

## **Self-employment, Work-Family Time and the Gender Division of Childcare**

Does being self-employed, as opposed to an employee, make a difference to how parents of young children can juggle the demands of work and family? This paper uses data from the Australian Bureau of Statistics (ABS) Time Use Survey (TUS) 2006, to identify associations between employment types (organisational employment and self-employment with and without employees), the time working mothers (N=855) and fathers (N=1168) spend in paid work, domestic labour and childcare, and when during the day they perform these activities. The quantity of time self employed mothers devote to each activity differs substantially from mothers who are employees, while fathers' time is relatively constant across employment types. Results imply that mothers use self-employment as a do-it-yourself 'family-friendly' strategy to combine paid work and childcare activities, particularly through working at home, but that fathers' time priority is paid work regardless of employment type. Thus self-employment is not associated with a gender redistribution of paid and unpaid work. It does appear to facilitate some rescheduling of work and family activities, however. Although the effects are much more pronounced for mothers, it seems that the flexibility and control of self-employment also allows fathers slightly more family involvement than organisational employment.

### **Background**

As women have moved into the workforce, coordinating work and family has become increasingly difficult (Presser 1994; Tuttle and Garr 2009). Households with young children are the most time-pressed of all demographic groups, and finding time for both paid work and family care is an urgent challenge for contemporary families (Jacobs and Gerson 2004). The demands are particularly pressing upon mothers, especially if they wish to maintain their attachment to the paid work force during their children's early years. The rise in women's paid employment was widely expected to lead to an increase in men's unpaid work, but it is still much more commonly mothers than fathers who withdraw from the workforce, downgrade their occupation or job role, or limit their working hours to care for children when they are young (Gornick and Meyers 2009; Lewis 2009). On average, men's unpaid labour has changed only marginally and care and housework still fall predominantly to women (Fisher et al. 2007). For example, men have slightly increased the time they spend doing housework and fathers are spending more time on childcare, but findings consistently indicate that women still spend two to three times more time with children than do men (Casper and Bianchi 2002; Craig and Bittman 2008; Sullivan 2006).

As both cause and consequence, fathers are more likely than mothers to conform to the expectation of the workplace that the 'ideal worker' is relatively unencumbered by domestic responsibilities (Gornick and Meyers 2009; Williams 2001). Especially in liberal welfare states with weakly regulated labour markets, the workplace has changed little to accommodate family demands, leaving the challenge of how to meet these obligations and how to divide them between mothers and fathers to private negotiation within households (Orloff 2006). Many parents cannot access workplace measures that assist combining work and family, such as part time hours, affordable day care, working from home, and flexible start and finish times. Even when such 'family friendly' measures are formally available, there may be unwritten sanctions against accessing them, particularly for men (Bittman, Hoffmann, and Thompson 2004). Juggling family responsibilities around work can limit promotion prospects and impede career development, outcomes men have historically been

less likely to accept than women (Rubery and Grimshaw 2003; Harkness and Waldfogel 2003; Folbre 1994).

Adding to the pressure on families is that at the same time as more households are supplying two workers to the market, jobs have become more demanding. The 24/7 economy, escalating workplace expectations including more technological and 'knowledge' work, and fear of job loss can mean work now claims more time and energy than in the past (Presser 2003; Blair-Loy 2003). At the same time, raising children has also become more demanding. Social expectations of what constitutes adequate parenting have grown and intensified (Coltrane 2007; Wall 2010; Hays 1998). The amount of time and attention that children are thought to need for optimal development has gone up significantly over recent decades (Sayer, Bianchi, and Robinson 2004). Compared with times past, parents are now involved in more aspects of their children's lives, including their education and their friendships, and also are less likely to let them play unsupervised (Hewlett, Rankin, and West 2002; Furedi 2001). Children are thought to require sustained and attentive nurturing, and constant active, concerted cultivation, perhaps particularly by the middle classes (Lareau 2003).

These intense and conflicting demands place working families in a difficult position. Many parents of both sexes currently express dissatisfaction with their work-family balance, and look for new ways in which to manage (Hilbrecht et al. 2008; Pocock 2006; Buchanan and Thornthwaite 2001). Parents who cannot access family friendly conditions through conventional employment may decide that self-employment offers a way of earning an income while also caring for young children. Self-employment may seem a do-it-yourself solution to implacable workplace structures, offering greater flexibility and freedom to balance earning money around family life than being an employee in an organisation (Tuttle and Garr 2009). It holds out the promise of flexibility and control over timing, place, quantity and effort of work (Hildebrand and Williams 2003; Lombard 2001; Budig 2006).

While self-employment may offer an alternative way to forge work-family balance, the self-employed of course have a wider range of motivations. Workers may be pulled into self-employment by the opportunity for independence, greater earnings, flexibility and choice over the type and variety of work (Mallon and Cohen 2001; Lombard 2001; Haddock et al. 2006; Hildebrand and Williams 2003). Push factors also operate, including unemployment, redundancy, perceived job insecurity and uncongenial organisational structures and culture (Mallon and Cohen 2001). These may be particularly pertinent in an economy that is shedding jobs, as more redundant workers try to create their own opportunities. Moreover, the benefits of self-employment may be counterbalanced by the long and non-standard hours required for business start-up and growth and by the heightened personal responsibility for success or failure (Baines, Wheelock, and Gelder 2003; Bell and La Valle 2003). Although being one's own boss may bring fewer constraints, it also has potential exclusionary effects, as the self-employed lack access to labour market or welfare state protections such as paid leave. It may exacerbate financial insecurity. Self-employment is often promoted as a route out of poverty and disadvantage, but the risk of business failure makes it also precarious, and income can be erratic (Blanchflower 2000). Independence and opportunity may be thus offset by long and irregular hours, competing demands, interruptions and distractions from work, financial stress and social isolation (Bell and La Valle 2003; Hyytinen and Ruuskenen 2007).

