, the New Zealand data show that, although the differences were small, partnered women with a child under five were the group of women most likely to be working in the evening. At first sight, this may appear to be a "family unfriendly" pattern of work. However, this issue has been explored in more detail in the United States, where it has been demonstrated to be a means of parents sharing equally in childcare. Therefore, this pattern of work has been perceived by many parents themselves as "family friendly". In the United States, Hamermesh (2000) found that couples, and particularly those with higher incomes, had a strong tendency to work similar shifts, with the result that they had joint leisure. However, children reduce the "jointness" of spouses' leisure, with the largest changes taking place among new mothers. Also in the United States, Presser (1988, 1994) found that, while couples often work at similar times, a significant proportion of two-parent families have non-overlapping shifts. She found that one-third of dual-earner married couples with pre-school children managed their childcare by having non-overlapping shifts.

## THE WORKPLACE HAS NOT BECOME HOME FOR MOST WORKERS

While home has traditionally been seen as a refuge from the workplace, United States researcher Arlie Hochschild (1997) proposed that long hours spent in workplaces reflected that home could be a place of conflict and stress. Hochschild argued some workplaces have "become home", with this finding widely reported in the popular media. While subsequent United States social survey data challenge this view (Kiecolt 2003), the time-use data also allows some testing of this theory in a New Zealand context.

Hochschild's notion of the workplace becoming home is that of white-collar workers staying on late into the evening at their workplaces. While data from both the Census and Household Labour Force Survey suggest there is a group who work long hours,

<sup>2</sup> As Hamermesh acknowledges, these couples may not have actually consumed this leisure together. In addition, he does not consider that couples working the same shifts might actually work in the same workplace, and so be able to have a "jointness" of work time.

overall the time-use data show that, during the week, relatively few people work during the day and then late into the evenings. The data (which include those individuals who work only in the evening) show that, while over 90% of men who worked during the week were actually working at some time between 8am and 4pm, in the period 6pm–8pm, this had dropped to 29% and further to 20% between 8pm and midnight. For women, the figures were 87%, 22% and 18%. When occupation was considered, it was found that 15% of male and female managers were working at 7pm during the week, whereas 27% of men and 20% of women in sales and service occupations were at work.

However, one major advantage of the Time Use Survey is that it allows researchers to also assess where this work was undertaken. Knowing where work is carried out, along with the type of work, can provide important contextual information. For example, Breedveld (1999:138) notes:

Obviously there is no comparison between driving a draughty bus until midnight and finishing up some paperwork over a cup of coffee in one's living-room. Going out to patrol a half-empty shopping mall is not the same as filling the gap between dinner and late-night television with some reading and writing.

When the "where" variable is considered, the New Zealand Time Use data show that, among those white-collar workers working late into the evening, a significant proportion are at home when undertaking such work (see section on hours of work). Even if this is unwelcome "spillover" of their job for many workers, a high proportion of workers who have some choice as to where to work choose to work at home rather than in the workplace in the evenings.

## YET HOME HAS NOT BECOME THE MAIN WORKPLACE FOR MOST WORKERS

Despite nearly 10% of non-agricultural work in New Zealand being undertaken at home, and over a quarter of non-agricultural workers reporting undertaking such work, the New Zealand Time Use data (supported by overseas time use and labour force surveys) suggest that relatively few people work primarily from home. Instead, it seems that there are three main patterns of work at home:

- undertaking most of one's work in an external workplace, and supplementing it with shorter periods of work at home in the evenings and/or weekends
- undertaking most of one's work in an external workplace, and staying home and working from there, possibly for an extended period of time, on particular weekdays
- undertaking most or all of one's work at home.

The data suggest that the first pattern is numerically the most important, with a large group of people undertaking some work from home. However, home work, even if generally for short periods, still presents some problems for those designing health and safety regulations. While managers may be meticulous in ensuring safe work practices are used within the workplace, such safe work practices may be ignored once employees are working at home.

