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Bundesinstitut  
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## BiB Working Paper 4/2020

### Weekend Work and Work-Family Conflict: Evidence from Australian Panel Data

Inga Laß, Mark Wooden



# Weekend Work and Work-Family Conflict: Evidence from Australian Panel Data

Inga Laß<sup>1</sup>, Mark Wooden<sup>2</sup>

## Abstract

**Objective:** This paper investigates whether weekend work is associated with higher levels of work-family conflict (WFC) among parents, and whether resources like schedule control or presence of a partner mitigate this effect.

**Background:** The 24/7 economy requires many workers to work on weekends. Nevertheless, research on the impact of weekend work on families, and on WFC in particular, is underdeveloped, with previous studies relying on cross-sectional data and small samples.

**Method:** Associations between regular weekend work and a measure of WFC are examined using data from fourteen waves of the Household, Income and Labour Dynamics in Australia (HILDA) Survey. The sample is restricted to workers aged 18 to 64 years with parenting responsibilities for children aged 17 or less (7,753 individuals, 40,216 observations). Both pooled ordinary least squares and fixed-effects regression models are estimated.

**Results:** Among both genders, weekend workers have significantly higher levels of WFC than those who only work weekdays. WFC is particularly high for those who work weekends and simultaneously have little control over their schedule. And whereas WFC is generally higher for single parents, weekend work affects WFC similarly for couple and single parents.

**Conclusion:** Weekend work generally has a detrimental effect on workers' ability to combine employment with parenting commitments. However, work-domain resources like schedule control can buffer the impact of weekend work.

**Keywords:** HILDA Survey, Weekend work, Work-family conflict, Working time

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In Western society, time for social activity with family and friends has long been concentrated on the weekend. At the same time, living in a 24/7 economy means that a sizeable fraction of the workforce is required to work on weekends (Presser, 2003). In the US, for example, almost 31% of employed persons were working on an average Saturday, Sunday or public holiday in 2018 (Bureau of Labor Statistics, 2019). Similarly, the share of workers in the EU-15 area who report usually working either Saturday or Sunday, though varying greatly across countries, averaged almost 29% in 2019 (Eurostat, 2020a). And in Australia, the fraction is even higher, with close to 35% of employed persons in 2019 usually working on the weekend (Australian Bureau of Statistics [ABS], 2019: Table 7.3).

Convincing empirical evidence on the extent to which weekend work interferes with the demands of family life — what is usually referred to as work-family conflict (WFC) — is, however, relatively scarce. Whereas a growing literature is pointing consistently to negative associations between weekend work and measures of the broader work-life balance concept (e.g., Fagan & Burchell, 2002; Pichler, 2009; Tausig & Fenwick, 2001; Wirtz, Nachreiner, & Rolfes, 2011), studies that focus specifically on WFC, and especially multivariate studies, are less common. Indeed, meta-analytic reviews of the WFC literature (Byron, 2005; Michel, Kotrba, Mitchelson, Clark, & Baltes, 2011) contain barely any mention of weekend work. Nevertheless, multivariate analyses of the impact of weekend work do exist, though usually presented within broader studies of the impact of non-standard work schedules. Early examples here are studies using data from the 1977 (US) Quality of Employment Survey (Pleck & Staines, 1985; Staines & Pleck, 1984; Voydanoff, 1988). These studies all reported positive associations between weekend work and summary measures of WFC, but they were mostly insignificant. In a similar vein, Davis, Goodman, Pirretti, and Almeida (2008) analyzed data from the Midlife in the US study and could find no evidence that weekend work was significantly associated with measures of work-family spillover. In contrast, two studies employing data from other countries reported significant associations. Hosking and Western (2008) found a measure of regular weekend work to be positively associated with WFC in a sample of working parents in Australia, although the association was only significant for fathers. Steiber (2009) used multi-country data from the 2004/05 round of the European Social Survey and found highly significant associations between usually working weekends at least several times a month and measures of time- and strain-based conflict in a sample of working parents. Further, and unlike Hosking and Western (2008), the estimated coefficients on their weekend work variable did not differ significantly between mothers and fathers.

There is also evidence that the association between weekend work and WFC is moderated by the extent of control workers have over their schedules. Voydanoff (1988) found that, among women, the levels of WFC were significantly higher among weekend workers only if they reported also having little control over the times at which they work. Similarly, Staines and Pleck (1986) reported that regular

(i.e., non-variable) weekend work had a more harmful effect on WFC for women workers with the least work schedule flexibility than for women with the highest flexibility. Surprisingly, among men, the estimated association was in the opposite direction: Levels of WFC among male regular (i.e., non-variable) weekend workers were actually highest when schedule flexibility was highest.

Overall, the existing body of empirical evidence is both relatively small and underdeveloped. All previous studies employed cross-section data and thus were unable to control for influences that are not readily measured in surveys yet might potentially influence both WFC and work schedules (e.g., personality traits). Further, with one exception, these studies all employed samples restricted to working parents living in couple relationships, and often to just married couples. Only Hosking and Western (2008) included single parents in their sample, and they did not explicitly test the possibility that effects may differ between singles and couples. Finally, the samples used in previous studies were all quite small. Even Steiber (2009), despite having data from 23 countries, was only able to include a little more than 4000 cases in her multivariate analyses.

The aim of this study is twofold: First, to contribute to theoretical approaches to WFC by embedding weekend work into a demands and resources framework, and second, to both add to and improve upon the existing empirical evidence. Most importantly, we employ data from a long-running household panel survey from Australia, a country where, as noted previously, the incidence of weekend work is relatively high. The sample used provides up to 14 years of consecutive observations on individuals, and on every adult household member. Critically, the dataset contains a multi-item measure of WFC among parents, as well as information on whether paid employment usually involves work on weekends. We estimate regression models of WFC where the primary variable of interest is weekend work. Unlike previous research, both pooled cross-section and fixed-effects models are estimated. We also investigate whether the association with weekend work differs between the genders, between single and couple parents, and with the degree of control over work schedules.

## **Theoretical considerations**

### **Conceptualizing WFC**

The concept of WFC has its foundations in role strain or stress theory (e.g., Goode, 1960; Pearlin, 1989). According to this approach, individuals have a range of different role relationships, which are each

connected to different obligations. Individual roles may demand a certain behavior or a certain investment of time or resources, or the presence in a certain place (Goode, 1960). If the obligations stemming from different roles are mutually incompatible, this leads to inter-role conflict, which contributes to stress (Pearlin, 1989).

Both the family role and the occupational role are major institutionalized roles or statuses, entailing persistent confrontations with an array of conditions and expectations, and connected to social pressures to conform to respective norms (Goode, 1960; Pearlin, 1989). Incompatibilities between the demands of the work and family roles are thus frequent (Pearlin, 1989). Consequently, WFC has been described as “a form of interrole conflict in which role pressures from the work and family domains are mutually incompatible in some respect” (Greenhaus & Beutell, 1985: 77). More precisely, work can interfere with family through time-based, strain-based, and behavior-based conflicts. Such conflicts relate to situations where the time devoted to, strain produced by, or behavior required in one role makes it difficult to fulfil the requirements of another role (Greenhaus & Beutell, 1985). WFC is bi-directional, in that the demands of the work role can impede role performance in the family (work-to-family conflict) as well as vice versa (family-to-work conflict) (Frone, Russell, & Cooper, 1992; Greenhaus & Beutell, 1985). Work demands are assumed to impact more strongly on work-to-family conflict, whereas family demands should impact more on family-to-work conflict (Byron, 2005; Frone et al., 1992).

