# Long work hours and the wellbeing of fathers and their families 

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#### Abstract

The average hours worked by full-time employees in Australia have increased since the late 1970s. This, combined with increases in female labour force participation, has led to concerns about the impact of long work hours on family life. This paper explores the relationship between fathers' work hours, their own wellbeing and that of their families using data from the Household, Income and Labour Dynamics in Australia survey. The analysis is restricted to full-time employed fathers with a partner and dependent children. Overall, satisfaction with work hours decreases as the number of hours worked increases. However, long work hours are not necessarily, or even on average associated with pervasively lower wellbeing. Work hours are negatively related to only two of the thirteen measures of wellbeing examined. For fathers working very long hours, their satisfaction with their work hours is found to be very important to the relationship between work hours and wellbeing.


## Summary

The average hours worked by full-time employees in Australia have increased since the late 1970s. This, combined with increases in female labour force participation, has led to growing concerns about the impact of long work hours on family life. Much of the public debate on the desirability of long work hours has focused on the possible negative consequences for the wellbeing of workers and their families.

This study aims to extend the Australian literature on the relationship between fathers' work hours, their own wellbeing and that of their families. The analysis is based upon wave 1 of the Household, Income and Labour Dynamics in Australia (HILDA) survey, collected in 2001. The relationship between work hours and wellbeing is examined for fathers working 35 to 40 hours per week, 41 to 48 hours per week, 49 to 59 hours per week and 60 or more per week. The HILDA survey contains a wide range of measures of wellbeing, including: mental and physical health; work and family balance; parenting stress; satisfaction with life as a whole; satisfaction with relationships with partner and with children; and overall job satisfaction. The analysis is restricted to fathers with a partner and dependent children. This enables us to focus exclusively on those men who have family responsibilities.

Overall, fathers' satisfaction with their work hours decreases as the number of hours worked increases.

- Among fathers working 35 to 40 hours per week, only 2.5 per cent indicate very low satisfaction with their work hours. In contrast, among fathers working 60 or more hours per week, 19.0 per cent indicate very low satisfaction with their hours.
- High satisfaction with work hours is expressed by 63.2 per cent of those working 35 to 40 hours and 25.3 per cent of those working 60 or more hours.
The proportion of fathers who would prefer to work fewer hours (taking into account the impact this would have on their income) increases with the number of hours worked.
- Among fathers working 35 to 40 hours per week, 15.8 per cent would prefer to work fewer hours. The proportion of fathers who would prefer to work fewer hours increases to 58.1 per cent among fathers working 60 or more hours per week.

Work hours are negatively related to only two of the thirteen measures of wellbeing examined. Fathers working in excess of 48 hours a week report a lower sense of "vitality" and report more negative effects of work on family life than fathers working 35 to 40 hours per week. However, for the majority of measures, wellbeing does not decline as the number of hours worked increases. Further, fathers working

60 or more hours indicate marginally higher satisfaction with their relationship with their partner compared with those working "standard hours".

The quarter of fathers working very long hours (in excess of 60 hours per week), who express high satisfaction with their work hours have higher levels of wellbeing on virtually all measures as compared to fathers who indicate low satisfaction with such very long hours. On the other hand, for fathers working 35 to 40 hours, there are much smaller differences in wellbeing between those who express high as opposed to low satisfaction with their work hours.

The "polarisation" of wellbeing apparent between fathers who are and are not highly satisfied with their very long hours is mainly caused by the particularly high levels of wellbeing among those highly satisfied, rather than any particularly low level of wellbeing among those with low satisfaction. This conclusion is based on comparisons of the wellbeing of fathers who indicate high satisfaction with working 60 or more hours and those indicating high satisfaction with working 30 to 40 hours, and comparisons of the wellbeing of fathers who indicate low satisfaction with working their 35 to 40 hours or 60 or more hours per week.

The minority of fathers who are satisfied with working very long hours appear to be coping well with life, and seemed better off on several wellbeing dimensions than those who are satisfied with their 35-40 hours of work. Furthermore, there was no evidence that fathers who have low satisfaction with their long hours are pervasively worse off in terms of these various wellbeing measures than fathers working 35 to 40 hours who indicate low satisfaction with their work hours.

The results presented in the paper show that satisfaction with work hours decreases as the number of hours worked increases. However, they do not provide support for the argument that long work hours will necessarily, or even on average, be associated with pervasively lower wellbeing. For two of the measures, wellbeing is lower for those working long hours than for those working "standard" hours, and for one of the measures wellbeing is higher. Rather, they support the notion that there are "horses for courses". Finding the right match between workers and their jobs is a central challenge for workers themselves and their places of employment - one that can have very powerful positive or negative effects on workers' productivity, job satisfaction, relationships at home, and enjoyment of life in general. The "right match" is likely to be changeable as workers' goals and family responsibilities change.

# Long work hours and the wellbeing of fathers and their families 

## Introduction

The majority of Australian fathers work full-time and many work long hours. Although concerns about possible damaging repercussions of long work hours have a long history, in recent decades changes in the makeup of the Australian workforce and growing awareness of the importance of fathers in the lives of children have added fuel to modern day debates on this issue.

The 20th century saw considerable change in the "standard" working week for full-time workers. The working week gradually shortened from close to 40 hours in the early 1900s to 35-38 hours in many industries by the late 1970s (ABS 1995). However, the proportion of employees working more than 48 hours a week increased from 13.6 to 20.6 per cent between 1978 and 1994, and has remained fairly stable since (Wooden and Loundes 2002). ${ }^{1}$ Over this period, the proportion of employees working 41 to 48 hours has been constant ( 12 to 13 per cent). ${ }^{2}$ Healy (2000) shows that an increase in the proportion of employees working long hours (defined as 45 or more hours) has occurred for both men and women, although long work hours are considerably more prevalent among men than women. Healy's analysis also demonstrates that, for men, the increase in long work hours has occurred for all age groups except teenagers and is not confined to those in managerial and administrative occupations, although men with managerial and administrative responsibilities are more likely than other men to work extended hours. ${ }^{3}$

For most of the 20th century, concerns about long work hours tended to focus on the workers themselves - including their need for adequate rest and leisure to achieve a reasonable quality of life and to do their job effectively. These concerns were behind the introduction of the Eight Hour Day, first negotiated by stonemasons in Victoria in 1856.

In more recent times, debates about long hours have expanded to cover the impact of long hours on family life. This is in line with the growing recognition that

1. A variety of definitions of what constitutes long hours have been used in the literature. The "standard" full-time working week has variously been defined as 35 to 40 hours (Wooden and Warren 2003) or 35-44 hours (Dawson McCulloch, and Baker 2001; Healy 2000). Long hours have variously been considered to be 45 or more hours (Dawson et al. 2001) and 49 or more hours (Wooden and Loundes 2002).
2. Over this period the proportion of fathers with dependent children not employed has increased, as has the proportion employed part-time (Renda 2003). Paradoxically, concerns about jobless families (Dawkins, Gregg and Scutella 2001) have arisen at the same time as concerns about long work hours.
3. Healy (2000) and Wooden and Loundes (2002) figures are for actual hours worked in the week prior to the Labour Force Survey.
workers, both male and female, have family responsibilities beyond providing financially for their family. Increased emphasis has thus been placed on employers creating "family friendly" workplaces. ${ }^{4}$ Such concerns have been fuelled by the dramatic increase in the employment rates of mothers that has occurred over the last few decades - a development that has had a profound effect on family life and made issues of managing family and work increasingly complicated. ${ }^{5}$

The shift towards long work hours runs counter to the growth of dual income families and associated increased emphasis on workers achieving a reasonable work-family balance. For men, the shift is also at variance with the increased recognition of the importance of fathering and consequent pressure on fathers to play an active role in their children's lives. There is evidence that various aspects of paternal involvement are related to children's healthy development. ${ }^{6}$ The effects on child development appear to be both direct and indirect through their effects on the wellbeing of the mothers and fathers themselves (see Marsiglio, Amato, Day and Lamb 2000; Palkovitz 2002; Pryor and Rodgers 2001).

In addition to increased work hours among full-time employees, there have been other changes in the workplace affecting the ability of families to negotiate work and family responsibilities. While some of these changes may help workers meet their family responsibilities (such as the increased availability of flexible work hours and of leave for caring for family members), others may represent mixed blessings for workers and their families. For example, despite potential benefits of working from home afforded by technological innovations such as laptops, email and voice-mail, such technology can also lead to increased demands on employees to remain in touch with their place of employment and make it more difficult to disengage from work (Lehmkuhl 1999).

There is also some evidence that employees believe that they are working harder than in the past (Allan, O'Donnell and Peetz 1999; Morehead, Steele, Stephen and Duffin 1997). However, as Wooden (1999) notes, the extent to which this perception reflects an actual increase in work intensity has yet to be tested, while the repercussions of any increase would depend on the base-line level.