# LONG HOURS OF PAID WORK DO NOT AUTOMATICALLY MEAN LITTLE TIME SPENT WITH CHILDREN

New Zealand, like the United States and Britain, stands out internationally in terms of having a significant group of workers who put in long weekly hours of work (Callister 1998, Jacobs and Gornick 2001). However, Census data also show that, for prime working-aged individuals and couples, hours of work have become more polarised since the mid-1980s (Callister 1998). Some workers are working shorter hours, while another group have extended their hours of paid work. Included amongst those New Zealanders working long hours are parents of young children.

Long working hours represents a possible concern for policy makers. In large part, this concern relates to the potential negative effect of long hours of work on the quality of family life. For example, research in the United States on welfare reform, while showing many benefits associated with these reforms, also raises questions about negative effects on adolescents as a result of the childcare problems associated with mothers working full time (Morris et al. 2002). In Britain, policy makers have raised concerns about the long hours of paid work among fathers of young children (Equal Opportunities Commission 2003). New Zealand's EEO Trust (2003) has identified similar concerns with regards to working fathers. Also in New Zealand, a study by the Council of Trade Unions (2003) has identified some of the family-related problems associated with long hours of paid work.

Yet, at the same time, it is well established that having an adequate household income is important for personal and family wellbeing. This is particularly relevant to families with dependent children (Carlson and Corcoran 2001). For many people, long hours of work are necessary in order to earn an adequate income (Rones et al. 2001). In addition, as Bell and Freeman (2001) demonstrate, in countries with a high level of wage inequality, such as the United States, Britain and New Zealand, working hard is potentially rewarded through career advancement, while a lack of perceived effort can attract a major earnings penalty. Thus, finding ways to balance paid work effort and time spent with family members or friends presents a challenge both for many individuals and for policy makers.

Yet, simply looking at weekly hours of paid work can be misleading when considering time spent with family members or friends. The New Zealand Time Use data suggest that those individuals in higher-skilled occupations generally have more control over when and where they work than their counterparts in lower-skilled jobs. Through this higher level of control, they may be working longer hours and earning higher incomes, but still be achieving a better work-life balance than those in lower-skilled, lower-status and lower-paid occupations. They might also be better supported by taxpayers in achieving this work-life balance than a lower-paid worker.

For example, a well-paid manager who is part of a couple household may work at a workplace from Monday to Friday between the hours of 8am and 6pm. During this time, the couple's children could be attending school followed by an after-school programme. This manager may then undertake some additional work at home in the evening and weekend. In relation to older children, including teenagers, working at home in the evenings and weekends can provide an opportunity for parents to have a "presence" in order to guide and monitor behaviour. Lareau (2000), although not specifically studying time use, suggests that the "presence" of fathers at home in the evening can be important for the wellbeing of children. She provides examples of fathers overseeing their children's homework.

When individuals in managerial, professional and technical occupations worked in the early morning and/or late evening, they undertook a much higher proportion of this work from home than was the case for other occupations. For men working after 8pm, when this work was measured in five-minute slots, the proportion of work carried out at home hovers around the 70% mark for professionals and just over 50% among managers. For women, the patterns are more complex, but managers have a peak around 60% while the high point for professionals is 70%.<sup>3</sup>

Morning work is not considered in most work/family discussions, and there may be stress associated with early-morning work both at home and at the workplace. Nevertheless, it is very different to get up in winter in a warm house to do some prework reading over breakfast while ensuring your children pack a healthy lunch, compared to going out in the cold and the dark to catch an early morning bus to work and having to leave your children to pack their own lunch.

Another advantage of time-use data is that it not only indicates when and where work is being undertaken, but it also provides data on simultaneous work. The New Zealand Time Use data show that, for professionals and managers who have dependent children, over 40% of the time they spent working in the late evenings was recorded as being simultaneous paid work and childcare (Singley and Callister 2004). This confirms

<sup>3</sup> However, low numbers mean these estimates should be treated with some caution.

that such parents could be in a monitoring/mentoring role at these times even if still working.