Theoretical approaches also stress that role performance and the fit between multiple roles not only depend on role demands but also on available resources (e.g., Bakker & Demerouti, 2007; Demerouti, Bakker, Nachreiner, & Schaufeli, 2001; Haar, Sune, Russo, & Ollier-Malaterre, 2019; Moen, Kelly, & Huang, 2008; Voydanoff, 2004, 2005). A crucial point is that demands and resources interact with each other to affect the fit between work and family roles. For example, according to the job-demands-and-resources model (Bakker & Demerouti, 2007; Demerouti et al., 2001), all job characteristics can be categorized as either job demands (e.g., physical workload, time pressure, shift work) or job resources (e.g., supervisor support, job control, rewards). High job resources can thereby function as a buffer preventing high job demands from causing job strain (Bakker & Demerouti, 2007) and work-home interference (Bakker, ten Brummelhuis, Prins, & van der Heijden, 2011).

### **Weekend Work as a Job Demand**

Building on role strain theory and the demands and resources approach, we regard work on weekends as a specific (but often overlooked) demand connected to the worker role, which may be incompatible with the parenting role by creating time-based or strain-based conflict.

With respect to time-based conflict, the crucial characteristic of weekend work is that it is out of sync with the working schedules of most other persons (including partner and relatives) as well as the rhythms of school and child care facilities. Further, many social events, such as sports events and social gatherings, are scheduled on weekends. Due to this “social desynchronization” (Wirtz et al., 2011: 361), weekend workers will often be at work when other family members are free, and so will typically be unable to spend as much time with their family as comparable persons working Monday to Friday. And indeed, previous studies show that weekend workers not only have less family time on the days worked, but also that this lost time is only to a limited degree, if at all, recuperated during non-work days (Bittman, 2005; Craig & Brown, 2014, 2015; Hook, 2012).

Additionally, weekend work is often associated with long working hours (Hook, 2012; Mills & Täht, 2010), another important job demand that by itself reduces time for family regardless of the specific days worked. We would thus expect the detrimental effects of weekend work on WFC to be largest when total working hours are not accounted for.

By contrast, weekend work may alleviate time-based conflict to the extent that it is connected to shorter commutes because of less traffic congestion during off-peak times (Presser, 2003). However, workers who depend on public transport may be subjected to even longer commutes if services are running less frequently on weekends. Further, some workers may benefit from higher pay through penalty wage rates attached to weekend work or overtime (Bittman, 2005; Presser, 2003), which can enable the purchase of household and child care services that help alleviate time pressures. This factor may be particularly important in Australia where, as discussed below, the requirement to pay penalty rates for weekend work in some industries has long been a feature of its system of industrial regulation.

There are also arguments suggesting a positive link between weekend work and strain-based conflict. To the extent that weekend work means a more fragmented work week, it reduces uninterrupted recovery time. In their qualitative study, Brown, Bradley, Lingard, Townsend, and Ling (2010) emphasized the benefits for personal recreation and family activities of a compressed work week that provides workers with a long break. Also, weekend work has been shown to be associated with work stressors, such as being more likely to make mistakes at work and working in understaffed environments (Davis et al., 2008). Limited recovery time and work stress may, in turn, help explain why weekend work has sometimes been linked to poorer mental and physical health, even after adjusting for the number of working hours (Kopp, Stauder, Prebl, Janszky, & Skrabski, 2008; Wirtz et al., 2011). That said, evidence is mixed, with other studies unable to find evidence of significant associations with

health outcomes (e.g., Neidhammer, Lesufleur, Algava, & Chastang, 2015; Shields, 2002; see also the meta-analysis by Zhao, Richardson, Poyser, Butterworth, Strazdins, & Leach, 2019).

Parents who work on weekends may also experience additional strain as a consequence of the lack of availability of formal child care on weekends and hence the need to organize complex child care arrangements (Fagnani & Letablier, 2004; Presser, 2003).

By contrast, if weekend work is associated with higher rates of pay, then the higher income received would be expected to decrease strain-based conflict.

In summary, there are arguments for both heightened and reduced WFC among weekend workers. Nevertheless, on balance, we expect the difficulties of recuperating lost time with family (and especially children) during the week to render higher levels of conflict more likely, leading to our first hypothesis:

H1. Weekend work will be associated with increased WFC for parents.

### **Moderating Factors: The Role of Gender**

Role strain theory views gender, and consequently the distinct roles of mother and father, as ascriptive statuses associated with highly binding role obligations and strong social pressures related to the norms of these roles (Goode, 1960). Traditionally, the mother and father roles vary distinctly with respect to paid work: The notion of men as breadwinners has explicitly linked men's fulfillment of role obligations as parent to the fulfillment of their obligations as workers (Goode, 1960). By contrast, for women, as traditional homemakers and carers, the role of mother was dissociated from the worker role. Despite the increase in maternal employment rates over the past decades, women most often still assume the role as primary carer and spend more time on family work than men (Altintas & Sullivan, 2016; Craig & Brown, 2015; Mills & Täht, 2010; Ruppanner, Perales, & Baxter, 2019). Accordingly, it has been argued that there is gender asymmetry in the permeability between work and family roles, with family demands interfering with the work role being more permitted for women, and work demands interfering with the family role being more accepted for men (Pleck, 1977). Missing family activities due to weekend work should thus be more accepted for fathers than mothers.

Alternatively, time-based conflict may be more acute for fathers, who tend to work long hours during the week and use the weekend to catch up on time with their children (Craig & Brown, 2014). However, this effect should only be visible if not accounting for the number of hours worked. All other things being equal, we thus expect weekend work to pose a particular challenge for mothers.



- H2. The association between weekend work and WFC will be stronger for mothers than for fathers.

### **Moderating Factors: The Role of Work and Family Resources**

As mentioned, the impact of a certain work demand, such as weekend work, may vary with the resources available to the worker. A crucial job-related resource potentially attenuating the impact of weekend work on family life is the degree of schedule control (Hook, 2012; Staines & Pleck, 1986; Tausig & Fenwick, 2001). Having some control over one's schedule allows workers to respond spontaneously to arising family demands, even when working weekends. If control over one's schedule is very high, we can even expect weekend work to be a choice that fits well with parents' family responsibilities. We thus expect high schedule control to attenuate or even neutralize the expected positive impact of weekend work on WFC. This brings us to our third hypothesis:

- H3. The negative association between weekend work and WFC will attenuate with the degree of control the worker can exert over his or her schedule.

As further highlighted by stress theory, an important resource potentially buffering role strain is social support, provided for example by the family and the partner (Pearlin, 1989; Ruppanner et al., 2019). Accordingly, having a partner, and particularly one who is not themselves working weekends and thus available for child care, is an important family-domain resource for parents working weekends. In such a situation, weekend work may alleviate time pressures: Some parents may choose weekend work as part of a "split-parenting" or "tag-team parenting" strategy to maximize the time the child can be cared for in the family (Boushey, 2006; Mills & Täht, 2010; Strazdins, Clements, Korda, & Broom, 2006). One parent will thus work on weekends if, and when, the other parent is free to take over the child care. We thus expect the presence of a partner who is not working weekends to buffer the disruptive effect of weekend work on family life. This leads us to our final two hypotheses:

- H4. Weekend work will be associated with higher levels of WFC for single parents compared to couple parents.
- H5. Weekend work will be associated with higher levels of WFC if both partners work weekends compared to a situation where only one partner works weekends.