While there is general agreement about trends in work hours, there is less agreement about the implications of long work hours for the wellbeing of workers and their families. So far, most of the empirical research into the impact of long work hours has focused on personal wellbeing and there has been relatively little Australian research on the effects of long hours per se on family wellbeing. ${ }^{7}$ In addition, much of the Australian literature on the impact of long
4. In 1990, Australia ratified the International Labour Orgnanisation Convention 156, thereby committed to the development of policies to remove discrimination in the workplace against workers with family responsibilities.
5. Between 1983 and 2002, the proportion of two-parent families with dependent children in which both parents are employed increased from 39.7 per cent to 56.9 per cent (ABS various years).
6. As Pryor and Rodgers (2001:203) argue: "The mere presence of fathers ... are not the most crucial components of father-child relationships. Involvement in care, the provision of nurturing, and generally engaged parenting behavior are the aspects of fathering that are important for children, just as they are for parenting in general."
7. Recent Australian research has been undertaken by Pocock, Van Wanrooy, Strazzari and Bridge (2001), Probert, Whiting and Ewer (2000), and Wooden (2003). Wooden (2003) extends the present analysis, using the same data to examine the work hours of lone parents and the combined work hour regimes of couples with dependent children.
work hours on wellbeing has been based on studies of specific occupations or is qualitative in nature and is thus difficult to generalise. ${ }^{8}$ Further, although long work hours may have some positive effects on wellbeing, most of the literature focuses on potential negative effects. This is true of both the policy debate and the academic research. Indeed, Barnett (1998: 126), in her review of the literature on work and family, concludes that "there is an almost exclusive focus on conflict, both at the individual and at the corporate level".

This study aims to extend the Australian literature on the relationship between fathers' work hours, their own wellbeing and that of their families. A wide range of measures of wellbeing is examined, including: personal health and life satisfaction; fathers' relationships with their partner and children; and their perceptions of work and family balance. The effect of fathers' satisfaction with the hours they work is also explored. Throughout this paper the term "work hours" is used to refer to hours spent in paid employment.

The analysis is based upon a new large-scale representative Australian data set the Household, Income and Labour Dynamics in Australia (HILDA) survey. The HILDA survey has a number of advantages for studying the impact of work hours on families. These advantages relate to the wide range of measures of wellbeing, the size and national representativeness of the sample, and the household nature of the survey.

The following section discusses mechanisms by which long hours may affect wellbeing and briefly reviews the empirical literature. The third section describes the HILDA survey and the measures of wellbeing used in this paper. In the fourth section, the characteristics of fathers by work hours are outlined. The fifth section explores how satisfaction with hours worked and preferred hours varies according to the number of hours worked. The relationship between work hours and wellbeing is considered in Section 6 and the effects of satisfaction with work hours on the relationship between work hours and wellbeing are analysed in Section 7. Concluding comments are made in the final section.

## Literature on long work hours and wellbeing

In this section we discuss how wellbeing is defined and the mechanisms through which long hours may impact upon wellbeing, and we review the empirical literature on the relationship between work hours and wellbeing.

## Long hours and wellbeing

A number of approaches have been used to measure wellbeing. Traditionally, assessment of personal wellbeing focused on the absence of signs of illbeing, but over the last few decades indicators of positive wellbeing have also been emphasised. Personal wellbeing has sometimes been measured in terms of the extent to which individuals have access to a set of resources prejudged as necessary for meeting basic needs for healthy functioning, for handling life's problems, or for achieving "a good life". It has also been measured in terms of people's subjective experiences or inner sense of wellness or happiness (Allardt 1993;
8. Of course, some of the potential health risks of long work hours would vary for different occupations (for example, risks of accidents, exposure to noxious chemicals). While occupational-based research is thus useful, there is also a strong need for research on broad effects of long hours on workers in general and their families.

Campbell 1981; Deci and Ryan 2000; Veenhoven 1996). Thus, wellbeing may include both objective circumstances such as access to financial and community resources, subjective phenomena such as happiness or life satisfaction, and, as Veenhoven (forthcoming) points out, circumstances that involve gradations of objective and subjective phenomena, such as physical health.

Considerable attention has also focused on indicators of the wellbeing of social systems, including families (Zubrick, Williams, Silburn and Vimpani 2000), and communities or nations (Headey and Wearing 1981; Cummins et al. 2003). Once again, subjective and objective indicators or gradations of both are frequently used. For instance, common indicators of family wellbeing include a family's financial and material circumstances, parental employment, family members' satisfaction with relationships with each other and their reports of behaviour that provide insight into parenting styles and the quality of "family functioning" (McKeown, Pratschke and Haase 2003; Zubrick et al. 2000). At times, some of the clearly objective measures such as housing and financial resources are treated as potential factors affecting family wellbeing, rather than as indicators of family wellbeing per se, where the latter is measured in terms of subjective phenomena (McKeown et al. 2003).

Long work hours may impact upon both personal, family and community wellbeing in several ways, both negatively and positively. In relation to potential negative outcomes for workers themselves, Spurgeon, Harrington and Cooper (1997) suggest that long work hours may impair personal health and jeopardise safety both directly and indirectly. They may operate as a direct stressor in that workers need to continue performing adequately despite any accumulating fatigue. In addition, long work hours may increase stress indirectly by prolonging workers' exposure to other sources of job stress. Examples would include prolonged exposure to work hazards, management practices perceived as unfair, interpersonal difficulties, and work overload (which might be responsible for the long work hours in the first place).

Some research also suggests that, in the longer term, such personal repercussions may have negative flow-on effects for workplaces: overall productivity may fall, while disability claims, absenteeism and staff turnover may increase (Dawson, McCulloch and Baker 2001). Dawson et al. (2001) cite a number of studies suggesting that prolonged sleep deprivation (which may derive from long work hours or shift work) impairs performance and thus increases the risk of accidents in jobs requiring concentration.

In addition, increased hours spent at work necessarily reduces the amount of time available to spend on non-working activities, raising concerns about the ability of workers to have enough time to: "unwind" when away from work; nurture family relationships and parent effectively; provide non-financial support to extended family members; and engage in voluntary community activities.

Some authors have argued that long work hours are detrimental for communities, by limiting the time and energy people have to invest in their communities. As a result, neighbourhood social networks are weakened and the "community" moves from the neighbourhood to the workplace (Charlesworth et al. 2002; Pocock 2001, 2003; Probert, Whiting and Ewer 2000).

On the other hand, long work hours may also have some positive effects if they are enjoyable and enable the achievement of key personal goals (for example, helping others, or receiving recognition of skills and achievements). The extra
hours worked may also provide some workers with "quality time" when interruptions are at a minimum and intrinsically satisfying work is completed, and enable avoidance of the "rush hour" when traffic congestion is at its peak. In addition, long work hours may be associated with higher earnings and faster rate of career progression, which in turn may have some positive effects on personal and family wellbeing. Indeed, some workers may be less inclined to see their work hours as conflicting with family time than to interpret work hours as time devoted to fulfilling their family role of provider (for a discussion of the latter issue, see Milkie and Peltola 1999).

To some extent, the impact of long work hours on wellbeing is likely to vary according to the reasons people have for working such hours and the way they view them. For instance, negative personal repercussions seem particularly likely for those who are reluctantly putting in extra hours through coercion or because they feel overwhelmed by an unwanted heavy workload. Positive repercussions are likely to apply for those who have adopted this lifestyle through choice rather than coercion, who find their work intrinsically rewarding and beneficial to clients or the community, and who have the support of their spouse in working long hours.

## Empirical studies of the impact of long work hours on wellbeing

It is not possible to determine a priori whether long work hours will have negative, positive or no impact upon wellbeing. The empirical literature has primarily focused on employees' physical health and psychological wellbeing (including their experience of fatigue or "burnout", happiness or distress, or cardiovascular disease), as well as workers' sense of work-family imbalance, and perceived quality of relationships with other family members (Dawson, et al. 2001; Spurgeon et al. 1997).

Several studies have supported the view that long hours are detrimental to personal and family wellbeing (Cooper 2000; Charlesworth et al. 2002; Dawson et al 2001; Lehmkuhl 1999; Pocock 2003; Glezer and Wolcott 1999). However, Spurgeon, Harrington and Cooper (1997) point out that much of the research fails to differentiate between long hours and shift work, which can be very disruptive, and between long hours and work overload, which may be both highly stressful and a central reason for long work hours. Barnett (1998) comes to similar conclusions in her review of the literature.

Furthermore, other studies have failed to find an inverse relationship between work hours and the aspects of wellbeing examined, and some studies have suggested a positive relationship (for reviews see Barnett 1998; Ganster and Bates 2003; Spurgeon et al. 1997). For instance, in Australia, Kelley (2001) suggests that long work hours do not adversely affect men's satisfaction with their marriage or with their children (net of the effects of age, education and occupational status). Compared with men who worked 35-48 hours, those working 49-59 hours per week and those working 60 or more hours per week expressed higher satisfaction with their jobs and income. As Kelley (2001) notes, men's enjoyment of their jobs may be one reason why they spend so much time at work. In addition, those working 60 or more hours appeared to be marginally more satisfied with life than those working 35-48 hours.

The mixed findings are hardly surprising given differences in research methodologies adopted. These include: the definition of long hours used, the
outcomes measured, the nature of any moderating or mediating factors examined ${ }^{9}$, and the different contexts in which the studies took place (for example, in a country experiencing high or low job security at the time) (see Barnett 1998). For example, using United States data, Crouter, Bumpus, Head and McHale (2001) conclude there is little evidence of a direct link between long work hours and marital relationship quality. Rather, they provide evidence suggesting that the impact of long work hours on the relationship between partners depends on the way the partner feels about these long hours. Some spouses may feel that the benefits of long hours may outweigh any negative repercussions.