In contrast, a single parent in the hospitality industry may be required to work Friday nights and weekends, times when formal childcare is generally not available. For single parents who work evenings and/or weekends outside the home, the ability to monitor and mentor a child is substantially reduced. Children may be at home alone in the evening. In this example, the hospitality worker may work relatively few hours of paid work, have a low weekly income, and also have a less satisfactory work—life balance than the manager.

These examples illustrate why policy makers need to take into account not only hours of paid work but also work schedules, where work is carried out, occupation and family type when considering strategies for improving the work–life balance of New Zealand workers. The complexity of the relationship between working hours and time spent with family members suggests that simple policy solutions to increase family time, such as France's 35-hour working week, may not be entirely effective.

### **FUTURE RESEARCH**

There are other work—life balance research questions that could be explored using time-use data. For example, while managers and professionals tend to work long hours of paid work, individuals in these occupations are also more likely to have contracted out work, such as house cleaning, that other groups might have to undertake themselves. Being able to contract out some parts of unpaid work, such as house cleaning, potentially means that the total daily work hours (paid and unpaid) of the "overworked" managers and professionals might actually be less than for other seemingly less "over-worked" occupations. This hypothesis could be tested using time-use data. Such research would help better identify those groups at risk through overwork.

As another example, for a significant number of couples in the New Zealand Time Use data set, there is information available on both partners. These data have yet to be used by researchers. Issues such as joint patterns of both paid and unpaid work could be explored, including whether a significant number of New Zealand couples with young children use non-overlapping work shifts to manage childcare. It would also provide a better understanding of the gender division of paid and unpaid work within households. This, in turn, would assist our understanding of inequalities in employment and earnings between women and men. For example, the 2001 OECD

<sup>4</sup> To add further complexity to this issue, a child may be looked after in these time periods by a non-custodial parent. However, unlike the time use survey that commenced in the United States in 2003, the New Zealand Time Use Survey provides no information on shared-parenting arrangements (Callister and Hill 2002).

study *Balancing Work and Family Life* shows the ratio of women's to men's total work time (paid and unpaid) in couple households with a child under five in a range of countries. These data do not include New Zealand. The data provide a richer indicator of gender equity, including whether a "double burden" existed for employed mothers, than would mere measures of paid work. For instance, these data indicate that, in Sweden, total work time amongst couples where both were in paid work was nearly equal. However, in the other countries examined, women in paid work had a higher total workload than men. To date, New Zealand studies of inequality in unpaid work have focused on individuals (who may be living in couples) rather than on patterns of work within couples themselves.

### CONCLUSION

This research note shows how New Zealand Time Use data can be used to explore some important work-life balance issues. It also demonstrates the need for caution when developing simple indicators of work-life balance. Life is complex and, as in most areas of social science, single-variable measures can be misleading. Finally, it argues that the time use survey is an under-utilised data set. As more interest focuses on work-life balance issues, policy makers and researchers need to consider new ways that might be employed to shed light on important research and policy questions. Also, the more value that is extracted from this data set, the more likely that the Time Use Survey will be repeated in New Zealand in coming decades.

## REFERENCES

- Bell, L. and R.B. Freeman (2001) "Working hard" in G. Wong and G. Picot (eds.) Working Time in Comparative Perspective (vol. 1), W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan.
- Breedveld, K. (1998) "The double myth of flexibilization: Trends in scattered work hours, and differences in time-sovereignty" *Time and Society*, 7(1):129-143.
- Breedveld, K. (1999) "Regular irregularity: Flexible working hours and their implications for leisure and recreation" unpublished doctoral thesis, Amsterdam.
- Callister, P. (1998) "'Work-rich' and 'work-poor' individuals and families: Changes in the distribution of paid work from 1986 to 1996" Social Policy Journal of New Zealand, 10:101-121.

<sup>5</sup> Statistics New Zealand has not deposited the Time Use data at the international time use study centre at Essex University where data for the OECD study were drawn from.