It is also the case that the self-employed are a very heterogeneous group. Self-employment is often associated and discussed interchangeably with small business ownership, entrepreneurship, independent professional practice, home-working, tele-working, freelancing and subcontracting (Bell and La Valle 2003). It covers family workers (including

unpaid), own account workers (who work for themselves with no employees) and the owners of businesses with employees (Blanchflower 2000; Le 1999). The rewards and risks are likely very different across these categories, and they are also likely to have different implications for work-life balance. For example, employers would have more supervisory and management responsibility, but having staff may also give them more spatial and temporal flexibility than is available to sole traders. Also, certain occupations have higher proportions of self-employed workers than others, such as trades like plumbing and professions like law or accountancy, so it is more likely that people in these occupations will take it on. There are also gender differences in the industry profile of the self-employed. In Australia for example, male self-employment is concentrated in the construction industry (52 percent) and in professional, scientific and technical services (25 percent), while female self-employment is most common in professional, scientific and technical services (28.5 percent), health and social assistance (20.5 percent) and retail (20.3 percent) (ABS 2010). Reflecting this gender segregation, the relationship between self-employment and family life may differ across occupations and industries (Bell and La Valle 2003; Blanchflower 2000; Le 1999; Tuttle and Garr 2009; Budig 2006, 2006).

There are also likely gender differences in the motivation for self-employment. Spending time away from their young children may be more unacceptable for mothers than fathers, for whom breadwinning is still a central normative expectation (Wall and Arnold 2007; Solomon 2010). Therefore to conform to social conceptions of proper motherhood, minimise role strain and/or avoid the use of substitute care, mothers may wish to opt out or take on less demanding work when children are young (Bianchi and Milkie 2010). If they cannot find organisational employment that offers desirable hours or flexibility, they may adopt self-employment as a do-it-yourself strategy. While overall men are more likely to be self-employed than women (Hildebrand and Williams 2003; Blanchflower 2000), mothers are more likely than fathers to use self-employment explicitly to juggle work and family (Gray and Hughes 2005). This likely reflects the persistence of gendered divisions of labor in which default responsibility for childcare most usually rests with mothers (Craig 2007; Lewis 2009).

Accordingly, in the USA self-employed women have been found to spend less time in work-related activities and more time providing childcare than men or employed women (Gurley-Calvez, Harper, and Biehl 2009; Gurley-Calvez, Harper, and Biehl 2009). However, in contrast, a comparison of European countries found that with the exception of the UK and the Netherlands, self-employed women generally spent less time caring for their children than employed women (Hildebrand and Williams 2003). The difference implies that mothers' use of self-employment as a means of being available to the children is more salient in some countries than others. Furthermore, most research suggests that although mothers' motivations for self-employment often include childcare factors, this is rarely their only impetus (Baines, Wheelock, and Gelder 2003; Mallon and Cohen 2001). There may be class and occupation differences in this, also. In the USA, women in professional occupations were, like men, motivated to enter self-employment to advance their careers (Budig 2006). Similarly, in the UK Bell and La Valle (2003) found highly qualified self-employed mothers were less likely to be as driven by childcare factors, and more likely to cite flexibility and autonomy over work patterns as the attraction to self-employment, than mothers with fewer qualifications.

For men, non-family motives are even more central; financial pulls such as being their own boss, and having the opportunity to make more money than when working for someone else, predominate (Tuttle and Garr 2009; DeMartino and Barbato 2003; Gurley-Calvez, Harper, and Biehl 2009). This also suggests that men's self-employment would therefore not be

associated with more involvement in the home, and indeed the small body of available research suggests that the reverse may be the case. Baines et al. (2003) found that when fathers have their own business, mothers are more constrained to traditional domestic roles. Bell and La Valle (2003) found that self-employment among both mothers and fathers is associated with more traditional divisions of housework and care. Responsibility for childcare was least likely to be shared in families where only the mother was self-employed, which again likely reflects mothers' desire to work flexibly in order to maximise the time they spend with their children (Bell and La Valle 2003).

Baines et al. (2003) did, however, find that while men never cited childcare as a reason for self-employment, 'being there' for their families was important. Both self-employed mothers and fathers of infants have been found to be less likely than employees to feel they miss out on family activities (Alexander and Baxter 2005). Baines et al. suggest that the family is often incorporated into the work routines of the self-employed, even when they work long hours (see also Hildebrand and Williams 2003). This implies that even if the self-employed allocate substantial time to paid labour, it is not necessarily at the expense of family life, since there is more autonomy over when to do the work. Thus even if it does not reduce the quantity of work, self-employment may still facilitate rescheduling of work and family time. The time of day when the activities are performed may be shifted around, allowing the self-employed to switch between paid and unpaid activities over the course of the day in a way not possible for employees. Similarly, they may be more able to multitask, for instance supervising children while simultaneously doing paid work.