Barnett (1988) notes that the effects of work hours may be non-linear and that any negative impact of long work hours may be restricted to very long hours. Furthermore, research by Wooden and Warren (2003) highlights the need for caution in interpreting any apparent linear relationship that emerges between long hours and wellbeing. Using data from Wave 1 of HILDA, these authors found that, although job satisfaction declines as work hours increase, this result seems to be more a function of the positive impact of part-time work hours than the negative impact of long hours.

It is also important to bear in mind the difficulty in determining whether any associations are causal. Much of the empirical research has focused on the correlation between work hours and wellbeing and has often been based on cross-sectional data. However, a correlation between long work hours and wellbeing does not necessarily reflect a causal connection.

Even where there is a causal connection, the direction can often be difficult to decipher. Hochschild's research (1997) illustrates this problem. Based on a study of a Fortune-500 company in a rural company in the Midwest of the United States, Hochschild concludes that the appeal of long hours experienced by managers who enjoy their work is bolstered by a desire to avoid the hassles of home life, including complaints by spouses about their excessive work hours.

Thus, in order to test whether long work hours have an impact upon wellbeing, information on the same group of people over time is needed (that is longitudinal data). A further consequence of the cross-sectional nature of much of the research is that it is difficult to separate out short from longer-run effects.

In part, the impact of long work hours on some aspects of personal and family wellbeing will be determined by the reasons people work those hours. Possible reasons include financial necessity, fear of job loss if they do not work the long hours, or personal commitment to an entrenched corporate culture. At the other end of the spectrum, the intrinsic enjoyment of their job leads some workers to put in long hours, but it appears that this is largely a preserve of those in professional or managerial roles (Hochschild 1997; La Valle, Arthur, Millward, Scott, and Clayden 2002).
9. Examples of potential moderating factors include gender of worker, work schedule of spouse, match between characteristics of the job and worker - including level of autonomy required and preferred - and family circumstances, while examples of potential mediating factors include views of spouses about the long hours, other adjustments made in response to long hours (for example, enlisting home help) that may change the wellbeing outcomes of interest (for example, enjoyment of family time).

In summary, the reasons individuals work long hours are varied and complex. Both the theoretical and empirical literature suggests that there may be both positive and negative effects on wellbeing. The effects are likely to be determined by many factors including the nature of the job, family circumstances and psychological factors.

## HILDA survey and measures of wellbeing

## HILDA survey

The first wave of the HILDA survey involved face-to-face interviews with nearly 14,000 respondents aged 15 or more years from 7,682 households across Australia. Watson and Wooden (2002) provide a detailed discussion of the design of the survey.

The data collection unit is the household. The survey involves the use of several data collection instruments. After establishing contact with a member of the household, an interview was conducted with at least one member of the household to obtain household level information. Face-to-face interviews were then pursued with each household member aged 15 years and over. Finally, household members were asked to respond to a self-complete questionnaire.
There are several features of the HILDA survey that makes it suited for an analysis of the relationship between work hours and wellbeing. The survey contains measures of: labour force status and work hours; preferred work hours and satisfaction with current work hours; relationship status and number and age of children; personal mental and physical health; levels of energy; satisfaction with various domains of life and with life in general; perceptions of work-family balance; and stress relating to parenting.

The household nature of the HILDA survey, allows us to compare fathers' responses to questions on their satisfaction with their relationship with their partner and their children, and their partners' views about the quality of these relationships. The relatively large sample size provided by the HILDA survey allows for a more detailed categorisation of work hours, as compared with most other Australian studies on work hours and wellbeing. This is important given the argument made earlier that there may be a non-linear relationship between hours and wellbeing.

The analysis is restricted to fathers who lived with a partner in a household containing at least one child under the age of $15 .{ }^{10}$ Given our focus on the impact of long work hours on wellbeing, we restrict the analysis to fathers whose usual work hours are full-time (that is, 35 hours or more per week).
Respondents in paid employment were asked to indicate the number of hours per week they usually work in all their jobs (including paid or unpaid overtime). We used fathers' answers to this question to classify them into the following four work-hour groups: 35-40 hours per week (termed in this paper "standard" full-time hours); 41-48 hours; 49-59 hours; and 60 hours or more.

## Work hour preferences and satisfaction

Respondents in paid employment were asked for their views on several aspects of their work. Employed respondents were asked to indicate the number of hours per week they would prefer to work, taking into account the effect of any

[^0]change in hours on their earnings, and to rate their satisfaction with work hours on a scale ranging from 0 for "totally dissatisfied" to 10 for "totally satisfied".

## Measures of personal and family wellbeing and work-family balance

The HILDA survey contains a wide range of measures of personal and family wellbeing and work-family balance. The measures used in this paper are briefly described in below.

## Satisfaction with fathers'relationships within family

Parents were asked to rate their satisfaction with their relationship with each other and with their own and their partner's relationship with their children, using the rating scale ranging from 0 "completely dissatisfied" to 10 "completely satisfied". In this analysis, attention is directed to each partner's satisfaction with their relationship with each other and with the father's relationship with their children. ${ }^{11}$ All other wellbeing measures were based on fathers' reports.

## Job and life satisfaction

All respondents were asked to use the $0-10$ satisfaction rating scale described above to answer the question "All things considered, how satisfied are you with your life?", while those in paid work were asked to use this scale to answer the question "All things considered, how satisfied are you with your job?".

## Work and family life balance

The HILDA survey contains 13 of the items in Marshall and Barnett's (1992) Work-Family Strains and Gains Scale. Based upon fathers' responses to these questions, three sub-scales of work and family life balance were constructed by summing the value given to each item (that is, each item in the scale is given equal weight). ${ }^{12}$ We label these measures: "negative effect of work on family"; "positive effect of work on family"; and "positive effect of work on self". ${ }^{13}$

## Parenting stress

One of the most direct mechanisms through which long work hours may negatively affect family wellbeing, and in particular the wellbeing of children, is
11. The HILDA survey asks about satisfaction with personal relationships with "your children", "your stepchildren" and with "your partner's relationship with your children". It seems reasonable to suggest that most respondents would interpret these questions to refer to all biological children and stepchildren, regardless of whether or not they were living with the respondent. We have not used the question on their relationship with their stepchildren. This means that 71 stepfathers with no biological child in the household are excluded from the analysis for this measure.
12. Principal Components analysis suggested that the items in the Work-Family Strains and Gains Scale could be reduced to a three factor solution.
13. The measure "Negative effect of work on family" is constructed using the following four items (Alpha reliability is 0.83): (i) "Because of the requirements of my job, I miss out on home activities that I would prefer to participate in"; (ii) "Because of the requirements of my job, my family life time is less enjoyable and more pressured"; (iii) "Working leaves me with too little time or energy to be the kind of parent I want to be"; and (iv) "Working causes me to miss out on some of the rewarding aspects of being a parent."
The measure "Positive effect of work on family" is constructed from the following three items (Alpha reliability is 0.59 ): (i) "My work has a positive effect on my children"; (ii) "Working helps me to better appreciate the time I spend with my children"; and (iii) "The fact that I am working makes me a better parent".
The measure "Positive effect of work on self" is constructed using the following three items (Alpha reliability is 0.82): (i) "Having both work and family responsibilities makes me a more well-rounded person"; (ii) "Managing work and family responsibilities as well as I do makes me feel competent"; and (iii) "Having both work and family responsibilities gives my life more variety".'
through increasing parenting stress. A measure of parenting stress was constructed on the basis of four items tapping the feelings that parenting is harder than expected, often very tiring, and more work than pleasure, and that parenting responsibilities create a sense of entrapment. ${ }^{14}$

## Health

Three aspects of health are measured, using questions from the widely used SF-36 Scale (Ware, Snow, Kosinski and Gandek 2000). These consisted of:

■ General health - higher scores indicate better health (five-item scale; Cronbach alpha = 0.77);
■ Vitality - lower scores indicate feeling tired and "worn out", and high scores indicate feeling "full of life" and "having lots of energy" (fouritem scale; Cronbach alpha $=0.81$ ); and

- Mental health - lower scores tap feeling nervous and unhappy and high scores tap a sense of peace and happiness (five-item scale; Cronbach alpha $=0.78$ ).
Of course, some fathers may not be aware of a negative impact of their work on themselves and their families and others may be unwilling to acknowledge any negative impacts. In part, this issue is addressed by the use of the partners' reports of their satisfaction with spousal relationships and with the fathers' relationship with the children. Although respondents in the household were asked to answer the self-completion questionnaire in private, some may have consulted each other and felt reluctant to provide answers that differed.


## Work hours and socio-demographic characteristics

As discussed in Section 2, the impact of long hours is likely to depend, in large part, on the father's characteristics and those of his family as well as the nature of his job. In this section we present information on the human capital, demographic and job characteristics of fathers and their partners according to the fathers usual work hours.

