

86 | is there really a second shift, and if so, who does it? a time-diary investigation

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abstract

This paper draws on data from the most recent Australian Bureau of Statistics (ABS) *Time Use Survey (TUS)* (over 4,000 randomly selected households) to tease out the dimensions of the 'second shift'. Predictions that as women entered the paid workforce men would contribute more to household labour have largely failed to eventuate. This underpins the view that women are working a second shift because they are shouldering a dual burden of paid and unpaid work. However, time use research seems to show that when both paid and unpaid work is counted, male and female workloads are in total very similar. This has led to suggestions that a literal second shift is a myth; that it exists in the sense that women do more domestic work than men, but not in the sense that they work longer hours in total. Using a more accurate and telling measure of workload than previous research (paid and unpaid labour including multitasked activities), this paper explores the second shift and how it relates to family configuration, ethnicity and indicators of class and socioeconomic standing. It finds a clear disparity between the total workloads of mothers and fathers, much of which consists of simultaneous (secondary) activity, and some demographic differences in female (but not male) total workloads. It concludes that the view that the second shift is a myth is only sustainable by averaging social groups very broadly and by excluding multitasking from the measurement of total work activity.

keywords

second shift; dual burden; gender; paid and unpaid work; secondary activity; time use

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Predictions that as women entered the paid workforce men would take on more of the household labour have largely failed to eventuate. Despite a massive movement by women into the paid workforce over the last 60 years, men have not increased the time they spend in domestic labour by a corresponding amount (Bittman, 1999; Bianchi *et al.*, 2000; Baxter, 2002). This has led some commentators to argue that because women who are participating in paid employment are also running the home they are performing a 'second shift' (Hochschild and Machung, 1989; Schor, 1991). The idea that women are shouldering a 'dual burden' has a great deal of popular currency.

But other researchers contest this view. Although empirical investigation of time use patterns confirms that the division of *domestic labour* remains unequal cross nationally, it also consistently shows that if *both paid and unpaid work* is counted, male and female average workloads are in total very similar (Robinson and Godbey, 1997; Gershuny, 2000; Beaujot, 2001; Bittman and Wajcman, 2004; Bianchi *et al.*, 2006). This implies that for most women the dual burden exists in the sense that women are responsible for most unpaid labour as well as some paid work, but not in the sense that women are working longer total hours than men. In which case, why does the idea that mothers are working a second shift strike such a popular chord?

This paper sheds new light on the question of whether women are doing a second shift while men are not, using data from the most recent Australian Bureau of Statistics (ABS) *Time Use Survey (TUS)*, to calculate an unusually telling measure of work time. It not only quantifies total paid and unpaid workload, but also captures multitasking by counting work that is done at the same time as other activities. Since women more often multitask than men, to ignore this dimension of work, as most previous studies have done, results in gender bias. The paper also investigates whether the reality of the second shift varies with family configuration (age and number of children), education and income (as indicators of class), recent immigrant status (as an indicator of ethnicity) and rural/urban location.

background

When large numbers of women began to enter the paid workforce during the last century, it was widely expected that there would be a complementary increase in male involvement in domestic activities. The assumption that there would be more gender equity in domestic labour partly arose from simple logic. One consequence of women's increasing time in paid employment time *should* be

men's increasing domesticity (Oakley, 1985). It was assumed that the family would act as a self-balancing system in which, if one member withdrew from certain types of labour, another would take over that labour. This was called the 'adaptive partnership model' (Meissner *et al.*, 1975).

In an early example of this approach, Myrdal and Klein wrote in 1956 of how both sexes could have dual roles in paid and unpaid work. They presented data on the long hours spent by women on housework, and optimistically suggested an equitable six-hour work day for both sexes, arguing that 'both men and women would have more time and energy to look after their home, an activity which can be a creative combination of work and leisure if one has neither too much nor too little time for it' (Myrdal and Klein, 1968: 52). Implicit is a view of marriage as a partnership of two equals. 'The symmetrical family' is one in which marital partners have equal status and responsibility (Young and Wilmott, 1973). The ideal marriage was increasingly seen as an equitable arrangement in which husband and wife both contribute financially and emotionally (Giddens, 1991).