Opportunities for shifting time schedules and multitasking are likely particularly strong for self-employed who work at home (Haddock et al. 2006; Osnowitz 2005; Hilbrecht et al. 2008; Berke 2003), for example, found that working at home gave people more control over their schedules, with many choosing to work when their children were busy with homework or in bed. This enabled them to meet their work obligations without distracting from family time. Self-employed people are much more likely to be home-based than those who are organisationally employed (Bell and La Valle 2003) and the ability to work from home may be a factor impacting on mothers' decisions to become self-employed (Haddock et al. 2006). Research has found women to be attracted to home working because of the perceived opportunity to earn without children missing out on their attention (Berke 2003; Wight and Raley 2009; Kelley et al. 2010). However, working at home may not alleviate time pressures for parents, given that negotiating spatial, temporal, social and psychological boundaries between paid and unpaid work can be very difficult for home workers, particularly for mothers (Ammons and Markham 2004; Hilbrecht et al. 2008; Wight and Raley 2009). There may be little opportunity for down-time, with paid and unpaid work activities bleeding into each other. Furthermore, working at home may allow mothers to maximise their time with children while still earning money, but that does not challenge the gendered division of labour, since it creates favourable conditions for women to provide more care (Sullivan and Lewis 2001; Osnowitz 2005; Hilbrecht et al. 2008).

### **Summary and research focus**

The literature thus gives a mixed picture of how self-employment may impact upon work-family time. It suggests that self-employment may be related to the quantity of time spent in work and family activities, to scheduling, and to multitasking, and that home-based work is of special relevance, but also highlights that the magnitude and direction of these effects likely vary by class and occupation, and even more particularly by gender. It underlines that there is little research comparing women and men in self-employment and especially little

empirical information on how it affects family life (Aidis and Wetzels 2007). Parents' time allocation to work and family may be affected not only by their own but also by their partners' employment characteristics, yet there is a paucity of evidence on cross-over effects between spouses. There is none on self-employment's association with the timing of work and family activities.

To redress these gaps in knowledge, we investigate whether and how a parent's employment type is associated with the balance they strike between work and family, specifically the amount of time both they and their spouse spend on paid work, domestic work and childcare (including multitasking) and when they perform these activities over the day. We look at whether these associations are related to home-based work. We examine the effects separately by gender to tease out whether self-employment is related to both how mothers and fathers manage their own time and/or with the gender division of work and family time.

We use Australian time use data, which means we explore the issue in a liberal welfare state with formal gender equality in the workplace, but where there is comparatively little institutional and policy support to combine work and family (Pocock 2005). In common with the USA, Australia has a relatively unregulated labour market, and at the time of writing no national mandated paid parental leave scheme. Childcare is mostly privately-provided and good-quality formal care is expensive (Brennan 2007). Also as in the USA, maternal workforce participation grew over the latter half of the 20<sup>th</sup> century, but has now stalled, and substantial gender pay gaps persist (Bianchi and Milkie 2010; Craig, Mullan, and Blaxland 2010; England 2010). High effective marginal tax rates penalise the secondary income in dual-earner families, and large numbers of Australian mothers opt out of the workforce, with withdrawal being longer term than in many other countries (Apps 2004). A high proportion of the mothers who do work do so part time, many of them in casual positions which lack workplace provisions such as unfair dismissal protection and employers' superannuation contributions, available to permanent fulltime employees (Apps and Rees 2005; OECD 2007). At the same time, workplace demands are high, with average fulltime hours long. More than half of fulltime employees devote over 50 hours a week to paid work (Pocock, Skinner, and Ichii 2009). There is a pronounced gender division of labour, an active debate over whether substitute care is harmful to children, and a pervasive ideology of intensive parenting, particularly in the middle class (Craig 2007; Lareau 2003; Craig and Mullan forthcoming). Self-employment rates are moderately high, with small business operation having been promoted for at least a decade. In 2006, approximately 18 percent of Australian workers were self-employed<sup>1</sup>; 22 percent of employed men and 13 percent of employed women (ABS 2006).

We expect that in this context self-employed mothers are likely particularly motivated by the opportunity to adjust their work around the family. Because it is more usually women than men who fit their paid work around family responsibilities, moreover, we expect that employment type will be associated with more variation in women's time allocation than in men's. Similarly we expect that women's time allocation will also be more affected by their spouses' employment type than vice versa. Finally, we expect that working from home will be an important factor influencing the time effects of self-employment.

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<sup>1</sup> Self-employed includes owner managers of incorporated and unincorporated business and contributing family workers. All others in employment are employees not owning a business.

## Data and method

We analyse data from the Australian Bureau of Statistics (ABS) Time Use Survey (TUS) 2006, drawn from a nationally representative sample of the population of Australian households. All individuals aged 15 years and over in sampled households are required to provide time use information at five minute intervals for a period of two days, so we are able to obtain detailed data on how both partners in couple households allocate their time. Respondents are asked to record their main or primary activities, any simultaneous (or secondary) activity they engage in, who they are with and where they are throughout the day.