Overall, 33.2 per cent of the full-time employed fathers work 35 to 40 hours ("standard" hours), 21.8 per cent work 41 to 48 hours, 23.6 per cent work 49 to 59 hours, and 21.4 per cent usually work 60 hours or more. The HILDA survey produces higher estimates of average hours worked than the ABS Labour Force Survey (Wooden 2003: 4). Wooden (2003) finds that this is mainly because the HILDA survey over-enumerates persons working very long hours. He notes that, while the reasons for this are not entirely clear, the questions on number of hours worked differ in the two surveys. For example, the HILDA survey prompts respondents to include both paid and unpaid overtime.

There are no statistically significant differences in the number of children or age of the youngest child by fathers' work hours (Table 1). The proportion of fathers with pre-school aged children ranges from 46.2 per cent for those working 60 or more hours to 49.2 per cent for those working 41 to 48 hours.
14. The measure "Parenting stress" is based on ratings from 1 "strongly disagree" to 7 "strongly agree" with each of four statements: (i) "Being a parent is harder than I thought it would be"; (ii) "I often feel tired, worn out, or exhausted from meeting the needs of my children"; (iii) "I feel trapped by my responsibilities as a parent"; and (iv) "I find that taking care of my child/children is much more work than pleasure". The alpha reliability for the present sample is 0.72 ). This measure has previously been used in the University of Michigan's Panel Study of Income Dynamics.


Perhaps somewhat surprisingly, there is no clear pattern between the work hours of fathers and their partner's employment status. Over 60 per cent of fathers in each work-hours group have partners who are employed. There is also no clear relationship between fathers' working hours and the number of hours their partner works if they are employed.
However, fathers' educational attainment differs across the work hours categories. Fathers working 35 to 40 hours per week are the least likely to have a post-secondary qualification followed by those working 60 or more hours.

As work hours increase, the proportion of fathers who are Australian-born increases. Furthermore, fathers who work 35-40 hours are nearly twice as likely to have been born in a non-English speaking country as fathers working longer hours. This pattern is reflected in English language proficiency. A higher proportion of
fathers working longer hours (more than 40 hours a week) speak only English than fathers working 35 to 40 hours.
As the number of hours worked increases, the proportion employed in upper white-collar occupations increases (from 40.8 per cent of those working 35 to 40 hours to 59.6 per cent of those working 60 or more hours). Correspondingly, fathers who worked $35-40$ hours are the most likely to have a blue-collar occupation. These figures indicate that many of those working long hours probably have jobs that offer substantially different conditions from those working shorter hours, including enhanced task variety and self-direction. Such factors have been found to be very important in determining the impact of jobs on personal and family wellbeing (see Barnett 1998; Ganster and Bates 2003).
There are striking differences in the proportions of fathers who are self-employed according to hours worked. ${ }^{15}$ Nearly half ( 47.3 per cent) of the fathers who are working 60 or more hours are self-employed, compared with 29.8 of those working 49-59 hours, only 11.9 per cent of those working 41 to 48 hours, and 14.6 per cent of those working 35 to 40 hours. Fathers working 35 to 40 hours are more likely to be employed on a casual basis ( 7.9 per cent) than fathers working 41 to 48 hours ( 2.4 per cent), 49 to 59 hours ( 2.8 per cent), or 60 or more hours ( 4.8 per cent).
Average gross annual earnings increase substantially with work hours (from \$43,800 for fathers working 35 to 40 hours to $\$ 55,000$ for fathers working 60 or more hours).

## Satisfaction with work hours and work hour preferences

In this section we document the relationship between number of hours worked and two measures of fathers' views about their work hours: satisfaction with work hours (measured on an eleven point scale) and work hours preferences.

We first consider satisfaction with work hours. Over 70 per cent of full-time employed fathers with dependent children reported ratings above the mid-point of the scale. This is consistent with the bulk of research into satisfaction with personal life domains: people are inclined to indicate moderate to high satisfaction with most aspects of their lives - a situation that seems to reflect a tendency to adjust to life's circumstances and maintain a positive outlook (Cummins and Nistico 2002).

As the number of hours worked increases, the proportion of fathers providing a "high" satisfaction rating ( 8 to 10) falls (Table 2 ). High satisfaction is indicated by 63.2 per cent of fathers working 35 to 40 hours, 48.5 of those working 41 to 48 hours, 30.5 per cent of those working 49 to 59 hours, and just 25.3 per cent of the fathers working 60 or more hours (Table 2). The relationship between satisfaction with work hours and number of hours worked is statistically significant.

At the other extreme, the proportion of fathers reporting "very low" satisfaction with their hours (ratings of 0 to 3 ) increases sharply as the number of hours worked increases. Very low satisfaction is indicated by just 2.5 per cent of the fathers working 35 to 40 hours and by 19.0 per cent of working 60 hour or more.
15. In this paper all respondents who have their own business are classified as being selfemployed. This differs to the approach used by the ABS. We define type of employment contract according to whether the respondent saw themselves as being employed on a casual basis or on a permanent or ongoing basis. This differs from the ABS approach in which type of employment is identified using information on whether the respondent receives paid holiday or paid sick leave. See Wooden and Warren (2003) for a comparison of these approaches.

As discussed in Section 3, the HILDA survey asked respondents whether they would prefer to change their work hours if they could choose their hours, taking into account the impact of a change in work hours on their income. Two-thirds of fathers working 35 to 40 hours per week say they would not change their work hours. Only 15.8 per cent of these fathers say they would work fewer hours and 17.5 per cent indicate a preference for more hours (Table 2). As the number of hours worked increases, the proportion of fathers who say they would prefer to work fewer hours increases. Of fathers working 41 to 48 hours, 32.8 per cent say they would work fewer hours and just 8.4 per cent indicate a preference for more hours.

Over half of the fathers working more than 48 hours per week report that they would prefer to work fewer hours, with very few reporting that they would like to increase their work hours ( 3.7 per cent of those working 49 to 59 hours per week and 0.6 per cent of those working 60 hours or more per week). Nevertheless, 44.2 per cent of those working 49 to 59 hours and 41.3 per cent of those working 60 or more hours indicate that they would not change their work hours.

Some fathers, who may be unhappy about their long hours, perhaps because of the impact on family life, may nevertheless prefer not to change their hours because it would lead to a reduction in income. Similarly, some fathers may prefer to work fewer hours with a corresponding drop in salary, but decide against doing so if this strategy implies loss of other rewards (for example, they want to "do their best", help their clients, gain promotion, or save their jobs). Thus, on balance, they may prefer not to reduce their work hours, even though they would like to spend more time engaging in other activities.

Table 3 shows fathers' satisfaction with work hours by preferred hours and number of hours usually worked. The majority of fathers working 35 to 40 hours who would prefer to work fewer hours report moderate ( 34.7 per cent) or high satisfaction ( 38.1 per cent). Just 5.4 per cent express very low satisfaction and a further 21.8 per cent indicate moderately low satisfaction. As the number of

hours worked increases, fathers who prefer to work fewer hours are increasingly likely to report moderately low or very low satisfaction with their hours. Among fathers working 60 or more hours, 25.1 per cent express very low satisfaction, 32.0 per cent indicate moderately low satisfaction, 30.1 per cent indicate moderate satisfaction and only 12.8 per cent indicate high satisfaction.

As expected, among fathers who would not change their work hours, the proportion reporting moderately low or very low satisfaction with their work hours is smaller than for fathers who would prefer to work fewer hours. Correspondingly the proportion indicating moderate or high satisfaction is larger than for fathers who would prefer to work fewer hours. Among fathers working 35 to 40 hours, just 1.2 per cent indicate very low satisfaction. This increases to $4.7,3.8$ and 10.3 per cent of fathers working 41 to 48,49 to 59 and 60 or more hours respectively. There is also an increase in the proportion reporting moderately low satisfaction as the number of hours worked increases. The proportion indicating high satisfaction falls as the number of hours worked increases. For example, 70.8 per cent of those working 35 to 40 hours indicate high satisfaction as compared to 43.0 per cent of those working 60 or more hours.

## Wellbeing and work hours

This section presents information on the relationship between the number of hours worked and personal and family wellbeing. Given that the human capital, demographic and job characteristics of fathers varies according to work hours, it is important to control for these differences in order to identify the underlying relationship between work hours and wellbeing. In this paper differences in the

|  | Hours (per week) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 35-40 | 41-48 | 49-59 | 60+ |
|  | Percent |  |  |  |
| Satisfaction rating | Prefer to work fewer hours |  |  |  |
| 0-3 (very low) | 5.4 | 21.2 | 26.2 | 25.1*** |
| 4-5 (moderately low) | 21.8 | 26.0 | 27.5 | 32.0 |
| 6-7 (moderate) | 34.7 | 36.5 | 33.9 | 30.1 |
| 8-10 (high) | 38.1 | 16.3 | 12.4 | 12.8 |
| Total | 100 | 100 | 100 | 100 |
|  | Prefer to work the same hours |  |  |  |
| 0-3 (very low) | 1.2 | 4.7 | 3.8 | $10.3^{* * *}$ |
| 4-5 (moderately low) | 5.5 | 7.4 | 17.9 | 17.1 |
| 6-7 (moderate) | 22.5 | 22.7 | 28.6 | 29.6 |
| 8-10 (high) | 70.8 | 65.2 | 49.7 | 43.0 |
| Total | 100 | 100 | 100 | 100 |
|  | Prefer to work more hours |  |  |  |
| 0-3 (very low) | 5.0 | - | - | - |
| 4-5 (moderately low) | 12.3 | - | - | - |
| 6-7 (moderate) | 25.3 | - | - | - |
| 8-10 (high) | 57.3 | - | - | - |
| Total | 100 |  |  |  |
|  |  |  |  | hted stering |
| Source: HILDA Survey Wave |  |  |  |  |

characteristics of fathers are controlled for by calculating least squares means. ${ }^{16}$ The characteristics adjusted for are: educational attainment; country of birth; English language use at home and proficiency; number of children under 15; age of youngest child; occupational status; employment classification; partner's employment status and hours of work; fathers age; and labour market earnings.
Table 4 shows that, for all but three of the 13 measures of wellbeing, there are no statistically significant differences between fathers working 35-40 hours and those working longer hours. ${ }^{17}$ Compared with fathers who worked 35-40 hours, those working more than 40 hours reported a stronger negative impact of work on family, while those working more than 48 hours reported lower personal vitality. On the other hand, fathers working 60 or more hours indicate marginally higher satisfaction with their relationship with their partner than those working 35-40 hours.