Liberal feminists, who saw women's equality as resulting from improved opportunities in education and employment, supported this model. 'Generally, feminists look to a future in which women and men are equal in opportunity, in respect and in the burdens they carry' (Bergmann, 1986: 263). They saw female withdrawal from housework and childcare as the mechanism for encouraging male participation and argued that the best way of achieving equity between the sexes was by improving the economic power of women. On this view, the priority for feminist action lies in access to employment, and discrimination and unfair practices in the workplace are the primary targets for reform. The solution to domestic disadvantage is greater economic independence. When women earn more, they will have more power in the family, so equality between husband and wife in domestic labour should be easier to achieve (Bergmann, 1986). Women's access to economic resources on the same basis as men was to be the key to wiping out female disadvantage (Hartmann, 1981), and to resolving the unequal allocation of domestic labour.

An opportunity to test these predictions empirically came with the advent of time use data, which can show how domestic labour is actually divided within households. Surveys of time use are a relatively recent form of data collection. Their unique contribution to research is to provide direct information about the private sphere, particularly by quantifying unpaid domestic work, which is largely invisible to usual data collection methods (Robinson and Godbey, 1997; Gershuny and Sullivan, 1998; Bittman *et al.*, 2003).

Analysis of time use data made clear that despite the predictions of increased gender equity, women continue to do most of the domestic labour. Numerous quantitative studies of the division of domestic labour confirm that even though they have entered the paid workforce in large numbers, women still perform the

bulk of housework and childcare (Meissner *et al.*, 1975; Pahl, 1984; Hochschild and Machung, 1989; Shelton, 1992; Bittman and Matheson, 1996; Harrington, 1998; Bittman, 1999; Baxter, 2002). This has led many to suggest that the only change in the division of labour is that many women have *added* employment to their existing domestic responsibilities. In the best-selling book that widely disseminated this perspective, Hochschild and Machung (1989) investigated how 50 households divided the responsibilities of paid and unpaid work. Identifying a widespread lack of domestic contribution by men, they suggested that women are largely responsible for household work, childcare *and* the requirements of their paid job. They characterized the take-up by women of paid work in the face of no adoption of domestic work by men as a 'stalled revolution' and popularized the term 'second shift', to encapsulate the contention that women are in the stressful position of performing the equivalent of two jobs (Hochschild and Machung, 1989).

However, the view that women are working a second shift is contested. Time use analysis has been used to show that time spent by men and women in total paid and unpaid work, and its inverse, leisure time, is broadly equal in the USA (Robinson and Godbey, 1997; Bianchi *et al.*, 2006), Canada (Beaujot, 2001) and Britain (Gershuny, 2000). A comparison of time use in 10 OECD countries replicates this finding (Bittman and Wajcman, 2004). Robinson and Godbey (1997) contend that, except in Bulgaria, Italy and Austria, an 'invisible hand' keeps total work time more or less equal between the sexes. One mechanism for this may be that women move in and out of paid work to accommodate family demands over the life course, continually reallocating their time between paid and unpaid work, but keeping to a total workload that is broadly similar to that of men. Another reason for it is a unilateral reduction in the time women spend doing housework. While men have not markedly raised their housework time, women have substantially lowered their's, thus making relative inputs more equal (Bianchi *et al.*, 2000, 2006; Baxter, 2002).

So on the face of it, the empirical evidence suggests that while women are still disproportionately responsible for domestic labour, male and female workloads are broadly similar if both paid and unpaid work is counted. On this view, the second shift cannot be interpreted to mean that women spend longer than men do working. But if this is the case, why does the idea that women are working a second shift *feel* so true?

One reason is that workload equality exists only in the average. Many studies average the work hours of the whole workforce, and this obscures differences between groups. Also, most assess only individual workloads. This approach overlooks that a major change over the last 50 years has been in the kind of family that now predominates: the dual-earner household, which is particularly subject to time stress (Jacobs and Gerson, 2004). When both members of a couple are supplying time to the paid workforce, time pressure is greater than if only one

is doing so, even if neither is individually working longer hours than the historical average (Craig, 2007a).

Also, time scarcity is more pressing at certain stages of the life course, most obviously when there are young children to care for (Craig, 2007a). As noted above, some gender convergence in housework time arises from women reducing their time in household work and thus contributing to relative gender equality (Bianchi *et al.*, 2000, 2006; Baxter, 2002). An important finding in recent research is that they are not similarly pursuing the option of reducing time in parental childcare (Baxter, 2002; Sandberg and Hofferth, 2001; Bianchi *et al.*, 2006; Craig, 2006a). Both sexes are spending longer performing childcare than hitherto (Sandberg and Hofferth, 2001; Bianchi, 2006), and the gender gap in time devoted to children is not diminishing (Baxter, 2002). Childcare is not unilaterally reduced (Craig, 2006a). Indeed, mothers go to considerable lengths to avoid trading off paid work and parental childcare against each other, including by forgoing sleep, self-care and childfree leisure time (Craig, 2007b). Therefore, patterns of broad equality in total work may be more likely to exist if there are no children in the household. Calculations that average the experiences of all men and women could allow parity between childless men and women to obscure the situation for parents. This paper will explore whether, if the second shift does exist in the sense that women are working more total hours than men, women mainly shoulder it during the life course stage of motherhood.