For this study we select parents, either married or cohabiting, aged 20-54 with at least one child aged 0-11 years old. Employment types are defined in three ways: employees, self-employed persons who have employees working for them (also called employers) and self-employed persons who have no employees (also called own account workers or sole traders). The two types of self-employment are kept separate, since each may be associated with different patterns of time use, which may also be different for mothers and fathers. To differentiate by gender, we look at i) employed mothers (N=855) and ii) employed fathers (N=1168). The sample characteristics are in Table 1.

[Table 1 about here]

Similar proportions of employed mothers and fathers fall into each of the employment types, with the overwhelming majority organisationally employed. There are, however, substantial differences in the proportion of fathers and mothers who have a non-working partner. Nearly thirty percent of fathers have a spouse who is not working, compared to only 4 percent of mothers. There are also differences by gender in the proportion that work at home, with 18 percent of mothers falling into this category, compared to less than 4 percent of fathers. Consistent with the predominant pattern in Australia, mothers are far more likely than fathers to work part time hours (67 percent compared to 7 percent). A higher proportion of mothers than fathers have a college degree (34 percent compared to 24 percent), although a slightly higher proportion of fathers than mothers are in a professional occupation (38 percent compared to 32 percent). This likely reflects the occupational downgrading that is a feature of maternal employment in Australia.

Our dependent variables are

1. *Paid work* (ABS codes 200-299): employment-related activities – main job; other job; unpaid work in family business or farm; work breaks; job search; communication and travel associated with these activities.
2. *Domestic work* (ABS codes 400-499; 600-699): housework; food or drink preparation and meal clean-up; laundry, ironing and clothes care; tidying, dusting, scrubbing and vacuuming; paying bills and household management; lawn, yard pool and pet care; home maintenance and pet-care; shopping for goods and services; communication and travel associated with these activities.
3. *Childcare* (ABS codes 500-599): interactive talk-based care including talking, listening, teaching, reading and playing games with children; physical care, including feeding, bathing, dressing, putting children to bed, accompanying and transporting children, waiting or meeting children, ensuring their safety and handing them over to substitute carers, supervising, watching, looking after children.

To capture multitasking, we measure childcare when performed as both primary and secondary activity, that is, both the main activity parents are doing, and also care that parents have recorded while simultaneously doing something else. To avoid double counting any time period in which childcare is recorded as both a primary and secondary activity is counted only once. Secondary activity is most often supervisory care. This is time that parents spend looking after children without active involvement, monitoring them from a distance, ready to be called upon if necessary. Secondary childcare constitutes a large amount of time, and analyses which exclude it significantly underestimate total parental childcare (Craig 2007). Contingent availability to perform active care, captured as secondary activity, may be particularly salient if parents are arranging their paid work around their children's care requirements.

### **Analysis plan**

We first conduct bivariate analyses of parents' employment type and their own time use and that of their spouse, showing average daily time spent in each activity. This is to explore associations between employment type and average time devoted to paid work, domestic work and childcare, and to identify cross-effects between parents. T-tests identify significant variation. Then we present tempograms showing how parents' spend their time in paid work, domestic work and childcare over the day by gender and employment types. This is to see if the self-employed shift activities around each other more than employees do.

Finally we conduct a series of multivariate regression analyses (OLS) on parents' time spent in paid work, domestic work, and childcare (primary and secondary combined). The use of OLS has been debated in time use research because of the sometimes large number of zeros in the dependent variables arising when individuals record no time in an activity. While some have argued that Tobit models are more appropriate in these circumstances (see for example Sousa-Poza, Schmid, and Widmer 2001) others counter that time in an activity cannot take values less than zero, that zero values in the dependent variable reflect actual non-participation, and that OLS is therefore preferable to Tobit (see for example Stewart 2009). We follow this approach. The explanatory variables of interest in the models are i) parents' *employment type* (employee=0) ii) whether or not parents *work at home* (yes=1) and iii) *spouses' employment type* (employee=0).

To remove compositional influences we control for factors that may independently affect time spent in the outcome variables. These are respondents' *employment status* (part-time=1), *education* (college degree=1), *occupational status* (professional=1), *age*, *number of children* and *age of youngest child* in the household. We do not include industry in the models because cells were too small, and we do not include income because the variable was unreliable and yielded no explanatory power further to education and occupational status. The reference category in model one is an employee working fulltime, who has no college degree, does not work in a professional occupation, whose spouse does not work in a professional occupation, and is aged 20-39 and has one child aged 0-4 years. In the second model the reference category is the same, with the additional criterion that the respondent works away from home. In the third model, we enter the employment characteristics of the respondents' spouse.

## Results

### Descriptive analysis

Across all three employment types, mothers spend much less time than fathers in paid work, and much more time in domestic work and childcare (Table 2). This is also the case across variation in spouse's employment type (Table 3). The implication is that a traditional gender division of labour predominates regardless of employment type.