It is interesting that there is no relationship apparent for general health given the occupational health and safety literature which suggests that shift work, sleep deprivation and fatigue are associated with an increased accident rate (Dawson et al. 2001). Given that accident rates are quite low, it is possible that the HILDA sample is not large enough to pick up any increased accident rate among those working long hours. Differing findings may emerge for specific occupations, such as long distance truck driving.

It is perhaps not surprising that most of the indicators of wellbeing do not vary significantly with work hours, given that the meaning of long hours varies according to personal goals and the context in which long work hours occur (for example, whether or not the respondents enjoy their work and their family circumstances). Indeed, models of stress and coping have long recognised that the impact of events or circumstances on wellbeing depend strongly on the way these events are appraised, and that appraisals in turn depend on a variety of factors, such as personal goals and beliefs (including belief in ability to cope with the demands), and personality factors (Lazarus and Folkman 1984).

## Satisfaction with work hours and wellbeing

The analysis thus far suggests that the longer the hours worked by fathers, the less satisfied they are with their working hours and the more likely they are to prefer shorter hours. Yet the lower levels of satisfaction with working hours are reflected in lower levels of wellbeing for only two of the thirteen measures examined: vitality and perceived negative effects of work on family. On the other hand, those working 60 or more hours reported significantly higher satisfaction with their relationship with their partner than those working "standard hours", although the difference between the two groups in average ratings was small.

[^1]Personal appraisal of the hours worked is also likely to be a crucial determinant of whether the long hours have adverse effects on personal and family wellbeing. In this section we examine whether wellbeing differs according to the fathers' satisfaction with their hours and number of hours worked. We choose to use satisfaction with work hours rather than preferred hours since a respondent can feel dissatisfied with working long hours while preferring to retain these hours rather than have a reduced income.

We make two broad sets of comparisons. First, we compare the wellbeing of those expressing different levels of satisfaction but working the same number of hours. ${ }^{18}$ Second we compare the wellbeing of those who express "low satisfaction" with work hours who work 35 to 40 hours with fathers who report low satisfaction with working 60 or more hours. Similarly, fathers who indicate high satisfaction with working 35 to 40 hours are compared to fathers with high satisfaction with

18. Thus, those previously classified as indicating "very low satisfaction" or "moderately low satisfaction" are combined for this analysis. The other classifications ("moderate satisfaction" and "high satisfaction") are retained.
working 60 or more hours. As in the previous section, the wellbeing measures have been adjusted for differences in the characteristics using least squares means. ${ }^{19}$
We first focus on fathers working 35 to 40 hours per week (Table 5). There are no significant differences in the wellbeing of fathers expressing low versus moderate satisfaction. However, significant differences are found between those indicating low versus high satisfaction for five measures of wellbeing: overall job satisfaction; overall life satisfaction; negative effects of work on family life; positive effects of work on family life; and sense of vitality. In each case, the group expressing high satisfaction indicates higher wellbeing (or lower illbeing).
The relationship between satisfaction with work hours and wellbeing is much stronger for fathers working 60 or more hours per week than for fathers working 35 to 40 hours. Fathers who are moderately satisfied with working 60 or more hours per week differed significantly from those indicating low satisfaction with such hours on 5 of the 13 measures (job and life satisfaction, negative effect of work on family life and general health and vitality). In each case, the moderately satisfied group indicates higher wellbeing (or lower illbeing).
For all except two measures, fathers who are highly satisfied with working 60 or more hours have significantly higher wellbeing (or lower "illbeing") than those who express low satisfaction with such hours. The exceptions are for "general health" and for the positive effect of work on the self. While mean scores on these measures are higher for those expressing high rather than low satisfaction with work hours, the differences are not statistically significant. ${ }^{20}$

The fact that the relationship between satisfaction with work hours and wellbeing is stronger for fathers working long hours than for those working "standard" hours implies that the association between satisfaction with work hours and wellbeing cannot be entirely explained by an underlying happy or unhappy disposition, which shapes both views about work hours and wellbeing. ${ }^{21}$

We now turn to the comparisons of fathers working 35 to 40 hours and those working 60 hours or more who express the same level of satisfaction with their respective working hours. Of the fathers who indicate low satisfaction with their work hours, those working 60 or more hours differed significantly from those working 35-40 hours on two dimensions only: the former group report a greater negative effect of work on family life and lower levels of vitality.

On the other hand, of fathers who expressed high satisfaction with their work hours, those working 60 or more hours had significantly higher wellbeing scores than those working "standard hours" in relation to six measures; positive effect of work on family life; lower parenting stress; satisfaction with their jobs; satisfaction with their relationships with their partner and children; and partners' satisfaction with father-partner and father-children relationships.

[^2]These results suggest that the personal and family wellbeing differences between those with high as opposed to low satisfaction with long work hours can not be explained by any markedly pervasive low wellbeing experienced of those with low satisfaction with such hours. Nor could the difference be entirely explained by any markedly pervasive high wellbeing experienced by fathers who are very satisfied with working such long hours. However, the latter group does seem to be better off than those with high satisfaction with "standard hours" on a number of wellbeing dimensions. There is no evidence that fathers who indicate high satisfaction with very long hours have poorer family relationships than fathers with high satisfaction working standard hours. Indeed the partners of fathers indicating high satisfaction with very long hours seem particularly happy with spousal relationships. One possible explanation for these patterns is that they reflect differences in the personalities of those who enjoy working hard. It is also possible that there are other benefits that accrue to partners, such as interesting work stories, work events and reflected glory from their partners' achievements.


## Concluding comments

The average hours worked by full-time employees in Australia have increased since the late 1970s. This trend, combined with increases in female labour force participation, has led to growing concerns about the impact of long hours on family life. This paper has empirically explored the validity of the argument that fathers' long work hours tend to be detrimental to these workers and their families. The analysis is restricted to full-time employed fathers with a partner and dependent children. This enabled us to focus on the association between long work hours and wellbeing for a group of men who all have family responsibilities. A wide range of indicators of subjective wellbeing are considered, including: mental and physical health; work and family balance; parenting stress; satisfaction with life as a whole; satisfaction with relationships with partner and with children; and satisfaction with job overall. It must be stressed that the analysis is based on cross-sectional data and hence testing for a causal relationship between hours and wellbeing is not possible.

Overall, fathers' satisfaction with their work hours decreases as the number of hours worked increases. Furthermore, the proportion of fathers who would prefer to work fewer hours (taking into account the impact on income) increases with the number hours worked.

For the majority of measures, wellbeing does not decline as the number of hours worked increases. There are two exceptions. Fathers working in excess of 48 hours a week report a lower sense of "vitality" and more negative effects of work on family life than fathers working 35 to 40 hours per week. On the other hand, fathers working 60 or more hours indicate marginally higher satisfaction with their relationship with their partner compared with those working "standard hours".

Although satisfaction with work hours declines sharply with increases in work hours, there is considerable variability in satisfaction ratings. For example, onequarter of fathers working 60 or more hours report a high level of satisfaction with these hours. These fathers have higher levels of wellbeing for virtually all measures as compared to the larger group ( 45 per cent) of fathers who indicate low satisfaction. On the other hand, for fathers working 35 to 40 hours, there are much smaller differences in wellbeing between those who have high as opposed to low satisfaction with their work hours. For fathers working 41 to 48 hours and 49 to 59 hours there are some differences in wellbeing according to satisfaction with work hours, although the number of dimensions for which there are differences is smaller than that for fathers working 60 or more hours.

Fathers indicating high satisfaction with working 60 or more hours report higher levels of personal and family wellbeing on several measures as compared to fathers with a similar level of satisfaction working 35 to 40 hours. However, fathers who work long hours and who express low satisfaction with those hours have similar levels of wellbeing as those who express low satisfaction working 35 to 40 hours on all but two dimensions. Thus, the "polarisation" of wellbeing apparent between fathers who view their very long hours positively and those who view them negatively is mainly caused by the particularly high wellbing of those who are highly satisfied with very long hours rather than any particularly low wellbing of those who indicate low satisfaction with such hours.