Similarly, comparing average workloads of all men and women may obscure differences that exist between class and ethnic groups. Some may be likely to experience a disparity in total workload by sex than others. The particular dimensions of this may be country-specific. In Australia, class differences are less obvious and entrenched than in the UK, but there is still considerable range in income and education levels that may affect workload, and gender equity. A further important social divide in Australia is that between city and country. The rural population has an average income well below that of city dwellers, and gender wage gaps are more marked in rural areas (ABS, 2005). There are also issues of race and ethnicity. Australia has no large racial minorities analogous to the Black or Hispanic groups in the US and the indigenous population is very small, but it is a nation of immigrants, with 40% of the population either born overseas or having a parent who was (ABS, 2005). Most come from English-speaking countries (particularly the UK and New Zealand) or from Europe, but recent waves of migrants are increasingly likely to be from East Asia or the Middle East. This paper will investigate whether the gendered second shift is more salient for those in different social groupings, specifically looking at whether it varies with income, education (as proxies for class), being of non-English-speaking background (NESB) and rural versus urban location.

Secondly, there is the important issue of measurement. The time use analyses that have found men and women to have broadly similar work and leisure times include in their calculation of workload only main (primary) activity (Robinson and Godbey, 1997; Gershuny, 2000; Beaujot, 2001; Bianchi *et al.*, 2006). That is, they record the main thing people were doing at any one time, and do not count activities that are being performed simultaneously. This is a gender-biased measure, because it fails to capture multitasking, which women, as a by-product of their greater domestic responsibilities, do more than men (Craig, 2006b). Primary activity is an underestimation of total workload, particularly of time spent caring for children, because a very high proportion (probably about half) of childcare is done at the same time as other activities (Craig, 2006b; Zick and Bryant, 1996; Ironmonger, 2004). Time with children is notoriously difficult to measure (Budig and Folbre, 2004), but there is general agreement that it is almost universally underestimated in quantitative studies (Craig, 2007a; Gershuny, 2000; Ironmonger, 2004; Folbre *et al.*, 2005).

Part of the reason for this is that most TUSs do not ask 'what else were you doing at the same time?' and so data on simultaneous (secondary) activities are not available. Another aspect of it, however, is that childcare is still not incontrovertibly recognized as real work. A body of feminist literature has established that housework is both laborious and economically productive (Mitchell, 1971; Rich, 1977; Oakley, 1985; Pateman, 1988; Waring, 1988; Folbre, 1991, 1994; Maushart, 1997), and childcare as a main activity is now routinely included in counts of unpaid work. However, counting primary only activity means that a great deal of childcare is miscategorized as leisure or overlooked entirely. An important part of childcare involves supervising children, being available to assist or intervene if necessary, or facilitating the child's experience. This can range from a parent keeping an eye on their playing child while also doing the cooking, to such activities as taking a child to a swimming lesson and then swimming themselves to fill in the time until they can take the child home again. This latter type of activity is more likely to be classified as leisure than as work.

With few exceptions (Craig, 2007a; Zick and Bryant, 1996; Ironmonger, 2004), secondary activity has been excluded from previous studies of time with children. However, supervisory and facilitative care is both necessary and constraining. It requires the carer's presence, at least part of their attention and is incompatible with engaging in market work. Therefore, to overlook it in counts of childcare time is to seriously underestimate unpaid workload. Indeed, to do so is to adopt a double standard, as there are many paid jobs with similar contingent requirements (Waring, 1988). For example, imagine a fire fighter playing cards while waiting at a fire station to be called upon if necessary. TUSs would categorize the main activity in that case as work.

It seems likely that much of the apparent equity in workloads of men and women arises because of the widespread practice in time use research of counting main

activity only, which means that time in childcare is underestimated, and prevents a meaningful gender comparison of total work commitment. This paper investigates this question.

research focus

To summarize, this paper adds to previous scholarship on whether men and women work similar total hours in two ways. First, it includes both primary and secondary activity in calculations of work time, which captures multitasking and provides a more meaningful gender comparison than used in previous analyses. Second, it looks beyond broad gender categories and differentiates between social groupings to tease out who, if there is a second shift, is more likely to be doing it.