## The Australian Context

Australia has much in common with other Western nations, and especially other English-speaking countries, but it does have a number of peculiar institutional features that potentially impact on both the incidence of weekend work and the extent to which work on weekends impacts on WFC. Arguably most prominent here is its system of employment and wages regulation. Key elements include a comparatively high national minimum wage (NMW) and a wide range of other minimum wages for job classifications, prescribed in “awards” (which set out minimum employment conditions and pay rates for different industries and occupations). Further, and as mentioned earlier, in key sectors where weekend work is the norm, such as retail trade, fast food, and hospitality, these awards require the payment of premia (or penalty rates) for weekend work. Typically, work on a Saturday requires the payment of an additional 25% of the wage rate paid on a weekday, whereas for work on Sundays, the premium varies, depending on the job/industry, between 50% and 100% (Productivity Commission, 2015: 405). In theory, this should reduce employer demand for weekend work while increasing worker willingness to work on weekends. At the same time, the presence of both relatively high minimum wages and these high weekend pay premia may have encouraged employers to make greater use of casual employment, where hours of work can be easily varied to meet variability in demand over the day, week, or year. Today around one in five Australian workers is a casual employee (Laß & Wooden, 2020), with its incidence being particularly high among weekend workers.

One factor we expect to be especially important for both weekend work and WFC is working hours. A high incidence of weekend work will be more likely in countries with a culture of long working hours, and hence where weekend work is often a by-product of workers bringing their work home. At the same time, long working hours have been shown to be among the key predictors of WFC (Byron, 2005). Among Western countries, the proportion of workers reporting regularly working long hours has been relatively high in Australia. In the EU-15, for example, the proportion of workers usually working 49 hours or more in their main job averaged 9.8% in 2018, slightly below the level recorded at the start of the century (11.4% in 2001) (Eurostat, 2020b). The comparable figures derived from the Household, Income and Labour Dynamics in Australia (HILDA) Survey reveal a steeper decline, but from a much higher base – 20.4% in 2001 and 15.4% in 2018. A long work hours culture is also a feature of some other Western countries, notably the US (Kuhn & Lozano, 2008). Australia, however, is different in combining both high levels of long work hours with high levels of part-time (and often casual) employment.

Another factor that may increase labor supply on weekends in Australia is a relatively strong economic dependence on income from paid work. As a prototype of the liberal welfare state (Esping-Andersen, 1990), social security payments in the case of short- or mid-duration unemployment are relatively low in Australia, pressuring many workers into quickly taking up a new job, even if it requires work during unsocial hours. For example, the net replacement rate of a parent who has been unemployed for three months, has two kids and a partner earning the average wage, was only 68% in Australia in 2019, compared to an OECD average of 87% (OECD, 2020a: Table – Net replacement rates in unemployment).

A lack of affordable child care may be another factor promoting demand for weekend work. OECD data reveal that, for most Australian parents, child care costs are well above the OECD average. If we take a couple household where both parents earn the average wage, for example, child care costs over the period 2004 to 2018 varied between 21% and 33% of net household income, which compares with an OECD average of 11% (OECD, 2020a: Table – Net childcare cost for parents using childcare). Coupled mothers, in particular, may thus choose weekend work as part of a split-parenting strategy to supplement household income while avoiding childcare costs. At the same time, lack of access to affordable child care may increase WFC by forcing parents to find alternative care arrangements.

A related factor is gender norms around maternal employment. Albeit rising, levels of maternal employment in Australia have historically been relatively low. The OECD Family Database (OECD, 2020b) reports an employment rate for Australian mothers (with at least one child under 15 years of age) of just under 63% in 2014. This compares with an OECD average of 66% and rates of up to 83% in Scandinavian countries. Further, HILDA Survey data suggest that maternal employment at this time was close to evenly split between full-time and part-time jobs, whereas in many other countries full-time jobs dominate. A substantial, albeit declining share of Australians has reservations against maternal full-time employment, with HILDA Survey data showing that in 2005 41% agreed with the statement that a pre-school child is likely to suffer if the mother works full-time, and still 29 % agreed in 2015. This combination of high child care costs and gender norms emphasizing the modified male breadwinner model, where women are primary carers and secondary earners, will result in many mothers taking part-time jobs that involve weekend work. The relatively low involvement of mothers in the labor market may, however, reduce WFC for fathers, who can rely on their partners to take care of most of the family responsibilities.

Finally, until relatively recently, Australia was one of only two OECD countries (along with the US) without a universal paid parental leave scheme. This changed in 2011 with the introduction of Parental Leave Pay (PLP). Payments under this scheme, however, are still modest by European standards, only amounting to a maximum of 18 weeks' pay at the NMW rate. Also, PLP is targeted at mothers only.

Fathers may be entitled to Dad and Partner Pay (DaPP) — a benefit introduced in 2013 — but this provides only two weeks' pay at the NMW rate. The short durations and low levels of PLP and DaPP mean many parents have a financial incentive to return to work relatively quickly, potentially increasing WFC.

## **Methods**

### **Data, Sample and Method**

We use data from fourteen waves of the HILDA Survey (covering the period 2004 to 2017), a longitudinal study following members of a nationally representative sample of Australian households on an annual basis since 2001 (<https://melbourneinstitute.unimelb.edu.au/hilda>; also see Watson & Wooden, 2012). Among other topics, the HILDA Survey provides comprehensive information on individuals' employment situations as well as subjective indicators of WFC. Our sample is restricted to workers who: (i) are aged between 18 and 64 years; (ii) have parenting responsibilities for children aged 17 or less; (iii) are living with their children; and (iv) provided information on both their working schedule and their level of WFC. This results in a working sample of 3,839 fathers (contributing 20,722 observations) and 3,914 mothers (contributing 19,494 observations).

We investigate the association between weekend work and WFC by means of multivariate regression analysis. To account for differences in unobserved worker characteristics, our preferred method is fixed effects (FE) regression. FE estimation relies entirely on within-person changes; that is, for the same individual, it compares the level of WFC during periods when the individual is working weekends with the level during periods when the individual is not working weekends. Whereas this has the advantage that the effects of all time-constant characteristics, whether observed or unobserved, are held constant, the downside is that workers who never change between working weekends and not working weekends are not used in the estimation of the coefficients for weekend work.

We also compare our results to those from pooled ordinary least squares (OLS) regression models to investigate the extent to which results from these models may be biased by unobserved heterogeneity. We run our main models separately by gender to account for potential differences in the relationship between weekend work and WFC among mothers and fathers. All standard errors are clustered on the individual.