Overall, the links between fathers' work hours and subjective wellbeing vary according to how fathers appraise these hours. However, the link between the
fathers' appraisal of their work hours and wellbeing is much stronger for fathers working long hours. The minority of fathers working very long hours who indicate high satisfaction appear to be coping well with life, and in some areas seem to be better off than those indicating high satisfaction with their 35-40 hours of work. Furthermore, there was no evidence that fathers who indicate low satisfaction with long hours are pervasively worse off in terms of these various wellbeing measures than fathers who indicate low satisfaction with working 35-40 hours.

In short, while long work hours appeared to be detrimental for some fathers and their families, this was not the case for all fathers. Our analysis suggests that workers' satisfaction with their work hours needs to be taken into account when examining the long work hours debate.

While these findings present a fairly clear picture, the study has several limitations. First, work hours represent just one dimension of work that may impact upon wellbeing. While we differentiate according to satisfaction with work hours it would be of value to consider other aspects of work conditions. Of particular relevance would be shift work and the level of fit between each partner's work schedule in the light of family needs. Second, we have used information only on the fathers' view of their own hours. The impact of fathers' work hours on the quality of relationships within the family is also likely to be affected by the views of other family members.

Third, we do not distinguish between shorter- and longer-term implications of long hours, and while the absence of a direct negative association between long work hours and (current) personal wellbeing can be explained by psychological theories, it remains possible that selection factors exaggerated these null results. As Crouter et al. (2001) point out, where long hours engender marital conflict, couples may be likely to either separate or cut back these hours, thereby disqualifying them from the sample that is studied.

Fourth, the analysis is based upon cross-sectional data. While our finding that satisfaction with working hours becomes increasingly important for wellbeing as the number of hours worked increases is suggestive of a causal relationship, it is not possible to determine definitively the direction of causation. Over time, as additional waves of HILDA data are collected, the survey will enable us to throw further light on this issue. Finally, the measures of wellbeing are based mostly on reports of fathers themselves. For some of the measures, such as various aspects of physical health, objective measures would be preferable. However, these kinds of data are not available for a large nationally representative sample in Australia.

The results presented in the paper show that satisfaction with work hours decreases as the number of hours worked increases. However, they do not provide support for the argument that long work hours will necessarily, or even on average, be associated with pervasively lower wellbeing. For two of the measures, wellbeing is lower for those working 60 or more hours than those working 35-40 hours, and for one of the measures wellbeing is higher. Rather, they support the notion that there are "horses for courses". Finding the right match between workers and their jobs is a central challenge for workers themselves and their places of employment - one that can have very powerful positive or negative effects on workers' productivity, job satisfaction, relationships at home, and enjoyment of life in general. The "right match" is likely to be changeable as workers' goals and family responsibilities change.

## References

ABS (various years), Labour Force Status and Other Characteristics of Families, Catalogue No. 6224.0, Australian Bureau of Statistics, Canberra.

Allan, C., O’Donnell, M., \& Peetz, D. (1999), "More tasks, less secure, working harder: three dimensions of labour utilisation", Journal of Industrial Relations, vol. 41, no. 4, pp. 519-535.

Allardt, E. (1993), "Having, loving, being: An alternative to the Swedish model of welfare research", in M. Nussbaum, and A. Sen (eds), The Quality of Life, Clarendon Press, Oxford.

Barnett, R.C. (1998), "Toward a review and reconceptualisation of the work/family literature", Genetic, Social, and General Psychology, vol. 124, no. 2, pp. 125-138.

Campbell, A. (1981), The Sense of Wellbeing in America: Recent Patterns and Trends, McGraw-Hill, New York.

Charlesworth, S., Campbell, I., Probert, B., Allan, J., \& Morgan, L. (2002), Balancing Work and Family Responsibilities: Policy Implementation Options, Report for the Victorian Department of Premier and Cabinet \& Department of Innovation, Industry and Regional Development, Centre for Applied Social Research, School of Social Science and Planning, RMIT University, Melbourne.

Cooper, C.L. (2000), "The psychological implications of the Americanisation of work in the UK", Stress News, vol. 12, no. 2.

Crouter, A., Bumpus, M., Head, M. \& McHale, S. (2001), "Implication sof over work and overload for the quality men's family relationships", Journal of Marriage and Family, no. 63, pp. 404-416.

Cummins, R.A., Eckersley, R., Pallant, J. Van Vugt, J., \& Misajon, R. (2003), "Developing a national index of subjective wellbeing: The Australian Unity Wellbeing Index", Social Indicators Research, vol. 64, no. 2, pp. 159-190.

Cummins, R.A. \& Nistico, H. (2002), "Maintaining life satisfaction: The role of positive cognitive bias", Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-being, No. 3, pp.37-69.

Dawkins, P., Gregg, P. \& Scutella, R. (2001), "The growth of jobless households in Australia", Melbourne Institute Working Paper No. 03/01, University of Melbourne, Melbourne.

Dawson, D., McCulloch, K. \& Baker, A. (2001), Extended Working Hours in Australia; Counting the Costs, Report Commissioned by the Queensland Department of Industrial Relations. Centre for Sleep Research, University of South Australia.

Deci, E.L. \& Ryan, R.M. (2000), "The 'What' and 'Why' of goal pursuits: Human needs and the self-determination of behavior", Psychological Inquiry, vol.11, no.4, pp.227-268

Diener, E. (1984), "Subjective wellbeing", Psychological Bulletin, vol. 95, no. 3, pp. 542-575.

Diener, E. \& Lucas, R.E. (1999), "Personality and subjective wellbeing", in D. Kahneman, E. Diener \& N. Schwarz (eds), Wellbeing: The Foundations of Hedonic Psychology, Russell-Sage, New York.

Ganster, D.C. \& Bates, C. (2003), "Do long work hours decrease general wellbeing and increase work-family conflict?", Paper presented at the Annual Meeting of the Academy of Management, Seattle.

Glezer, H. \& Wolcott, I. (1999), "Work and family life: Reciprocal effects", Family Matters, no. 52, pp. 69-74.

Headey, B. \& Wearing, A. (1981), "Australians' priorities, satisfactions and wellbeing", Public Policy Studies no.4, Department of Community Welfare Service, University of Melbourne, Parkville, Victoria.

Healy, E. (2000), "The shift to long working hours: A social and political crisis in the making", People and Place, vol. 8, no. 1, pp. 38-50.

Hochschild, A.R. (1997), The Time Bind: When Work Becomes Home and Home Becomes Work, Henry Holt \& Co., New York.

Johnson, D.R. \& Elliott, L.A. (1998), "Sampling design effects: Do they affect the analyses of data from the national survey of families and households?", Journal of Marriage and the Family, vol. 60, no. 4, pp. 993-1001.
Kelley, J. (2001), "Consequences of working long hours", Australian Social Monitor, vol. 4, no. 4, pp. 99-102.
La Valle, I., Arthur, S., Millward, C., Scott, J. \& Clayden, M. (2002), Happy Families? Atypical Work and Its Influence on Family Life, Joseph Rowntree Foundation publication, Prepared by National Centre for Social Research, London, UK.
Lazarus, R.S. \& Folkman, S. (1984), Stress, Appraisal, and Coping, Springer, New York.
Lehmkuhl, L. (1999), "Health effects of long work hours", Online: http://www. wen.net/32hours/Health\ Effects\ v2.htm
McKeown, K., Pratschke, J. \& Haase, T. (2003), Family Wellbeing: What Makes a Difference?, Report to the Céifin Centre: "Insights and Initiatives for a Changing Society", County Clare, Ireland.

Marshall, N.L. \& Barnett, R.C. (1992), "Work-family strains and gains among twoearner couples", Working Paper No.253, Wellesley College Center for Research on Women, Wellesley, MA.
Marsiglio, W., Amato, P., Day, R.D. \& Lamb, M.E. (2000), "Scholarship on fatherhood in the 1990s and beyond", Journal of Marriage and the Family, vol. 62, pp.1173-1191.
Milkie, M.A., \& Peltola, P. (1999), "Playing all the roles: Gender and the work-family balancing act", Journal of Marriage and the Family, vol. 61, pp. 476-490.

Morehead, A., Steele, M., Stephen, K. \& Duffin, L. (1997), Changes at Work: The 1995 Australian Workplace Industrial Relations Survey, Longman, South Melbourne.

Palkovitz, R. (2002), "Involved fathering and child development: Advancing our understanding of good fathering", in C.S. Tamis-LeMonda \& N. Cabrera (eds), Handbook of Father Involvement: Multidisciplinary Perspectives, Erlbaum, New Jersey.
Pocock, B. (2001), The Effect of Long Hours on Family and Community Life: A Survey of Existing Literature, A report for the Queensland Department of Industrial Relationships, Centre for Labour Research, Adelaide University, Adelaide.

Pocock, B. (2003), The Work / Life Collision: What Work is Doing to Australians and What to do About it, The Federation Press, Sydney.