It should be noted that this paper does not investigate the *relative* allocation of time to paid and unpaid labour by sex, as has been the focus of considerable previous research (see e.g. Craig, 2007a). This paper addresses the specific issue of how workloads compare by sex *in total*.

Specifically, it tests the hypotheses:

1. Women work a second shift in the sense of having a greater workload, not just doing a greater share of domestic work, but it is obscure because it largely consists of simultaneous activity, a facet of time commitment that is invisible to a simple calculation of total workload as a main activity.
2. Women work a second shift in the sense of having a greater workload, not just doing a greater share of domestic work, but it is mainly associated with motherhood.
3. The second shift affects certain women differently from others. In particular, workload will vary with household income, educational attainment, ethnicity and location.

data and method

To test these hypotheses, I analyse the ABS TUS 1997. The TUS is the most recent in a regular series of cross-sectional time use surveys conducted by the ABS. These surveys reach the highest standard of time-diary methodology, recognized by international specialists to be the most accurate method of time data collection (Andorka, 1987; Juster and Stafford, 1991; Robinson and Godbey, 1997). The TUS randomly samples over 4,000 households, requiring each person aged 15 years or older resident in that household to record, at five-minute intervals, all their activities over two days. The survey yields a high average number of episodes per day (over 30). The TUS is unusually comprehensive and detailed, collecting data and demographic information other national surveys do not include.

The TUS is particularly useful for this inquiry because it asks respondents to record what they were doing in a particular time period and, in a separate column, to also record what they were doing 'at the same time'. That is, they record not only primary (main) activities but also simultaneous (secondary) activities. (The time is still coded as a specific task, so it is possible to separate secondary activity that is a work task, from other secondary activity, such as listening to the radio.) This captures multitasking, information that is fundamental to this study. It can be used to address the question of the second shift in a way that most other TUSs cannot (e.g. the American TUS has a column asking if a child was in the respondent's care, but does not break secondary activity down by task, so cannot be used to address the present issue).

The TUS also has a column in which respondents can record whom they were with during each time interval. This information gives an extremely broad measure of parental time devoted to children: all time that is spent in their company. It is not drawn upon in this paper, because the interest here is in workload, and unlike the measure of secondary activity it is not possible to classify with 'whom' data by specific task, so overlaps with recreation time cannot be disentangled.

This study uses a sub-sample of the TUS data. The age range is restricted to those between 25 and 54 years old. Households with adults other than a marital or *de facto* couple are excluded, to highlight the gender comparison by eliminating the potential confounding effect of other adults in the household contributing to childcare or housework. This paper follows the Australian government's convention of treating cohabiting couples as *de facto* married. It is unfortunately not possible with this data set to investigate workload or the division of labour in same-sex couples, as questions about sexual orientation are not included in the TUS. The population restrictions leave 4,274 person-days, made up of 2,067 men's and 2,207 women's diary-days, on which to base the analysis. The characteristics of the sample are set out in Table A.1 in Appendix A.

measures

The measures investigated in this study are

- (i) Hours a week spent in total work (both paid and unpaid) as a primary activity only.
- (ii) Hours a week spent in total work (both paid and unpaid) as either a primary or a secondary activity.

In both these variables, total work is comprised of paid work, domestic labour and childcare, as defined in ABS codes 20–59 (ABS, 1998).¹ To create variables that include both weekend and weekday time, and therefore optimally represent total paid and unpaid work, weekly hours are calculated by multiplying daily total work by seven. Only the work activities outlined are counted: other

1 *Paid work:* employment-related and education activities — main job; other job; unpaid work in family business or

farm; work breaks; job search; attendance at educational courses; job-related training; homework/study/research; breaks at place of education; communication and travel associated with these activities. *Domestic labour*: 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. *Childcare*: teaching, helping children learn, reading, telling stories, playing games, listening to children, talking with and reprimanding children; feeding, bathing, dressing, putting children to sleep, carrying, holding, cuddling, hugging, soothing, are all examples of physical childcare; journeys and communications associated with childcare activities; supervising games and recreational activities such as swimming, being an adult presence for children to turn to, maintaining a safe environment, monitoring children playing outside the home, keeping an eye on sleeping children.

secondary activities are excluded. This is to avoid including leisure time in the variables. Similarly, time when the secondary activity was childcare, but the primary activity was sleeping is excluded. Episodes in which the same activity was recorded as both a primary and a secondary activity are counted once only. The terms 'main' and 'primary' activity are used interchangeably.

analysis plan

First, this paper will show the average (mean) time spent in each of these measures by men and women by family configuration (age and number of children) income, education, ethnic background (NESB) and rural versus urban location.