- Callister, P. and S. Dixon (2001) "New Zealanders' working time and home work patterns: Evidence from the Time Use Survey" Occasional Paper 2001/5, Labour Market Policy Group, Wellington, www.lmpg.govt.nz/publication-view.asp?ID=36
- Callister, P. (2003) "Overwork, work schedules, working at home and time spent with family members: How time use data can inform work/life policy" working paper, www.callister.co.nz
- Callister, P. and M. Hill (2002) "Are 'two-parent' and 'single-parent' families misnomers misdirecting policies and family/work research?" Cornell Careers Institute working paper 02-18, Cornell University, Ithaca, New York http://www.blcc.cornell.edu/cci/workpap\_all.html
- Carlson, M.J. and M.E. Corcoran (2001) "Family structure and children's behavioral and cognitive outcomes" *Journal of Marriage and the Family*, 63:779-792.
- Council of Trade Unions (2003) "Website highlights epidemic of overwork" 5 August, http://union.org.nz/news/188.html
- EEO Trust (2003) "Fathers and paid work the research picture" www.eeotrust.org.nz/information/fathers/research.shtml
- Equal Opportunities Commission (2003) "Dads need more time out to share job of caring for children" 13 June, www.eoc.org.uk/EOCeng/EOCcs/News/13\_june\_fathersday.asp
- Evans, J.M., D.C. Lippoldt and P. Marianna (2001) "Trends in working hours in OECD
- countries" Labour Market and Social Policy Occasional Paper no. 45, OECD, Paris.
- Hamermesh, D.S. (1995) "Who works when? Evidence from the U.S. and Germany" NBER Working Paper 5208, NBER, Cambridge, Massachusetts.
- Hamermesh, D.S. (1999) "The timing of work over time" *The Economic Journal*, 109:37-66.
- Hamermesh, D.S. (2000) "Togetherness: Spouses' synchronous leisure, and the impact of children" NBER Working Paper 7455, NBER, Cambridge, Massachusetts.
- Harkness, S. (1999) "Working 9 to 5?" in P. Gregg and J. Wadsworth (eds.) *The State of Working Britain*, Manchester University Press, Manchester.
- Harvey, A.S. (1996) "Paid work around the clock: A cross-national/cross-temporal perspective" paper prepared for the Canadian Employment Research Forum Conference Changes in Working Time in Canada and the United States, Ottawa, Canada, June 13-15.
- Hochschild, A.R. (1997) *The Time Bind: When Work becomes Home and Home becomes Work*, Metropolitan, New York.
- Jacobs, J.A. and J.C. Gornick (2001) "Hours of paid work in dual-earner couples: The U.S. in cross-national perspective" Working paper, University of Pennsylvania.
- Kiecolt, K.J. (2003) "Satisfaction with work and family life: No evidence of a cultural reversal" *Journal of Marriage and the Family*, 65(1):23-35.

- Lareau, A. (2000) "My wife can tell me who I know: Methodological and conceptual problems in studying fathers" *Qualitative Sociology*, 23(4):407-433.
- Morris, P., V. Knox and L.A. Gennetian (2002) "Welfare policies matter for children and youth: lessons for TANF reauthorization" Research Brief, Manpower Demonstration Research Corporation, www.mdrc.org/NextGeneration
- OECD (2001) "Balancing Work and Family Life: Helping Parents Into Paid Employment" in OECD Employment Outlook, June, OECD, Paris.
- Presser, H.B. (1988) "Shift work and child care among young dual-earner American parents" *Journal of Marriage and the Family*, 50:133-148.
- Presser, H.B. (1994) "Employment schedules among dual-earner spouses and the division of household labor by gender" *American Sociological Review*, 59(3):348-364.
- Rones, P.L., J.M. Gardner and R.E. Ilg (2001) "Trends in hours of work in the United States" in G. Wong and G. Picot (eds.) Working Time in Comparative Perspective (vol. 1), W.E. Upjohn Institute for Employment Research, Kalamazoo, Michigan.
- Singley, S. and P. Callister (2004) "A double burden or the best of both worlds? A research note on simultaneous paid work and childcare in New Zealand" under review for publication.