Pocock, B., Van Wanrooy, B., Strazzari, S. \& Bridge, K. (2001), Fifty Families: What Unreasonable Hours are Doing to Australians, their Families and their Communities, ACTU, Melbourne.
Probert, B., Whiting, K. \& Ewer, P. (2000), Pressure From All Sides: Life and Work in the Finance Sector, Finance Sector Union of Australia, Melbourne.
Pryor, J. \& Rodgers, B. (2001), Children in Changing Families: Life after Parental Separation, Blackwell, Maldan MA.
Renda, J. (2003), "Polarisation of families according to work status", Family Matters, no. 64, pp. 16-21.
Russell, G., Barclay, L., Edgecombe, G., Donovan, J., Habib, G., Callaghan, H. \& Pawson, Q. (1999), Fitting Fathers into Families: Men and the Fatherhood Role in Contemporary Australia, A report for the Commonwealth Department of Family and Community Services, Commonwealth of Australia.
Spurgeon, Harrington \& Cooper (1997), "Health and safety problems associated with long working hours: A review of the current position", Occupational and Environmental Medicine, vol. 54, no. 6, pp. 367-375.

Veenhoven R. (1996), "Developments in satisfaction research", Social Indicators Research, vol. 37, pp. 1-46.

Veenhoven, R. (forthcoming), "Subjective measures of wellbeing", in M. McGillivray (ed.), Measuring Human Wellbeing, World, Institute for Development Economics Research, United Nations University.
Ware, J.E., Snow, K.K., Kosinski, M. \& Gandek, B (2000), SF-36 Health Survey: Manual and interpretation guide, QualityMetric Inc, Lincoln, RI.
Watson, N. \& Wooden, M. (2002), The Household, Income and Labour Dynamics in Australia (HILDA) Survey: Wave 1 Survey Methodology, HILDA Project Technical Paper Series, No.1/02.

Wooden, M. (1999), "Review of manuscript by the Australian Centre for Industrial Relations Research and Training (1999), "Australia at work: Just managing?", Prentice Hall, Sydney", Journal of Industrial Relations, vol. 41, pp. 494-497.
Wooden, M. (2003), "Balancing work and family at the start of the 21st century: Evidence from wave 1 of the HILDA survey", Paper presented to the Pursuing Opportunity and Prosperity: The 2003 Melbourne Institute Economic and Social Outlook Conference, 13-14 November, Melbourne.

Wooden, M. \& Loundes J. (2002), "How unreasonable are long working hours?", Melbourne Institute Working Paper No. 1/02, University of Melbourne, Melbourne.

Wooden, M. \& Warren, D. (2003), "The characteristics of casual and fixed-term employment: Evidence from the HILDA survey," Melbourne Institute Working Paper No. 15/03, University of Melbourne, Melbourne.
Zubrick, S.R., William, A.A., Silburn, S.R. \& Vimpani, G. (2000), Indicators of Social and Family Functioning, Department of Family and Community Services, Canberra.

## Appendix A

|  | Number of work hours |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | 35-40 | 41-48 | 49-59 | 60+ |
| Satisfaction with job overall | $\begin{aligned} & 7.6 \\ & (0.08) \end{aligned}$ | $\begin{gathered} 7.3 \\ (0.14) \end{gathered}$ | $\begin{gathered} 7.5 \\ (0.11) \end{gathered}$ | $\begin{aligned} & 7.6 \\ & (0.12) \end{aligned}$ |
| Satisfaction with relationship with partner Self-report | $\begin{gathered} 8.4 \\ (0.09) \end{gathered}$ | $\begin{aligned} & 8.4 \\ & (0.11) \end{aligned}$ | $\begin{aligned} & 8.5 \\ & (0.10) \end{aligned}$ | $\begin{gathered} 8.7^{*} \\ (0.09) \end{gathered}$ |
| Partner's report | $\begin{gathered} 8.2 \\ (0.11) \end{gathered}$ | $\begin{gathered} 8.3 \\ (0.12) \end{gathered}$ | $\begin{gathered} 8.4 \\ (0.11) \end{gathered}$ | $\begin{gathered} 8.4 \\ (0.12) \end{gathered}$ |
| Satisfaction with relationship with children Self-report | $\begin{aligned} & 8.7 \\ & (0.08) \end{aligned}$ | $\begin{aligned} & 8.8 \\ & (0.09) \end{aligned}$ | $\begin{aligned} & 8.6 \\ & (0.09) \end{aligned}$ | $\begin{gathered} 8.8 \\ (0.09) \end{gathered}$ |
| Partner's report | $\begin{aligned} & 8.5 \\ & (0.09) \end{aligned}$ | $\begin{gathered} 8.6 \\ (0.12) \end{gathered}$ | $\begin{gathered} 8.5 \\ (0.10) \end{gathered}$ | $\begin{gathered} 8.5 \\ (0.12) \end{gathered}$ |
| Satisfaction with life as a whole | $\begin{gathered} 7.9 \\ (0.07) \end{gathered}$ | $\begin{gathered} 7.9 \\ (0.09) \end{gathered}$ | $\begin{aligned} & 8.0 \\ & (0.08) \end{aligned}$ | $\begin{gathered} 7.8 \\ (0.10) \end{gathered}$ |
| Parenting stress | $\begin{aligned} & 14.2 \\ & (0.26) \end{aligned}$ | $\begin{aligned} & 13.8 \\ & (0.31) \end{aligned}$ | $\begin{aligned} & 13.5 \\ & (0.28) \end{aligned}$ | $\begin{aligned} & 13.5 \\ & (0.29) \end{aligned}$ |
| Work and family balance |  |  |  |  |
| Negative effect of work on family | $\begin{aligned} & 15.2 \\ & (0.31) \end{aligned}$ | $\begin{aligned} & 16.4^{*} \\ & (0.38) \end{aligned}$ | $\begin{gathered} 17.5^{* * *} \\ (0.33) \end{gathered}$ | $\begin{aligned} & 18.7^{* * *} \\ & (0.37) \end{aligned}$ |
| Positive effect of work on family | $\begin{aligned} & 13.5 \\ & (0.20) \end{aligned}$ | $\begin{aligned} & 13.1 \\ & (0.22) \end{aligned}$ | $\begin{aligned} & 13.5 \\ & (0.22) \end{aligned}$ | $\begin{aligned} & 13.5 \\ & (0.21) \end{aligned}$ |
| Positive effect of work on self | $\begin{aligned} & 15.7 \\ & (0.16) \end{aligned}$ | $\begin{aligned} & 16.1 \\ & (0.19) \end{aligned}$ | $\begin{aligned} & 15.9 \\ & (0.20) \end{aligned}$ | $\begin{aligned} & 15.8 \\ & (0.23) \end{aligned}$ |
| Health |  |  |  |  |
| General health | $\begin{aligned} & 73.5 \\ & (0.90) \end{aligned}$ | $\begin{aligned} & 75.2 \\ & (0.98) \end{aligned}$ | $\begin{aligned} & 74.0 \\ & (1.08) \end{aligned}$ | $\begin{aligned} & 72.7 \\ & (1.22) \end{aligned}$ |
| Vitality | $\begin{aligned} & 66.2 \\ & (0.90) \end{aligned}$ | $\begin{aligned} & 64.5 \\ & (1.24) \end{aligned}$ | $\begin{gathered} 62.8^{*} \\ (0.95) \end{gathered}$ | $\begin{aligned} & 61.6^{* *} \\ & (1.30) \end{aligned}$ |
| Mental health | $\begin{aligned} & 77.2 \\ & (0.79) \end{aligned}$ | $\begin{aligned} & 77.4 \\ & (1.07) \end{aligned}$ | $\begin{aligned} & 76.4 \\ & (0.96) \end{aligned}$ | $\begin{aligned} & 76.9 \\ & (0.99) \end{aligned}$ |