Second, it will use Ordinary Least Squares regression analysis to investigate time spent in each measure by each social grouping independently, with the other factors held constant. This means a prediction can be made of how much variation in time spent in each of the dependent variables will be associated with each variation in circumstance, independent of other influences.

independent variables

The independent variables of interest are those representing age, family configuration, class, location and ethnicity. Family configuration is entered in two ways. There is a continuous variable indicating whether the respondent has children, and if so how many. In addition, dummy variables for having a youngest child that is under five years old (yes=1), or a youngest child aged between 5 and 11 years (yes=1) are entered. Data about the ages of children are available only in ranges, but these chosen categories are meaningful because five is the age at which children begin primary school in Australia, and this is associated with a reduction in parental childcare time (Craig, 2007a). Respondents' age is also entered in ranges; 25–34 (yes=1); 35–44 (omitted) and 45–54 (yes=1). As proxies for class, indicators of education and income are entered. (Experimentation with including Socio Economic Indicators for Area (SEIFA) scores yielded no significant results.) Total weekly household income is entered as a continuous variable. Educational attainment is grouped into three levels: no post-school qualifications (omitted category); has vocational qualifications (yes=1); has university qualifications (yes=1). To explore whether there are workload differences along the lines of race or ethnicity, a variable indicating whether English was the first language spoken (yes=omitted, no=1) is included. This measure was chosen, rather than one representing whether or not the respondent or their parents were born overseas, or one indicating whether a language other than English was spoken at home, because the former was too broad (40% of the sample) and the latter was too narrow (6% of the sample) (see Table A.1). Sub-groups were too small to enter different ethnicities separately, so the information yielded here is on immigrant status *per se* rather

than on specific nationalities. To investigate the impact of rural versus urban location upon workload, a dummy variable for location (urban=omitted, rural =1) was entered.

control variables

Entered as control variables are factors that could independently influence time in either paid or unpaid work. Usual weekly hours spent by the respondent's spouse in paid employment are controlled because they may affect the amount of time the respondent spends in household duties (Bergmann, 1986). The use of domestic help and weekly hours of non-parental childcare the household uses are controlled; as well as limiting the gender comparison, the ability to outsource unpaid work may vary by class (Hochschild and Ehrenreich, 2002).

The models are run separately for men and women, as some of the independent variables have different effects by sex (Craig, 2007a). When significance was found, I experimented with interaction terms, but excluded them if all significance was lost. Two are retained in the model; one interacts number and age of children, the other interacts parenthood and rural area. For consistency, these were retained in both the male and female models, though the effects are significant for women only. In each model, the reference category is a married person aged 35–44, with no post-school qualifications, who uses no domestic help and no non-parental childcare, lives in an urban area and has an English-speaking background. The full model specifications are set out in Table A.2 in Appendix A.²

2 Analyses, including tests for multicollinearity, were conducted using SPSS version 14.

results

descriptive analysis

Table 1 shows the average (mean) hours spent each week in paid and unpaid work by men and women in each of the social categories of interest, as a primary activity only (columns two and three) and as a primary or secondary activity (columns four and five).

The picture on gender equity is very different according to which measure of workload is used. As found in the previous research that argues the second shift is not literally true, there is rough equality in average primary workload by sex. The maximum gender difference in total primary work within each category is less than five hours a week (see columns two and three of Table 1). Overall, the range in primary weekly workload was between 55 and 68 hours a week, with in most cases the male total average slightly higher than the female. Some variation is apparent within many of the social groupings studied. For both sexes, primary workload is higher when there are children in the household, particularly when the youngest child is under five years old. Main activity workload is higher for those with vocational or university qualifications than for those with no post-school

Table 1 Mean hours a week spent by men and women in total paid and unpaid work by age and number of children, education, income, ethnicity and location