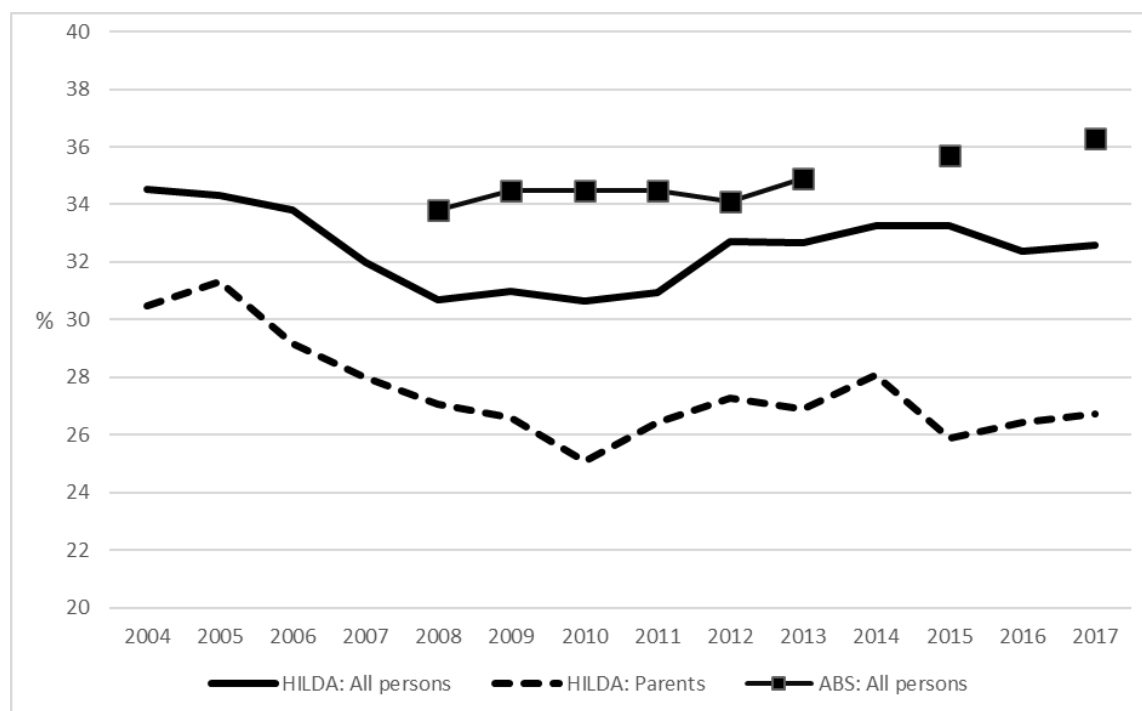
## Measures

*WFC*: WFC represents the average value of four items taken from Marshall and Barnett (1993), measured on a scale from 1 (strongly disagree) to 7 (strongly agree): i) “Because of the requirements of my job, I miss out on home or family activities that I would prefer to participate in”; ii) “Because of the requirements of my job, my family 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”. Following Hosking and Western (2008), we assign observations with one missing item ( $n=157$ ) the mean value of the remaining three items, but exclude cases with more than one missing item ( $n=363$ ). The Cronbach’s alpha for this measure is .84.

*Weekend work*: All respondents to the HILDA Survey who indicate they are currently employed are asked on which days of the week they usually work, with the options being “Monday to Friday”, “Nine-day fortnight”, “Days vary from week to week”, “Days vary from month to month” and “Other”. We code those who report working Monday to Friday as non-weekend workers. Those who report working nine-day fortnights or that days worked vary from week to week or month to month are subsequently asked whether they usually work weekends. However, this follow-up question has only been asked since wave 4, explaining why we exclude waves 1 to 3 from our analysis. Finally, workers who report working some “other” schedule are also asked to report the specific days they usually work. We code those who report usually working Saturday, Sunday, or both as weekend workers. Note that all these questions relate to the main job only, meaning that for multiple job holders (around 8% of our sample) we do not know the days on which they work in their additional jobs.

As shown in Figure 1, the HILDA Survey generates population estimates of the extent of weekend work in Australia that, over time, have varied between 30% and 35% of employed persons. Importantly, these estimates align well with the ABS survey estimates referred to earlier, which are also provided in the figure. The HILDA Survey estimates, however, are always lower (e.g., 32.6% vs 36.3% in 2017), which is to be expected given its estimates are restricted to weekend work undertaken in the main job, whereas the ABS survey estimates cover all jobs. The third (dashed) line in Figure 1 reports the share of weekend workers among working parents. It shows that weekend work is much less prevalent among parents than among the general workforce, which may be a first indicator of a relatively bad fit of weekend work with family responsibilities.

Figure 1. Prevalence of weekend work in Australia (% of employed): HILDA Survey and ABS estimates compared



*Notes:* All estimates are weighted to the population. The HILDA parent sample is restricted to working parents aged 18 to 64 years with co-residing children aged less than 18 years.

*Sources:* ABS 2008-2013 – ABS (2014); ABS 2015, 2017 – ABS (2019: Table 7); HILDA Survey – Department of Social Services / Melbourne Institute of Applied Economic and Social Research (2018).

*Control variables:* In a base specification, we include a range of socio-demographic and family characteristics. Specifically, we include age (in quadratic form), and dummy variables identifying highest educational level, whether a full-time student, and the presence of a work-limiting long-term health condition. The family context is considered by indicators for persons living with a partner, as well as indicators for family composition (i.e., the age of the youngest own resident child and the number of children below 18 years of age). We also include an indicator for whether one's parent(s) or parent(s)-in-law live in the household and an indicator for whether persons other than one's partner, parents, and children live in the household. Further, we include previous financial year's equivalized disposable household income, expressed in AU\$10,000, and deflated using the Consumer Price Index, and where the equivalence scale used is that recommended by the OECD (2013). We also control for time effects by means of survey year dummies. In the pooled OLS models, we additionally include Indigenous origin and region of birth. In an extended specification, we include controls for employment characteristics other than weekend work. Two are particularly important: the number of weekly working hours and

the level of control over one's working schedule. Working hours are included in a linear form. We also investigated a categorical specification of working hours, but the linear specification provided a better model fit. Level of schedule control designates the extent of agreement with the statement "I have a lot of freedom to decide when I do my work", measured on a scale from 1 (strongly disagree) to 7 (strongly agree). In order to account for non-linear effects, schedule control is represented by six dummy variables. Further, we account for whether employed in the public sector, whether has supervisory responsibilities, working schedule (differentiating between regular daytime, regular evening/night and other schedules), occupation (according to the major groups within the Australian and New Zealand Standard Classification of Occupations), and firm size. All mentioned job characteristics relate to the main jobs. Additionally, we include a dummy indicating multiple job holders.

Summary statistics for all variables (except survey year), differentiated by gender and whether works weekends, are provided in Table 1. It shows that parents working weekends had higher levels of WFC than those not working weekends. The gap was especially large for fathers, with those only working weekdays scoring 3.80 points on the WFC scale, but those (also) working weekends scoring 4.19 points; a gap of 0.39 of a point. For mothers, the gap between weekday and weekend workers was 0.21 of a point. Weekend workers are also less highly educated, are more likely to work on a casual contract (if female) or be self-employed, and have less control over their work schedule. Also, they are less likely to work in the public sector (particularly women), more likely to be working as community and personal services workers, sales workers (women), or as machinery operators and drivers (men), and more likely to work in small businesses. For men, there is also a marked difference in working hours, with weekend workers working considerably longer hours each week.