[^3]| Table A2. Men working 41-48 hours, wellbeing by satisfaction with work hours (adjusted means) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Satisfaction with work hours |  |  |
|  | $\begin{aligned} & \text { Low } \\ & (0-5) \end{aligned}$ | Moderate (6-7) | $\begin{gathered} \text { High } \\ (8-10) \end{gathered}$ |
| Satisfaction with job overall | $\begin{aligned} & 5.6 \\ & (0.32) \end{aligned}$ | $\begin{gathered} 6.8^{* *} \\ (0.27) \end{gathered}$ | $\begin{aligned} & 8.2^{* * *} \\ & (0.16) \end{aligned}$ |
| Satisfaction with relationship with partner Self-report | $\begin{gathered} 8.4 \\ (0.25) \end{gathered}$ | $\begin{aligned} & 8.2 \\ & (0.26) \end{aligned}$ | $\begin{aligned} & 8.8 \\ & (0.17) \end{aligned}$ |
| Partner's report | $\begin{aligned} & 8.2 \\ & (0.31) \end{aligned}$ | $\begin{gathered} 8.2 \\ (0.28) \end{gathered}$ | $\begin{gathered} 8.6 \\ (0.21) \end{gathered}$ |
| Satisfaction with relationship with children Self-report | $\begin{aligned} & 8.6 \\ & (0.18) \end{aligned}$ | $\begin{aligned} & 8.5 \\ & (0.22) \end{aligned}$ | $\begin{array}{r} 9.0^{* *} \\ (0.13) \end{array}$ |
| Partner's report | $\begin{gathered} 8.5 \\ (0.30) \end{gathered}$ | $\begin{gathered} 8.3 \\ (0.26) \end{gathered}$ | $\begin{gathered} 8.8 \\ (0.17) \end{gathered}$ |
| Satisfaction with life as a whole | $\begin{gathered} 7.4 \\ (0.20) \end{gathered}$ | $\begin{gathered} 7.3 \\ (0.22) \end{gathered}$ | $\begin{aligned} & 8.1^{* * *} \\ & (0.14) \end{aligned}$ |
| Parenting stress | $\begin{aligned} & 14.6 \\ & (0.81) \end{aligned}$ | $\begin{aligned} & 13.1 \\ & (0.54) \end{aligned}$ | $\begin{aligned} & 12.7^{*} \\ & (0.49) \end{aligned}$ |
| Work and family balance |  |  |  |
| Negative effect of work on family | $\begin{aligned} & 19.0 \\ & (0.74) \end{aligned}$ | $\begin{gathered} 17.3^{*} \\ (0.63) \end{gathered}$ | $\begin{aligned} & 13.9^{* * *} \\ & (0.58) \end{aligned}$ |
| Positive effect of work on family | $\begin{aligned} & 13.3 \\ & (0.55) \end{aligned}$ | $\begin{aligned} & 12.5 \\ & (0.49) \end{aligned}$ | $\begin{aligned} & 14.5^{*} \\ & (0.42) \end{aligned}$ |
| Positive effect of work on self | $\begin{aligned} & 16.2 \\ & (0.49) \end{aligned}$ | $\begin{aligned} & 16.0 \\ & (0.38) \end{aligned}$ | $\begin{aligned} & 16.9 \\ & (0.36) \end{aligned}$ |
| Health |  |  |  |
| General health | $\begin{aligned} & 71.1 \\ & (2.12) \end{aligned}$ | $\begin{aligned} & 72.7 \\ & (2.06) \end{aligned}$ | $\begin{gathered} 76.6^{*} \\ (1.80) \end{gathered}$ |
| Vitality | $\begin{aligned} & 61.0 \\ & (2.91) \end{aligned}$ | $\begin{aligned} & 65.4 \\ & (2.42) \end{aligned}$ | $\begin{gathered} 70.1^{* *} \\ (1.68) \end{gathered}$ |
| Mental health | $\begin{aligned} & 74.3 \\ & (2.70) \end{aligned}$ | $\begin{aligned} & 76.1 \\ & (1.76) \end{aligned}$ | $\begin{aligned} & 78.7 \\ & (1.63) \end{aligned}$ |
| Notes: Standard errors are shown in brackets.The significance tests are for the comparison with fathers with low satisfaction.The significance levels reported in the table are for the underlying coefficients in the regression model used to construct the least squares means. Significance levels are:* 5 per cent confidence level; ** 1 per cent confidence level; ;*** 0.1 per cent confidence level. The data have been weighted and calculation of the test statistics takes account of the survey design that involves stratification and clustering. <br> Source: HILDA Survey Wave 1 (2001). |  |  |  |


| Table A3. Men working 49-59 hours, wellbeing by satisfaction with work hours (adjusted means) |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Satisfaction with work hours |  |  |
|  | $\begin{aligned} & \text { Low } \\ & (0-5) \end{aligned}$ | Moderate (6-7) | $\begin{aligned} & \text { High } \\ & (8-10) \end{aligned}$ |
| Satisfaction with job overall | $\begin{aligned} & 6.3 \\ & (0.25) \end{aligned}$ | $\begin{aligned} & 7.6^{* * *} \\ & (0.16) \end{aligned}$ | $\begin{aligned} & 8.2^{* * *} \\ & (0.18) \end{aligned}$ |
| Satisfaction with relationship with partner Self-report | $\begin{gathered} 8.4 \\ (0.22) \end{gathered}$ | $\begin{gathered} 8.6 \\ (0.20) \end{gathered}$ | $\begin{gathered} 9.0^{*} \\ (0.19) \end{gathered}$ |
| Partner's report | $\begin{aligned} & 8.2 \\ & (0.25) \end{aligned}$ | $\begin{gathered} 8.8^{*} \\ (0.19) \end{gathered}$ | $\begin{aligned} & 8.5 \\ & (0.22) \end{aligned}$ |
| Satisfaction with relationship with children Self-report | $\begin{gathered} 8.5 \\ (0.19) \end{gathered}$ | $\begin{aligned} & 8.7 \\ & (0.17) \end{aligned}$ | $\begin{gathered} 8.8 \\ (0.18) \end{gathered}$ |
| Partner's report | $\begin{gathered} 8.4 \\ (0.19) \end{gathered}$ | $\begin{aligned} & 8.8 \\ & (0.17) \end{aligned}$ | $\begin{aligned} & 8.8 \\ & (0.17) \end{aligned}$ |
| Satisfaction with life as a whole | $\begin{gathered} 7.4 \\ (0.20) \end{gathered}$ | $\begin{gathered} 7.9^{*} \\ (0.13) \end{gathered}$ | $\begin{array}{r} 8.1^{* *} \\ (0.15) \end{array}$ |
| Parenting stress | $\begin{aligned} & 14.1 \\ & (0.49) \end{aligned}$ | $\begin{aligned} & 13.0 \\ & (0.54) \end{aligned}$ | $\begin{gathered} 12.3^{* *} \\ (0.63) \end{gathered}$ |
| Work and family balance |  |  |  |
| Negative effect of work on family | $\begin{aligned} & 19.2 \\ & (0.62) \end{aligned}$ | $\begin{gathered} 16.9^{* *} \\ (0.69) \end{gathered}$ | $\begin{aligned} & 15.5^{* * *} \\ & (0.70) \end{aligned}$ |
| Positive effect of work on family | $\begin{aligned} & 13.4 \\ & (0.42) \end{aligned}$ | $\begin{aligned} & 14.1 \\ & (0.44) \end{aligned}$ | $\begin{aligned} & 141 . \\ & (0.58) \end{aligned}$ |
| Positive effect of work on self | $\begin{aligned} & 15.8 \\ & (0.38) \end{aligned}$ | $\begin{aligned} & 16.6^{*} \\ & (0.36) \end{aligned}$ | $\begin{aligned} & 16.2 \\ & (0.49) \end{aligned}$ |
| Health |  |  |  |
| General health | $\begin{aligned} & 69.8 \\ & (1.99) \end{aligned}$ | $\begin{gathered} 76.8^{* *} \\ (1.96) \end{gathered}$ | $\begin{aligned} & 73.4 \\ & (1.92) \end{aligned}$ |
| Vitality | $\begin{aligned} & 59.6 \\ & (2.08) \end{aligned}$ | $\begin{aligned} & 67.4^{* * *} \\ & (1.70) \end{aligned}$ | $\begin{gathered} 69.3^{* * *} \\ (1.81) \end{gathered}$ |
| Mental health | $\begin{aligned} & 72.9 \\ & (1.94) \end{aligned}$ | $\begin{gathered} 77.3^{*} \\ (1.61) \end{gathered}$ | $\begin{gathered} 78.1^{*} \\ (1.83) \end{gathered}$ |
| Notes: Standard errors are shown in brackets. The significance tests are for the comparison with fathers with low satisfaction. The significance levels reported in the table are for the underlying coefficients in the regression model used to construct the least squares means. Significance levels are:*5 per cent confidence level;** 1 per cent confidence level; ;** 0.1 per cent confidence level. The data have been weighted and calculation of the test statistics takes account of the survey design that involves stratification and clustering. <br> Source: HILDA Survey Wave 1 (2001). |  |  |  |


[^0]:    10. There are too few lone fathers in the HILDA data to allow an analysis of this group.
[^1]:    16. The construction of least square means involves two steps. First a linear regression model with the measure of wellbeing as the dependent variable is estimated. Explanatory variables include the characteristics that are being controlled for and a set of dummy variables for hours worked by satisfaction with work hours (12 dummy variables). The model is estimated using the sample of full-time employed fathers. Second, the resulting coefficients are used to calculate the predicted value of the measure of wellbeing while setting all the continuous variables to their sample mean and for discrete variables equal proportion in each catagory of that variable.
    17. The unadjusted (raw) means are presented in Appendix Table A1.
[^2]:    19. Similar comparisons for fathers working 41 to 48 hours and 49 to 59 hours are presented in Appendix Tables A2 and A3 respectively. Statistically significant differences between fathers who indicate high or low satisfaction with their work hours emerge for 6 and 7 of the 13 dimensions respectively. In each of these cases, those who are highly satisfied with their work hours have higher wellbeing or lower illbeing scores. However, the largest differences are for fathers working 60 or more hours.
    20. For fathers working 60 or more hours, the highest mean score for general health emerge for fathers who indicate moderate satisfaction with their work hours.
    21. The literature suggests that evaluations of various aspects of life are coloured by overall level of happiness or unhappiness (Diener 1984; Veenhoven 1996).
[^3]:    Notes: Standard errors are shown in brackets. The data for each group working more than 40 hours per week were compared with the data for those working 35-40 hours using t-tests. Significance levels are ${ }^{*} \mathrm{p}<0.05 ;{ }^{* *} \mathrm{p}<.01$;*** $\mathrm{p}<.001$. The data have been weighted and calculation of the test statistics take account of the survey design that involves stratification and clustering
    Source: HILDA Survey Wave 1 (2001).