<i>Mean hours per week total paid and unpaid work as a ...</i>				
	<i>...primary activity</i>		<i>...primary or secondary activity</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
<i>Parental status</i>				
No children	60.21	55.62	61.17	58.19
One child	63.94	63.07	73.72	87.13
Two children	68.25	66.11	79.29	91.47
Three or more children	65.99	66.33	77.12	91.93
<i>Age of youngest child</i>				
0–4 years	67.33	68.34	79.02	98.39
5–11 years	65.38	61.73	74.90	80.84
<i>Qualifications</i>				
No post-school qualifications	59.70	59.97	66.52	76.41
Vocational qualifications	67.38	62.87	74.20	81.00
University qualifications	66.12	65.51	76.20	84.88
<i>Income range</i>				
Low	57.89	57.27	65.28	74.04
Medium	67.06	64.15	75.40	83.35
High	68.42	66.45	76.38	80.85
<i>Ethnicity</i>				
Anglo	64.64	61.96	72.80	80.34
Non-Anglo	64.31	62.92	70.09	76.46
<i>Location</i>				
Lives in an urban area	64.18	61.47	72.43	78.98
Lives in rural area	66.41	64.89	72.23	82.96

Source: ABS Time Use Survey 1997.

qualifications, with the effect more pronounced upon men than women. Income levels were also associated with differences in average primary workload, with men in the medium or high income ranges averaging over 10 hours more work a week than men in the low-income range. For women, the average difference is seven to eight hours a week. The reason for this may be that people in the low-income range are more likely to be unemployed or working very few hours than

those in higher income brackets. For both men and women, there is little difference in average main activity workload according to whether or not they come from a non-English-speaking background. There is more difference associated with location. Both men and women who live in the country have slightly higher average main activity workloads than urban dwellers, with male average hours higher than female.

As predicted, gender differences emerge much more strongly when the measure of total paid and unpaid work includes secondary activity (see columns four and five of Table 1). On this measure, in almost every category, women have longer working weeks than men, and the gender bias of counting primary activity alone becomes apparent. The single category in which male work time is on average higher than female work time is non-parents: men without children average three more weekly hours of paid work than women without children. In all other categories, women's total workload is higher than male, in many cases by a substantial amount. The lowest gender gap is between men and women from a non-English-speaking background (six and a half hours a week). The highest margin is nearly 20 hours a week. This is the difference between the mean total workload of men with a youngest child under five years old (79.02 weekly hours) and the mean total workload of women with a youngest child the same age (98.39 weekly hours). These findings demonstrate that counting only primary activity significantly underestimates female workload compared to male.

There are also differences within social categories. Mean primary and secondary workload for both sexes goes up with educational attainment. Female average work in each category outstrips male by between seven (at vocational level) and 10 (for those with no post-school qualifications) hours a week. On a workload measure that includes secondary activity, there is a gender gap of six and a half hours for urban dwellers and of over 10 hours for country dwellers. There is a weekly work-time gender gap for those in households in the highest income range of four and a half hours, and of nine and a quarter hours in households in the lowest income range.

On this descriptive evidence, there is support for each of the three hypotheses. It appears that women do work a second shift in the sense of having a greater workload, not just doing a greater share of domestic work, but this is not apparent if simultaneous activity is overlooked. The results also suggest that this applies most strongly to mothers, and that the effects vary with income, education, ethnicity and location. However, descriptive analyses are limited. Because they present averages of the whole sample population, they combine categories and therefore obscure the differences between demographic groups. Averages cannot accurately reveal which factors have an influence net of others. In order to more clearly establish the effects of each independent variable upon workload, it is necessary to employ multivariate analysis.

multivariate analysis

The regression results are set out in Table 2. The constant terms show time in each measure, of a married man and woman aged 35–44 years, with no children, no post-school qualifications, who uses no domestic help and no non-parental childcare, lives in an urban area and has an English-speaking background. The figures show how much more or less weekly time in each measure is associated with a one-unit change in each of the variables independently of each of the others, and the asterisks indicate the extent of statistical significance. Standard errors are shown in brackets.

Looking first at columns two and three, which show the effect of each independent variable on main activity work time of men and women respectively, shows that primary workload goes up for both sexes with household income (each extra dollar a week predicts six minutes more work). The age of the youngest child affects both sexes' primary workload: for men, having a youngest child aged 5–11 years predicts just over seven more hours weekly primary work, as does having a youngest child aged 0–4 years, for women. Education also affects both sexes' primary workload: for women, having a university qualification is associated with three and a quarter hours more than other women, and for men having vocational qualifications is associated with just over six and a half more weekly hours than other men. The effect upon women is consistent with previous research showing that university-educated women are more likely to be in the paid workforce, and to work longer hours, than others women (Craig, 2006a).