[Tables 2 and 3 about here]

There are, however, some differences by employment type within each gender. For mothers, employers average the most time in paid work, significantly more than both employees and own-account workers (Table 2). By a large margin, own-account workers average the least amount of time in paid work; less than an hour and a half a day. Self-employed mothers spend more time on domestic work and childcare than employees. These results are consistent with the interpretation that self-employment means mothers preserve time in home duties, and that own-account workers are the most marginally attached to the workforce. Also, mothers who are employers spend significantly less time in primary activity childcare than other mothers, and significantly more time on secondary activity childcare than mothers who are employees. (All noted results are significant at  $p < 0.01$ .) This, together with their higher paid work time, suggests that more of these mothers' time with their children is multitasked, and work is performed while also supervising children. In support of this, we found (results not shown) that mothers who are employers spend significantly more time ( $p < 0.001$ ) doing paid work and childcare simultaneously (on average, 50 minutes per day), compared with employees (who average 6 minutes) and self-employed without employees (who average 5 minutes).

Fathers who are employers average the most, and own-account workers the least, time in paid work (Table 2). This echoes the findings for mothers, although the magnitude of the differences is much less. There is little difference in the average time fathers spend on domestic work and childcare by their own employment type. Quantity of male time in these activities is relatively constant, which implies that even when fathers average less paid work, their time is transferred to activities other than home duties. Employer fathers spend the most time on secondary childcare, while employees spend the least. Fathers who are self-employed with employees, like their female counterparts, spend significantly more time ( $p < 0.001$ ) doing paid work and childcare simultaneously (on average, 22 minutes per day), compared with employees (2 minutes) and self-employed without employees (5 minutes).

Mothers' average paid work is lower when they have a spouse who is an employer and time spent on total childcare is significantly less for mothers whose spouse is an own-account worker, although the differences are not large. Fathers' time use is almost entirely unaffected by their spouse's employment type. The sole exception is that fathers with a spouse who is an employer average slightly more secondary childcare and as a result slightly more childcare in total (Table 3).

We now examine how this average time allocation is spread over the day. Figure 1 shows the average minutes employed parents spend on paid work, domestic work and childcare (including both primary and secondary) activities at each hour of the day, by their own employment type. The tempograms clearly illustrate the large gender disparity in quantity of time devoted to each activity noted above; across employment types, mothers spend much

less time on paid work than fathers and much more time on childcare and domestic work. They further reveal some scheduling differences by employment type for each gender.

For mothers, the tempograms show that own-account workers start their working day later and end it earlier than both employees and employers ( $p < 0.05$ ), as well as averaging much less paid work overall. Employers are more likely than own-account workers or employees to do paid work in the very late evening and night. The scheduling of mothers' domestic labour is quite similar across employment types, with the exceptions that at 7 am own-account workers are less likely than employers to be doing housework ( $p < 0.05$ ), and at 4 pm and 8 pm, employees are less likely than employers to be doing housework ( $p < 0.05$ ). Childcare shows less scheduling variation. The only significant differences are between 11 am and 1 pm, when employees are significantly less likely to be doing childcare than own-account workers ( $p < 0.05$ ). There are no significant childcare differences between employers and own-account workers, despite their differences in quantity and timing of paid work time. The tempograms thus show that female employers, in addition to the multitasking noted above, exhibit the most time-shifting. They appear to fit paid work around childcare rather than vice versa. The results imply that for mothers, childcare is the priority activity around which other activities fit.

Fathers' scheduling of paid work is more uniform across employment types. The exceptions are that employers are more likely to be doing paid work at 4 and 5 am, and are more likely to be working at 5pm than sole traders ( $p < 0.05$ ). Self-employed fathers do seem to have more flexibility than employees to be with children during the day; employees are less likely than other fathers to be performing childcare between 9 and 11am ( $p < 0.05$ ).

In summary, the descriptive results show that in quantity, mothers' time is more affected by their own employment type, and to a lesser extent their spouse's employment type, than is fathers' time. Scheduling and multitasking differences by employment type are also greater for mothers than for fathers. This is consistent with our expectations, but to test whether the results pertain net of potentially confounding characteristics, and whether home-based work is an important explicator, we now turn to multivariate analysis.

### **Multivariate analysis**

*Parents' employment type and their own time use:* When key covariates are held constant, there is no association between fathers' employment type and their own time in paid work, domestic work or total childcare. However, all else equal, fathers who work at home are predicted to spend 1 hr 50 minutes more in total childcare (Table 4). This time is comprised of secondary activity (results not shown) indicating that it consists of supervising children without active involvement, not of direct childcare tasks.

Mothers who are own-account workers are estimated to spend significantly less time in paid work, and significantly more time on total childcare, than those who are employees, confirming the descriptive results. However, both these effects are removed when place of work is added to the model, showing that it is working at home, not self-employment per se, that predicts these time use differences between mothers. Also, mothers who work at home are predicted to spend over an hour a day more in domestic labour than mothers who work away from home, with no independent association between this outcome variable and employment type.

*Control variables:* Parents of both sexes are predicted to do less paid work and more domestic labour if they work part time. Part-time working mothers are also estimated to do more total childcare than fulltime workers. Fathers' childcare is also estimated to be higher if they are employed part time, but this effect is not statistically significant when the variable "usually works at home" is entered. This suggests that the higher childcare of home-based worker fathers, noted above, applies to part-time workers. If they have a professional occupation, mothers are estimated to do more paid work and less domestic labour, although the latter effect is only significant if the mother works at home. Occupational status has no independent effect on any aspect of fathers' time use. Fathers spend less time in total childcare if they have older children than if their youngest is a pre-schooler and more if they have two or more children. Mothers also spend less time in childcare with older children. They are also estimated to spend significantly more time in paid work when they have older children, and more time in total childcare if they have two or more children, but only if home-based work is not controlled.