Table 1. Sample characteristics by gender and whether works weekends (mean values)

|  | Mothers      |          | Fathers      |          |
|--|--------------|----------|--------------|----------|
|  | Weekday only | Week-end | Weekday only | Week-end |
| WFC                                      | 3.53         | 3.74     | 3.80         | 4.19     |
| Age (years)                              | 40.51        | 39.06    | 41.24        | 40.69    |
| Educational level                        |              |          |              |          |
| High (bachelor or higher)                | 0.42         | 0.26     | 0.37         | 0.17     |
| Medium (year 12, cert III / IV, diploma) | 0.42         | 0.53     | 0.50         | 0.63     |
| Low (year 11 and below)                  | 0.17         | 0.21     | 0.13         | 0.20     |
| Full-time student                        | 0.02         | 0.03     | 0.01         | 0.01     |
| Age of youngest resident child           |              |          |              |          |
| 0 to 3 years                             | 0.27         | 0.30     | 0.39         | 0.39     |
| 4 to 7 years                             | 0.22         | 0.22     | 0.20         | 0.20     |
| 8 to 12 years                            | 0.27         | 0.25     | 0.22         | 0.22     |
| 13 to 17 years                           | 0.25         | 0.23     | 0.19         | 0.18     |
| Number of own resident children          |              |          |              |          |
| One child                                | 0.39         | 0.40     | 0.35         | 0.35     |
| Two children                             | 0.44         | 0.40     | 0.44         | 0.43     |
| Three or more children                   | 0.17         | 0.20     | 0.20         | 0.22     |
| Work-limiting health condition           | 0.07         | 0.09     | 0.06         | 0.08     |
| Partner in household                     | 0.84         | 0.80     | 0.97         | 0.98     |
| Parents in the household                 | 0.03         | 0.03     | 0.02         | 0.02     |
| Other people in the household            | 0.03         | 0.05     | 0.03         | 0.03     |
| Origin                                   |              |          |              |          |
| Australia— non-Indigenous                | 0.79         | 0.77     | 0.77         | 0.78     |
| Australia— Indigenous                    | 0.02         | 0.03     | 0.02         | 0.01     |
| Overseas— main English-speaking country  | 0.09         | 0.08     | 0.11         | 0.10     |
| Overseas— other country                  | 0.11         | 0.12     | 0.11         | 0.11     |
| Working hours (main job)                 | 28.47        | 28.44    | 42.66        | 49.17    |
| Schedule control                         |              |          |              |          |
| 1 (least control)                        | 0.18         | 0.20     | 0.11         | 0.16     |
| 2  | 0.18         | 0.21     | 0.16         | 0.19     |
| 3  | 0.12         | 0.13     | 0.13         | 0.12     |
| 4  | 0.14         | 0.13     | 0.17         | 0.14     |
| 5  | 0.13         | 0.11     | 0.18         | 0.13     |
| 6  | 0.15         | 0.12     | 0.17         | 0.14     |
| 7 (highest control)                      | 0.10         | 0.12     | 0.08         | 0.12     |
| Employment type                          |              |          |              |          |
| Permanent contract                       | 0.64         | 0.48     | 0.70         | 0.56     |
| Fixed-term contract                      | 0.09         | 0.06     | 0.07         | 0.06     |
| Casual contract                          | 0.16         | 0.25     | 0.05         | 0.06     |
| Temporary agency work                    | 0.02         | 0.01     | 0.02         | 0.02     |
| Self-employed                            | 0.10         | 0.21     | 0.17         | 0.30     |
| Multiple job holder                      | 0.09         | 0.11     | 0.06         | 0.07     |
| Public sector                            | 0.34         | 0.22     | 0.21         | 0.17     |
| Working schedule                         |              |          |              |          |
| Regular daytime                          | 0.90         | 0.43     | 0.92         | 0.50     |



|   | Mothers      |          | Fathers      |          |
|---|--------------|----------|--------------|----------|
|   | Weekday only | Week-end | Weekday only | Week-end |
| Regular evening/night                   | 0.02         | 0.11     | 0.02         | 0.04     |
| Other                                   | 0.08         | 0.46     | 0.06         | 0.46     |
| Supervisory responsibilities            | 0.42         | 0.48     | 0.60         | 0.59     |
| Occupation                              |              |          |              |          |
| Managers                                | 0.10         | 0.12     | 0.22         | 0.22     |
| Professionals                           | 0.34         | 0.22     | 0.28         | 0.13     |
| Technician and trades workers           | 0.03         | 0.07     | 0.21         | 0.21     |
| Community and personal services workers | 0.14         | 0.25     | 0.02         | 0.14     |
| Clerical and administrative workers     | 0.28         | 0.09     | 0.08         | 0.03     |
| Sales workers                           | 0.06         | 0.16     | 0.03         | 0.05     |
| Machinery operators and drivers         | 0.01         | 0.01     | 0.08         | 0.15     |
| Laborers                                | 0.05         | 0.09     | 0.07         | 0.08     |
| Firm size                               |              |          |              |          |
| Less than 20 employees                  | 0.25         | 0.35     | 0.29         | 0.40     |
| 20-99 employees                         | 0.14         | 0.11     | 0.15         | 0.11     |
| 100-499 employees                       | 0.10         | 0.07     | 0.13         | 0.08     |
| 500 and more employees                  | 0.45         | 0.41     | 0.41         | 0.38     |
| Missing firm size                       | 0.05         | 0.07     | 0.02         | 0.03     |
| N (observations)                        | 14915        | 4579     | 14578        | 6144     |

## Results

### Main Results

Table 2 presents the results of the multivariate regression analysis, reporting on two pooled OLS and one FE model for each gender. Among both genders, weekend workers had significantly higher levels of WFC than those who do not usually work weekends. This association was strongest in the OLS base model, which only controls for socio-demographic characteristics and survey year. In this model, weekend work was associated with levels of WFC that were around one quarter of a point higher on the seven-point scale for mothers and about 0.4 of a point higher for fathers. Once accounting for job characteristics (the extended OLS model), the coefficient for weekend work attenuated, especially for fathers, but remained statistically significant. Additional analyses, in which job characteristics are included one by one in the model, show that for men, this could mainly be traced back to the close link

between weekend work and long working hours. For women, supervisory responsibilities, working hours, and occupation contributed to explaining a more modest decline in effect size.

Moving from the extended OLS model to the FE model, the coefficient for weekend work further attenuated, suggesting that weekend workers have unobserved traits that are associated with higher WFC. Still, even in this comprehensive model, weekend work was associated with significantly higher levels of WFC for both genders; in both cases by 0.13 of a point.

In summary, the weekend work variable attracted a highly significant and positive coefficient in all specifications. Less clear is whether the size of the estimated effect is large. Relative to the standard deviation of the outcome measure (1.4 for fathers and 1.5 for mothers), a coefficient of around 0.13 is small. Alternatively, comparisons of the estimated coefficients on weekend work with those on hours of work suggest quite large effects. Using the estimates from the preferred FE models, we found that working on the weekend had, on average, about the same size negative effect on WFC as working an additional four hours each week for mothers, and an additional six hours a week for fathers. We are thus drawn to the conclusion that the estimated effects are not trivial.

We also note that the results for the control variables were mostly in line with what had been found in previous research on WFC and work-family balance (e.g., Haar et al., 2019; Nomaguchi, 2009; Pichler, 2009; Steiber, 2009; Voydanoff, 2004). Most obviously, WFC rose with both the number of hours usually worked each week and the number of dependent children, and was much higher for those with more than one job, for those with supervisory responsibilities, and for those who are managing a long-term health condition. It also tended to be more pronounced among the more highly educated (in the pooled OLS models), which others have suggested reflects higher standards of involvement in children's daily lives (e.g., Lareau, 2003). WFC levels were also higher among those working at nights (another non-social work time), though surprisingly, this association was only large and significant for men. By contrast, occupation differences were, in the presence of other controls, unimportant.

As the HILDA Survey data do not provide information on whether secondary jobs are worked on the weekends, we tested in an additional analysis whether the estimates on weekend work change upon excluding multiple job holders. The results (available from the authors on request) showed coefficients little different from those reported in Table 2.