There are also sex-specific effects on primary workload. Men aged 45–54 years are predicted to do nearly five hours less total primary work than other men. Women in this age bracket do no more or less total work than other women. Women's workload increases with their partner's paid work hours, whereas men's primary workload is unresponsive to variation in their spouses' paid work time. Women from a non-English-speaking background are predicted to do three hours more primary work than other women, and women in a rural area are predicted to do eight and a half hours more primary work than other women. (The interaction term shows that this effect is ameliorated by motherhood, implying that the extra work is paid work.) Neither ethnicity nor rural location predicts a corresponding variation in male primary work time.

Columns four and five of Table 2 show the effects of each variable upon primary and secondary workload combined. On this measure, university qualifications are associated with a higher workload for both sexes. As with primary activity only, household income has a similar effect on both women and women. Spouses' hours on the paid workforce becomes significant for men as well as for women. That male secondary workload goes up when primary did not, implies that men do not

Table 2 OLS regression coefficients of hours a week spent by men and women in total work as a primary activity and total work as a primary or secondary activity

<i>Hours per week total paid and unpaid work as a ...</i>				
	<i>...primary activity</i>		<i>...primary or secondary activity</i>	
	<i>Male</i>	<i>Female</i>	<i>Male</i>	<i>Female</i>
(Constant)	45.28*** (93.23)	41.46*** (2.76)	49.63*** (3.31)	44.69*** (3.52)
Number of children under 15	2.54 (2.06)	2.92 (1.71)	3.87 (2.11)	3.38 (2.18)
Youngest child is under five years old	5.85 (3.21)	7.06** (2.63)	16.11*** (3.30)	37.55*** (3.37)
Youngest child is aged 5–11	7.14* (3.46)	2.28 (2.85)	15.32*** (3.55)	20.98*** (3.65)
Number and age of children (interaction term)	−0.76 (1.00)	−0.23 (0.83)	−1.05 (1.03)	−0.57 (1.06)
Has university qualifications	2.29 (1.61)	3.25** (1.25)	5.54** (1.66)	7.60*** (1.59)
Has vocational or “other” qualifications	6.58*** (1.45)	0.95 (1.26)	6.87*** (1.49)	2.50 (1.61)
Total weekly household income	0.01*** (0.001)	0.01*** (0.001)	0.01*** (0.001)	0.01*** (0.001)
Usual hours worked by husband/partner	0.07 (0.04)	0.09** (0.04)	0.14** (0.04)	0.14** (0.05)
Had domestic help within last week	−0.19 (2.46)	−0.37 (1.96)	−0.72 (2.52)	0.62 (2.50)
Hours child usually attends day care	−0.04 (0.07)	0.05 (0.05)	−0.10 (0.07)	−0.27*** (0.07)
Non-English-speaking background	0.05 (1.75)	3.02* (1.39)	−2.94 (1.80)	−1.44 (1.78)
Lives in a rural area	4.40 (2.55)	8.53*** (1.99)	2.00 (2.62)	6.57** (2.54)
Rural by parent (interaction term)	−1.86 (1.39)	−3.32** (1.12)	−2.17 (1.43)	−1.17 (1.43)
Aged 25–34	1.28 (1.49)	0.02 (1.21)	−0.69 (1.53)	0.81 (1.55)
Aged 45–54	−4.89** (1.70)	−2.26 (1.62)	−5.54** (1.74)	0.13 (2.08)

Standard errors are in brackets * $P < 0.05$, ** $P < 0.005$, *** $P < 0.001$, $N = 4274$ person-days.

NB: sample is comprised of households headed by couples aged 25–54 years either with no children, or with children aged 0–12 years.

do more housework, but become more involved in supervising children, when their wives work.

The hours a week that a child spends in day care makes no difference to male or female primary work time. However, for women it is associated with about quarter of an hour less total work as either a primary and secondary activity for every hour a week the child spends in day care. This is consistent with previous research that shows that women who use day care do not lower their parental care time on an hour-for-hour basis, and that any reduction in time is in passive supervisory care rather than in direct interaction with their children (Bittman *et al.*, 2004a; Craig, 2007b). That the effect is found for women but not men implies that because mothers continue to take the major responsibility for childcare, non-parental care substitutes for their own time, not their partners' (Craig, 2007b).