*Parents' employment type and their spouse's time use:* All else equal, there is no direct association between spouses' employment type and the time use of either mothers or fathers (results not shown).

The multivariate findings do not indicate that parents' use of time is affected by their spouses' employment type, but do confirm that mothers are more affected by their own employment type than are fathers. They further suggest that place of work is a more important predictor of parents' time than employment type.

## **Conclusion**

We explored links between self-employment and the way parents of young children allocate time to work and family. We added to previous research by using detailed time use data from both parents in couple families to examine the relationship between self-employment and amount of time spent in activities, when those activities were performed, the moderating effect of working at home, and associations between parents' time use and their partners' self-employment. We found marked differences by gender.

Mothers' employment type was strongly associated with the time they spent in paid work and childcare. Mothers who were own-account workers spent significantly less time in paid work and more time on childcare activities than other mothers. This behaviour is consistent with mothers choosing this form of self-employment as a strategy to earn (some) money while maximising the time they spend with their children. Working from home was an important added explicator, and had a stronger association with maternal time use than self-employment per se. Though our data are cross-sectional and cannot establish causality, this is consistent with the interpretation that the ability to work from home plays an important role in mothers' decisions to become self-employed (Berke 2003; Wight and Raley 2009; Kelley et al. 2010). The results also imply that this form of self-employment is unlikely to generate high earnings; mothers who work as sole traders are rarely running their business fulltime, but rather appear more marginally attached to the workforce than employees. Given the high levels of part time maternal employment in Australia, this means these mothers are averaging very short hours indeed. Thus, while these mothers do participate in both paid work and childcare, the short time spent in paid work suggests that childcare is the higher priority.

Mothers who employed others exhibited time-use patterns that were different again. These mothers averaged a similar amount of paid work as employees, and at the same time more

closely matched own-account workers' high childcare time. They did the most rescheduling and the most multitasking of paid work and childcare, suggesting that they actively interweave and overlay their commitments to work and family so as to maximise their time in each. Perhaps because of the difficulty of this juggling act, the number of mothers who fall into this category is few. The predominant pattern of mothers' self-employment is own-account work, which our results suggest is mainly comprised of home-based work done within the parameters of almost fulltime home-making.

Compared with women, self-employment was not associated with much variation in men's time. Fathers' paid and unpaid work was largely unaffected by their employment type; the time-characteristics of the male job did not differ much according to whether or not they were organisationally employed, own account workers, or self-employed with employees. When fathers' time did vary, as for example in our finding that own-account working fathers spent least time in paid work, it did not appear to be related to maximising family time, as their childcare and housework did not vary. The implication is that the reduction in paid work time meant more time in other activities, such as leisure, rather being used to increase their home duties, as was the case for mothers.

Nor did we find much association between fathers' self-employment, working from home and work-family time. The small proportion of men who worked at home were estimated to spend longer in supervisory care of children, but the effect was independent of employment type. This suggests that the motivation for male self-employment is less entwined with the opportunity it affords to be home-based than is the motivation for female self-employment. Our findings that men's time allocation was comparatively constant underscores that adjusting paid work around family commitments is still more central to mothers' than to fathers' lives. In contrast to mothers, for whom childcare was the largest daily time commitment, for fathers paid work was the major activity. This is consistent with the interpretation that men's care time is contingent upon their paid work, whereas women's paid work is contingent upon their care time. On average fathers are much more likely to conform to notions of a worker who is uninhibited by domestic demands (Gornick and Meyers 2009; Williams 2001) than mothers who retain primary responsibility for childcare and managing the home (Craig 2007; Lewis 2009). Our findings show that this extends to fathers who are self-employed as well as those that are organizationally employed.

A small but notable exception was that for self-employed fathers, especially those who employed others, time spent on childcare fluctuated throughout the day slightly more than for other fathers. This suggests that they use the flexibility of self-employment to insert slightly more childcare into their day. Thus both mothers and fathers seem to use the control self-employment affords them to manoeuvre their daily timetables. This may not alter the amount of time allocated to each activity overall, but provide more freedom to reschedule the activities. Our findings show that women, especially, use the opportunity to shift the times they are working, performing domestic labour or looking after children.

Thus mothers appear to actively dove-tail their time around children and the needs of the home, while fathers' time is more invariant. We expected that as a corollary, women's time allocation would be more affected by the time allocation of their spouse, and the characteristics of their spouse's job, than vice versa. Our descriptive results suggested that on average this was the case, but our multivariate analyses showed this was due to demographic variation rather than to type of employment. For both mothers and fathers, therefore, self-employment was more directly associated with their own time use than with that of their spouse, and self-employment of neither spouse led to a gender redistribution of paid work

and family time. Rather, self-employed men largely replicated the family time inputs of male employees, and self-employed women did as much or more home care as female employees.