Table 2. Weekend work and WFC: Estimates from pooled OLS and FE regression (main models)

|   | Mothers    |      |  |          |      |  | Fathers    |      |  |          |      |  |
|---|------------|------|--|----------|------|--|------------|------|--|----------|------|--|
|   | Pooled OLS |      |  | FE       |      |  | Pooled OLS |      |  | FE       |      |  |
|   | base       |      |  | extended |      |  | base       |      |  | extended |      |  |
|   | B          | SE   |  | B        | SE   |  | B          | SE   |  | B        | SE   |  |
| Weekend work                                      | 0.24**     | 0.04 |  | 0.17**   | 0.04 |  | 0.41**     | 0.04 |  | 0.17**   | 0.04 |  |
| Age   | -0.00      | 0.02 |  | -0.01    | 0.02 |  | 0.02       | 0.02 |  | 0.01     | 0.02 |  |
| Age squared                                       | -0.00      | 0.00 |  | 0.00     | 0.00 |  | -0.00*     | 0.00 |  | -0.00    | 0.00 |  |
| Educational level (ref.= Low (year 11 and below)) |            |      |  |          |      |  |            |      |  |          |      |  |
| High (bachelor or higher)                         | 0.54**     | 0.07 |  | 0.27**   | 0.07 |  | 0.14*      | 0.07 |  | 0.17*    | 0.07 |  |
| Medium (year 12, cert III, IV, diploma)           | 0.17**     | 0.06 |  | 0.08     | 0.06 |  | -0.06      | 0.06 |  | -0.04    | 0.06 |  |
| Full-time student                                 | -0.09      | 0.10 |  | 0.15     | 0.10 |  | -0.12      | 0.13 |  | 0.09     | 0.12 |  |
| Age of the youngest child (ref.= 0-3 years)       |            |      |  |          |      |  |            |      |  |          |      |  |
| 4-7 years   | 0.23**     | 0.04 |  | 0.07     | 0.04 |  | -0.00      | 0.04 |  | -0.03    | 0.03 |  |
| 8-12 years  | 0.25**     | 0.06 |  | -0.05    | 0.05 |  | -0.05      | 0.05 |  | -0.11*   | 0.05 |  |
| 13-17 years                                       | 0.01       | 0.07 |  | -0.40**  | 0.07 |  | -0.19**    | 0.06 |  | -0.28**  | 0.06 |  |
| Number of children (ref.= one child)              |            |      |  |          |      |  |            |      |  |          |      |  |
| Two children                                      | -0.01      | 0.04 |  | 0.09*    | 0.04 |  | 0.07       | 0.04 |  | 0.06     | 0.03 |  |
| Three or more children                            | 0.08       | 0.06 |  | 0.24**   | 0.05 |  | 0.19**     | 0.05 |  | 0.18**   | 0.05 |  |
| Work-limiting health condition                    | 0.26**     | 0.06 |  | 0.41**   | 0.06 |  | 0.26**     | 0.06 |  | 0.34**   | 0.06 |  |
| Partner in the household                          | -0.37**    | 0.06 |  | -0.27**  | 0.05 |  | 0.04       | 0.10 |  | -0.07    | 0.09 |  |
| Parents in the household                          | 0.23*      | 0.10 |  | 0.19     | 0.11 |  | -0.06      | 0.11 |  | -0.04    | 0.11 |  |
| Other people in household                         | 0.09       | 0.07 |  | 0.02     | 0.07 |  | -0.01      | 0.08 |  | -0.02    | 0.08 |  |
| Origin (ref. = Australia: non-Indigenous)         |            |      |  |          |      |  |            |      |  |          |      |  |
| Australia: Indigenous                             | 0.15       | 0.15 |  | 0.18     | 0.14 |  | -0.38*     | 0.16 |  | -0.34*   | 0.16 |  |
| Overseas: main English-speaking country           | -0.02      | 0.08 |  | -0.00    | 0.08 |  | -0.00      | 0.07 |  | 0.00     | 0.07 |  |
| Overseas: other country                           | -0.04      | 0.07 |  | -0.07    | 0.07 |  | -0.19**    | 0.06 |  | -0.13*   | 0.06 |  |
| Household income (in \$10,000)                    | -0.01      | 0.00 |  | -0.02**  | 0.00 |  | 0.00       | 0.00 |  | -0.01    | 0.00 |  |
| Working hours (main job)                          |            |      |  | 0.04**   | 0.00 |  | 0.03**     | 0.00 |  | 0.03**   | 0.00 |  |
| Schedule control (ref. = 1 (least control))       |            |      |  |          |      |  |            |      |  |          |      |  |
| 2   |            |      |  | 0.10*    | 0.05 |  | 0.08*      | 0.03 |  | -0.19**  | 0.05 |  |
| 3   |            |      |  | 0.13*    | 0.05 |  | 0.04       | 0.04 |  | -0.21**  | 0.06 |  |
| 4   |            |      |  | 0.08     | 0.05 |  | -0.02      | 0.04 |  | -0.27**  | 0.06 |  |
| 5   |            |      |  | -0.01    | 0.05 |  | -0.12**    | 0.04 |  | -0.36**  | 0.06 |  |