In summary, this research suggests that the typical self-employed mother is a sole trader who fits very short paid work hours around her childcare and home duties, and that self-employment of either parent is more likely to reinforce than to challenge the gendered division of labor. It thus strongly underlines the persistence of normative role expectations, with mothers as caregivers and fathers as breadwinners. However, our data are from a country in which, as in the USA, collective measures to assist work-family balance are relatively sparse. It may be that this context is particularly likely to motivate mothers to seek a do-it-yourself solution to work-family strain. In other institutional contexts, maternal self-employment may be more directly related to entrepreneurial ambition, rather than to work conditions. For example, countries such as the Nordic social democracies have more comprehensive work-family policies including mandated paid parental leave, subsidised universal public day care and the right to request part time work. Where such family-friendly measures can be readily accessed through organizational employment, the motivation for self-employment and its impact on time allocation may be more gender-similar, such that women, like men, enter it to run a business rather than to prioritize care of children. This will be investigated in future research.

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**Table 1: Sample characteristics**

	<b>Employed mothers n = 855</b>	<b>Employed fathers n=1,168</b>
	<b>%</b>	<b>%</b>
Employee	85.5	83.0
Self-employed (has employees)	3.7	4.7
Self-employed (no employees)	10.8	12.3
Spouse is employee	80.1	60.1
Spouse is self-employed (has employees)	4.8	2.7
Spouse is self-employed (no employees)	11.1	7.5
Spouse is not in paid work	4.0	29.6
Usually works at home	18.0	3.9
Usually works away from home	82.0	96.1
Works full time	32.7	93.2
Works part-time	67.3	6.8
Does not have a college degree	65.4	75.0
Has college degree	33.6	24.2
Not professional occupation	64.4	62.1
Professional occupation	32.0	37.9
Aged 20-39	65.1	54.8
Aged 40-54	34.9	45.2
Youngest child aged 0-4	49.6	54.5
Youngest child aged 5-11	50.4	45.5
1 child in household	28.4	27.4
Two or more children in household	71.6	72.6

**Table 2: Parent's employment type and their own time use (mean daily minutes)**

	Employee		Self-employed with employees		Self-employed no employees	
	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers
Paid work	179	376	215	391	100	326
Domestic work	233	124	242	119	256	122
Primary childcare	184	92	167	85	217	87
Secondary childcare	182	82	270	113	229	100
Total childcare	366	174	436	198	446	187

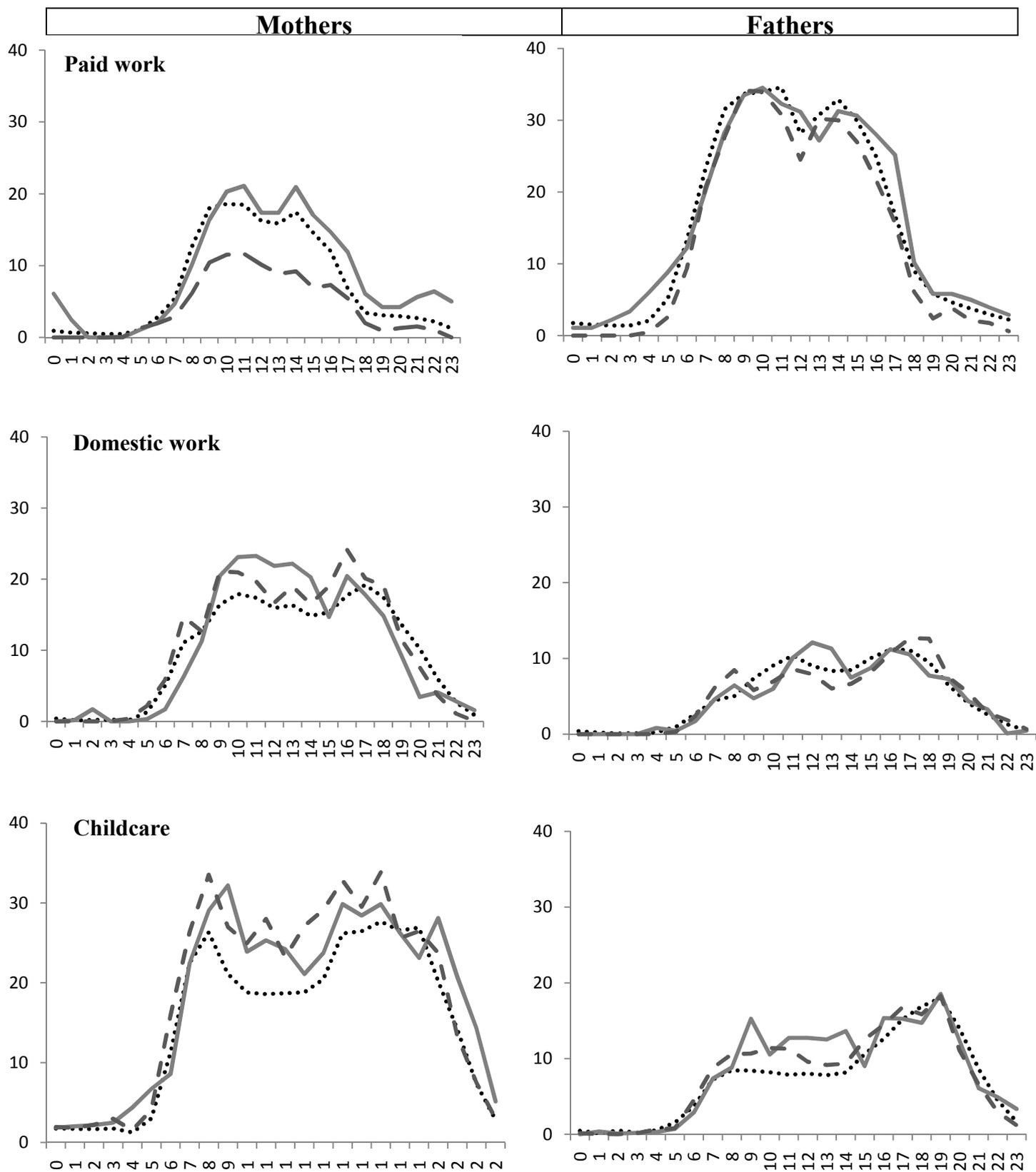
**Table 3: Parent's employment type and spouse's time use (mean daily minutes)**

	Employee		Self-employed with employees		Self-employed no employees	
	Mothers	Fathers	Mothers	Fathers	Mothers	Fathers
Paid work	123	361	95	363	115	341
Domestic work	252	132	281	135	235	114
Primary childcare	216	89	235	95	195	94
Secondary childcare	207	87	256	123	175	104
Total childcare	423	176	490	219	370	198

**Table 4: OLS regression results**

	Mother's time						Father's time					
	Paid work		Domestic work		Childcare		Paid work		Domestic work		Childcare	
	M1	M2	M1	M2	M1	M2	M1	M2	M1	M2	M1	M2
<b>Constant</b>	186.9*** (21.9)	189.3*** (21.9)	190.1*** (12.9)	187.8*** (12.8)	460.4*** (24.4)	457.9*** (24.3)	419.6*** (21.7)	420.5*** (21.7)	106.6*** (10.5)	106.5*** (10.5)	145.9*** (14.3)	148.1*** (14.2)
<b>Explanatory variables</b>												
Self-employed with employees	26.4 (41.1)	43.5 (41.3)	6.3 (24.2)	-10.0 (24.1)	65.0 (45.6)	47.4 (45.9)	21.9 (40.3)	16.8 (40.6)	-6.7 (19.5)	-6.0 (19.7)	-1.8 (26.6)	-14.5 (26.7)
Self-employed no employees	-72.7** (25.7)	-32.7 (29.0)	19.2 (15.1)	-18.9 (17.0)	58.1* (28.5)	17.0 (32.2)	-21.3 (26.5)	-26.7 (27.1)	-11.5 (12.8)	-10.8 (13.1)	18.8 (17.5)	5.1 (17.8)
Usually works at home		-69.3** (23.7)		65.9*** (13.9)		71.1** (26.4)		44.0 (46.4)		-5.6 (22.5)		111.1*** (30.5)
<b>Control variables</b>												
Works part-time	-91.7*** (16.7)	-86.2*** (16.7)	38.7*** (9.8)	33.5*** (9.8)	48.6** (18.5)	43.0* (18.6)	-168.8*** (34.4)	-174.1*** (34.8)	41.6* (16.6)	42.3* (16.9)	51.1* (22.7)	37.8 (22.9)
Has professional occupation	49.5* (19.7)	53.6** (19.7)	-19.9 (11.6)	-23.9* (11.5)	-25.2 (21.9)	-29.5 (21.9)	-27.4 (19.5)	-30.1 (19.7)	4.8 (9.4)	5.1 (9.5)	40.5** (12.9)	33.8** (12.9)
Spouse has professional occupation	-7.8 (18.6)	-4.0 (18.5)	10.5 (11.0)	6.9 (10.8)	8.3 (20.6)	4.5 (20.6)	13.1 (23.3)	10.7 (23.4)	-1.9 (11.3)	-1.6 (11.3)	28.1 (15.4)	22.0 (15.4)
Aged 40-54	4.4 (18.6)	1.5 (18.5)	22.2* (10.9)	25.0* (10.8)	-12.6 (20.6)	-9.6 (20.6)	-23.0 (18.9)	-22.1 (18.9)	8.1 (9.2)	8.0 (9.2)	2.8 (12.5)	5.1 (12.4)
Youngest child aged 5-11	37.6* (18.3)	32.2 (18.3)	3.9 (10.8)	9.1 (10.7)	-288.4*** (20.3)	-282.8*** (20.3)	-11.4 (19.4)	-11.9 (19.4)	16.1 (9.4)	16.2 (9.4)	-97.8*** (12.8)	-99.0*** (12.8)
Two or more children	25.5 (17.6)	29.2 (17.6)	14.7 (10.4)	11.2 (10.3)	41.9* (19.6)	38.1 (19.6)	-15.4 (19.0)	-15.4 (19.0)	5.1 (9.2)	5.1 (9.2)	61.1*** (12.6)	61.2*** (12.5)
N	855	855	855	855	855	855	1168	1168	1168	1168	1168	1168
Adjusted R2	0.06	0.07	0.02	0.05	0.26	0.27	0.02	0.02	0.00	0.00	0.09	0.10

**Figure 1: Parents' average minutes in paid work, domestic work and childcare by gender and employment type, at each hour of the day**



..... Employees    — Self-employed with employees    - - Self-employed no employees