|  | Mothers    |      |       |            |      |         | Fathers    |        |      |            |      |         |      |
|--|------------|------|-------|------------|------|---------|------------|--------|------|------------|------|---------|------|
|  | Pooled OLS |      |       | Pooled OLS |      |         | Pooled OLS |        |      | Pooled OLS |      |         |      |
|  | base       |      |       | extended   |      |         | FE         |        |      | base       |      |         |      |
|  | B          | SE   |       | B          | SE   |         | B          | SE     |      | B          | SE   |         |      |
| 6  |            |      |       |            |      |         |            |        |      |            |      |         |      |
| 7 (highest control)                        |            |      |       | -0.22**    | 0.06 | -0.19** | 0.04       |        |      | -0.51**    | 0.06 | -0.29** | 0.04 |
| Employment type (ref.= Permanent contract) |            |      |       | -0.60**    | 0.07 | -0.46** | 0.05       |        |      | -0.84**    | 0.08 | -0.46** | 0.05 |
| Fixed-term contract                        |            |      |       | 0.05       | 0.05 | 0.03    | 0.04       |        |      | 0.07       | 0.05 | 0.07*   | 0.04 |
| Casual contract                            |            |      |       | -0.15**    | 0.05 | -0.10** | 0.04       |        |      | 0.21**     | 0.06 | -0.01   | 0.05 |
| Temporary agency work                      |            |      |       | 0.12       | 0.10 | 0.05    | 0.08       |        |      | -0.01      | 0.08 | -0.11   | 0.06 |
| Self-employed                              |            |      |       | -0.15*     | 0.07 | -0.20** | 0.05       |        |      | -0.01      | 0.06 | -0.07   | 0.05 |
| Multiple job holder                        |            |      |       | 0.28**     | 0.06 | 0.24**  | 0.04       |        |      | 0.18**     | 0.06 | 0.20**  | 0.04 |
| Public sector                              |            |      |       | -0.09      | 0.05 | -0.03   | 0.04       |        |      | -0.06      | 0.05 | -0.12*  | 0.05 |
| Working schedule (ref. = Regular daytime)  |            |      |       |            |      |         |            |        |      |            |      |         |      |
| Regular evening / night                    |            |      |       | 0.04       | 0.09 | 0.04    | 0.06       |        |      | 0.12       | 0.10 | 0.22*   | 0.09 |
| Other                                      |            |      |       | 0.06       | 0.04 | 0.04    | 0.03       |        |      | 0.11*      | 0.04 | 0.04    | 0.03 |
| Supervisory responsibilities               |            |      |       | 0.16**     | 0.03 | 0.11**  | 0.02       |        |      | 0.14**     | 0.03 | 0.11**  | 0.02 |
| Occupation (ref.= Professionals)           |            |      |       |            |      |         |            |        |      |            |      |         |      |
| Manager                                    |            |      |       | -0.05      | 0.06 | -0.02   | 0.05       |        |      | -0.04      | 0.05 | 0.02    | 0.04 |
| Technician and trades workers              |            |      |       | 0.03       | 0.10 | -0.14   | 0.08       |        |      | -0.03      | 0.06 | 0.02    | 0.05 |
| Community and personal services workers    |            |      |       | -0.09      | 0.06 | -0.05   | 0.05       |        |      | 0.06       | 0.09 | 0.05    | 0.08 |
| Clerical and administrative workers        |            |      |       | -0.17**    | 0.06 | -0.06   | 0.05       |        |      | -0.03      | 0.07 | -0.05   | 0.05 |
| Sales workers                              |            |      |       | 0.01       | 0.08 | 0.00    | 0.07       |        |      | 0.14       | 0.09 | 0.06    | 0.06 |
| Machinery operators and drivers            |            |      |       | -0.36**    | 0.14 | -0.16   | 0.13       |        |      | 0.06       | 0.07 | 0.07    | 0.06 |
| Laborers                                   |            |      |       | -0.09      | 0.09 | -0.07   | 0.08       |        |      | 0.00       | 0.07 | -0.04   | 0.06 |
| Firm size (ref. = <20 employees)           |            |      |       |            |      |         |            |        |      |            |      |         |      |
| 20-99 employees                            |            |      |       | 0.01       | 0.06 | 0.04    | 0.04       |        |      | 0.13*      | 0.06 | 0.12**  | 0.04 |
| 100-499 employees                          |            |      |       | 0.09       | 0.07 | 0.11*   | 0.05       |        |      | 0.14*      | 0.06 | 0.13**  | 0.05 |
| 500 or more employees                      |            |      |       | 0.14**     | 0.05 | 0.08    | 0.04       |        |      | 0.14**     | 0.05 | 0.06    | 0.04 |
| Missing firm size                          |            |      |       | 0.05       | 0.07 | 0.12*   | 0.05       |        |      | 0.06       | 0.08 | 0.08    | 0.06 |
| Constant                                   | 3.53**     | 0.43 |       | 2.81**     | 0.40 | -0.15   | 1.58       | 3.56** | 0.36 | 2.73**     | 0.35 | 0.93    | 1.36 |
| N (observations)                           | 19487      |      | 19300 | 19300      |      | 19300   |            | 20704  |      | 20545      |      | 20553   |      |
| R <sup>2</sup>                             | .04        |      | .19   | .12        |      | .12     |            | .05    |      | .12        |      | .08     |      |

Note: All models additionally control for survey year.

\*p < .05, \*\*p < .01.

## Moderator Effects

In Table 3, we extended the analysis in four ways. First, we formally tested whether the gender difference in the association between weekend work and WFC is statistically significant. We re-estimated the models using the joint sample of all parents, including an indicator for men (in the pooled OLS models) and an interaction term between weekend work and men. Starting with the OLS base model, we see that the main effect for being male is positive and significant, indicating that men working weekdays experience higher WFC than women. Further, there is a significant, positive interaction effect, meaning the positive association between weekend work and WFC is larger for fathers than mothers. In the extended OLS model, however, the main effect has changed signs, meaning that when comparing men and women in similar jobs, men in fact experience lower WFC. Also, the interaction effect attenuated and became statistically insignificant, indicating that differences in job characteristics between the genders, and especially longer working hours for weekend working men, were also driving the positive interaction effect in the OLS base model. To summarize, after accounting for differences in the characteristics of workers and their jobs, the magnitude of the association between WFC and working weekends is similar for both fathers and mothers.

Second, we investigated whether the association between weekend work and WFC varies with the level of schedule control. To this end, we re-estimated the pooled gender models after including interaction terms between weekend work and the dummies measuring schedule control. The results from our main model (presented in Table 2) suggested that schedule control is, with the exception of weekly working hours, the most powerful predictor of WFC. The FE estimates, for example, revealed that the difference in predicted WFC between those who score highest on the control scale and those who score lowest was around 0.46 for both genders. However, these differences turned out to be much larger among weekend workers. As can be seen from Table 3, the interaction effects were negative and significant in both the extended OLS and the FE model, indicating that WFC is particularly high for those who work weekends and simultaneously have little schedule control. The mean difference in WFC between weekend workers with no schedule control and weekday workers with no control was around 0.28 of a point in the FE model. In contrast, when we focus on workers who report the top score on schedule control, we find that weekend workers do not have significantly higher levels of WFC than other workers ( $0.28 - 0.24 = 0.04$ ). Yet, as can be seen from Table 1, relatively few weekend working parents score high on schedule control. We also investigated this interaction effect separately by gender (results not shown), with the finding of a significant interaction effect in both cases.

Table 3. Weekend work and WFC: Estimates from pooled OLS and FE regression (interaction models)

|   | All parents                |      |                     |      |               |      |
|---|----------------------------|------|---------------------|------|---------------|------|
|   | Pooled OLS base            |      | Pooled OLS extended |      | Fixed effects |      |
|   | B                          | SE   | B                   | SE   | B             | SE   |
| <i>Gender interaction model</i>             |                            |      |                     |      |               |      |
| Weekend work                                | 0.22**                     | 0.04 | 0.14**              | 0.04 | 0.13**        | 0.03 |
| Male  | 0.34**                     | 0.04 | -0.21**             | 0.04 |               |      |
| Male x weekend work                         | 0.21**                     | 0.06 | 0.03                | 0.05 | -0.02         | 0.04 |
| N   | 40191                      |      | 39845               |      | 39853         |      |
| R <sup>2</sup>                              | .05                        |      | .16                 |      | .10           |      |
| <i>Schedule control interaction model</i>   |                            |      |                     |      |               |      |
| Weekend work                                |                            |      | 0.36**              | 0.06 | 0.28**        | 0.04 |
| Schedule control (ref. = 1 (least control)) |                            |      |                     |      |               |      |
| 2   |                            |      | 0.02                | 0.04 | 0.02          | 0.03 |
| 3   |                            |      | 0.04                | 0.05 | 0.01          | 0.03 |
| 4   |                            |      | -0.01               | 0.05 | -0.03         | 0.03 |
| 5   |                            |      | -0.11*              | 0.05 | -0.10**       | 0.03 |
| 6   |                            |      | -0.25**             | 0.05 | -0.15**       | 0.03 |
| 7 (highest control)                         |                            |      | -0.62**             | 0.06 | -0.39**       | 0.04 |
| Schedule control x weekend work             |                            |      |                     |      |               |      |
| 2   |                            |      | -0.15*              | 0.07 | -0.11*        | 0.05 |
| 3   |                            |      | -0.19**             | 0.07 | -0.16**       | 0.05 |
| 4   |                            |      | -0.23**             | 0.07 | -0.18**       | 0.05 |
| 5   |                            |      | -0.26**             | 0.08 | -0.22**       | 0.05 |
| 6   |                            |      | -0.37**             | 0.08 | -0.29**       | 0.06 |
| 7   |                            |      | -0.32**             | 0.09 | -0.24**       | 0.06 |
| N   |                            |      | 39845               |      | 39853         |      |
| R <sup>2</sup>                              |                            |      | .16                 |      | .10           |      |
| <i>Partnership status interaction model</i> |                            |      |                     |      |               |      |
| Weekend work                                | 0.36**                     | 0.03 | 0.17**              | 0.03 | 0.12**        | 0.02 |
| No partner in household                     | 0.38**                     | 0.05 | 0.29**              | 0.05 | 0.04          | 0.05 |
| No partner x weekend work                   | -0.19*                     | 0.09 | -0.12               | 0.09 | -0.05         | 0.06 |
| N   | 40191                      |      | 39845               |      | 39853         |      |
| R <sup>2</sup>                              | .05                        |      | .16                 |      | .10           |      |
| <i>Partner schedule interaction model</i>   |                            |      |                     |      |               |      |
|   | Dual-earner couple parents |      |                     |      |               |      |
|   | Pooled OLS base            |      | Pooled OLS extended |      | Fixed effects |      |
|   | B                          | SE   | B                   | SE   | B             | SE   |
| Weekend work                                | 0.31**                     | 0.04 | 0.15**              | 0.04 | 0.11**        | 0.03 |
| Weekend work partner                        | -0.02                      | 0.04 | 0.01                | 0.03 | 0.00          | 0.02 |
| Weekend work x weekend work partner         | 0.06                       | 0.06 | 0.02                | 0.06 | 0.00          | 0.04 |
| N   | 28556                      |      | 28308               |      | 28311         |      |
| R <sup>2</sup>                              | .04                        |      | .17                 |      | .10           |      |

Note: Control variables as in Table 2 plus an indicator for men (where appropriate).

\*p < .05, \*\*p < .01.

Third, we examined whether the association between weekend work and WFC differs between single and couple parents. Contrary to expectations, in the base OLS model, there was a negative interaction effect, suggesting that weekend work is more strongly associated with WFC for couple rather than single parents. Living with a partner was generally associated with lower WFC, but less so for weekend workers. That said, once additional characteristics were accounted for in the extended OLS or FE models, this interaction effect between not partnered and weekend work attenuated and lost significance.

Fourth, we tested whether the specific couple working-time arrangement moderates the effect of weekend work. We thus restricted our sample to dual-earner couples and included the partner's information on weekend work as well as an interaction between the respondents' own weekend work and the partner's weekend work (while, in the extended OLS and FE models, also controlling for the partner's total number of working hours). The results revealed no significant difference in the level of WFC if only one partner works weekends or both; what matters seems to be solely one's own working schedule.

## **Discussion and conclusion**

Longitudinal data from a large-scale Australian household survey were used to investigate the relationship between weekend work and WFC. The results suggest four main findings.

First, weekend work is consistently linked to higher levels of WFC. This result is in line with our expectation that weekend work is a job demand that creates both time-based and strain-based challenges for parents (H1).

Second, the impact of weekend work on WFC varied across models. The estimated coefficient on weekend work was largest for fathers in the pooled OLS model that does not account for job characteristics. This result is in part due to the close link between weekend work and long working hours among men. Accounting for working hours and other job characteristics, however, reduced the estimated size of the association between weekend work and WFC, but did not eradicate it. This suggests that what is crucial for the combination of work and family is not just the volume of work, but how this work is spread out across the week. The magnitude of this association was reduced further once we accounted for worker fixed effects, an indication that weekend workers have unobserved characteristics that are associated with high WFC. Not accounting for these fixed traits will thus lead to an overestimation of the detrimental effects of weekend work on families.

Third, in line with expectations (H3) and previous studies (Voydanoff, 1988; Staines & Pleck 1986), the association between weekend work and WFC differed with the level of control workers have over when they work. We found no differences in WFC levels between weekend workers and other workers among those reporting high levels of control over their working time. Schedule control is therefore an important work-domain resource that can buffer the detrimental effects of weekend work on family life. Differently to both Voydanoff (1988) and Staines and Pleck (1986), we found this applies to both men and women.

Fourth, after accounting for unobserved person-specific traits, the impact of weekend work on WFC did not differ between the genders, between couple and single parents, or with the partner's schedule. Contrary to our hypothesis (H2), weekend work thus appears to be equally detrimental for mothers and fathers, despite them facing different role expectations in Australian society. Further, working on the weekend increases WFC for single and couple parents alike, despite couples' advantage of being able to share the care work. And among couple parents working weekends, we do not see an additional rise in the level of WFC if the partner also works weekends. We thus cannot confirm H4 or H5, which indicates family-domain resources may be unable to notably buffer the impact of weekend work on WFC.

Our study has limitations. First, despite the use of FE regression, we cannot make any strong claims to causality. Most obviously, there may be unobservable time-varying factors that simultaneously influence respondents' reports of WFC and their working schedule. This problem is inherent to studies based on observational data and hence where experimental conditions do not exist. Second, our measure of weekend work is imperfect given it only captures work on weekends in the main job, whereas there is reason to believe that many second jobs will involve work on weekends. Third, our binary measure of weekend work is relatively crude; a superior measure would also take into account the number of hours worked on weekends. This is potentially of large importance given the many full-time workers who take work home with them and hence would be recorded as weekend workers, even though the number of hours worked on the weekend may be both relatively few and more likely to be worked at times that fit with family schedules. Unfortunately, the HILDA Survey has only recently started collecting this information (in 2017). Analysis of this issue is thus a task for a future study, when repeated measures of hours worked on weekends will be available.

Overall, our study highlights that weekend work is an important job demand impacting on WFC, which has been given relatively little attention in previous theoretical and empirical literature. Further, the results suggest that the impact of weekend work on WFC can be buffered more effectively by work-domain resources (i.e., schedule control) than by family-domain resources (i.e., the presence of a partner).



An interesting question is whether current and new labor market trends and developments will exacerbate or reduce pressures to work on weekends. In the short-term, many of the industries that have been most heavily affected by the social distancing measures introduced to contain the COVID-19 pandemic are those where weekend work is more pervasive (such as the hospitality, entertainment, and recreation sectors). It is very likely, therefore, that the overall volume of weekend work declined. Furthermore, fears about the ongoing risk of infection (at least until a safe and effective vaccine is available) may mean that recovery will be both relatively slow and incomplete in industries where interpersonal contact is significant. Again, we expect this to most heavily affect industries where weekend work is most pervasive. By contrast, the high levels of unemployment and underemployment that have accompanied the pandemic mean that many workers will find themselves in a weaker bargaining position and thus, as the economy rebounds and businesses re-open, be far more willing to accept work that is not a good fit with family responsibilities.

Very differently, the pandemic may have triggered a fundamental shift in the way jobs, and especially white-collar jobs, are organized. Many economies have seen a marked surge in the incidence of working from home since the pandemic commenced (e.g., Bick, Blandin, & Mertens, 2020; Brynjolfsson, Horton, Ozimek, Rock, Sharma & TuYe, 2020; Okubo, 2020), and it is possible that such trends will be the start of more lasting changes. One possible side effect of this change is a greater blurring of the division between work time and non-work time, which may in turn be associated with paid work being spread over more days of the week. But at the same time, there need not be any adverse consequences for WFC. Indeed, working from home should make it far easier for parents to combine work with the demands of parenting. At a minimum, reductions in time spent commuting will provide more time for other activities. Other positive effects are also likely given working from home is typically accompanied by the worker having greater control over when work is performed.

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