The effect upon women's workload of being from a non-English-speaking background disappears when secondary activity is included in the measure of work time, implying that the effect is mainly on paid work. Similarly, the effect of living in a rural area upon women's workload is less pronounced on this measure, again suggesting the increase found for primary work is mainly non-household activity. Ethnicity and location remain insignificant for men, and being aged 45–54 years, and having vocational qualifications is again associated with a reduced total workload for men but not for women. So net of other factors, education, income, partners paid work hours, age (for men), and living in a rural area, and having a child attend day care (for women) are all associated with variation in total workload, calculated to include both primary and secondary activity.

However, the effect of all these predictors is dwarfed by the size of the effect upon total workload of being a parent. Holding all else constant, having a child aged 0–4 years old is associated with an increase in total (primary and secondary) workload of over 16 hours a week for men and of over 37.5 hours a week for women. The effect of a youngest child aged 5–11 years is 15 hours and 20 minutes a week extra total work for men, and just less than 21 hours a week for women.

To make clearer what this means about whether there is a second shift in the sense of women working longer in total than men, and how calculating secondary as well as primary activity is essential in investigating this question, these findings are presented graphically in Figure 1. The graph combines information on sample means and the results of the regression analyses, to show the predicted time of respondents in the modal categories, that is, of married men and women aged 35–44 years, on the average household income, with no post-school qualifications, who use no domestic help and no non-parental childcare, live in an urban area and have an English-speaking background, according to whether or

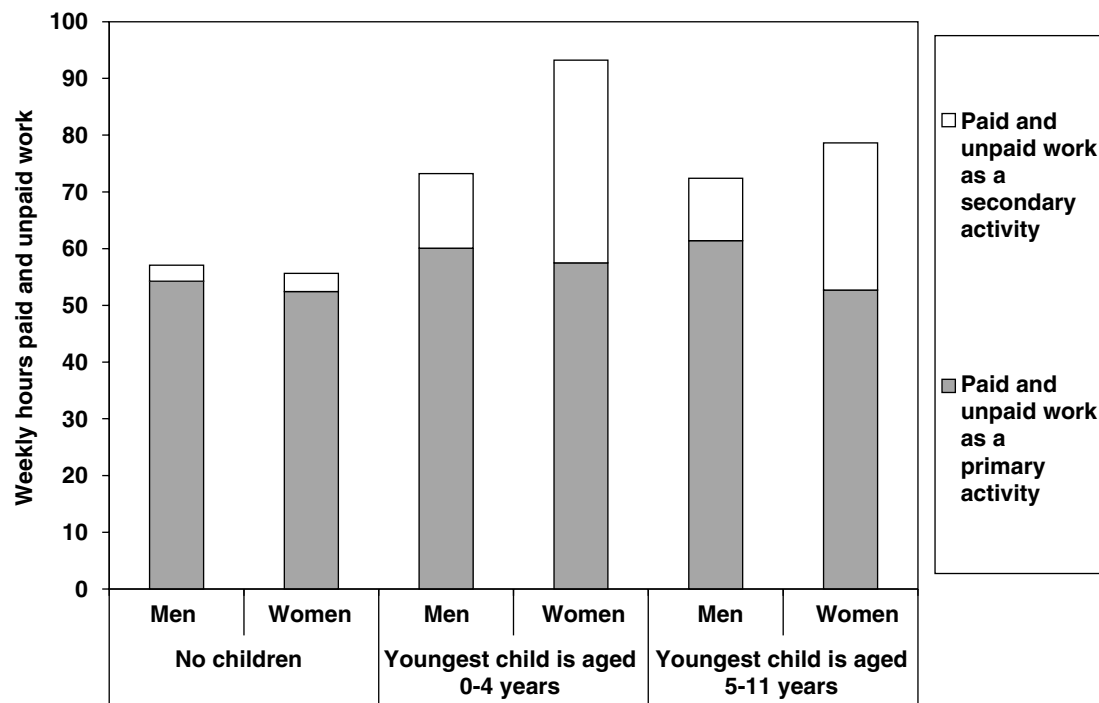


Figure 1 Predicted weekly hours paid and unpaid work as either a primary or secondary activity by sex and age of youngest child.

3 Recall that variables that include both weekend and weekday time, and weekly hours are calculated by multiplying daily total work by seven. Only the work activities outlined are counted: secondary activities such as listening to the radio are excluded. Time when the secondary activity was childcare, but the primary activity was sleeping is excluded. Episodes in which the same activity was recorded as both a primary and a secondary activity are counted once only.

not they have children, and if so, the age of their youngest child. In the graph the grey parts of the bars represent total workload counted as a primary activity only. The white parts of the bars are the addition to total workload that is revealed by counting secondary activity as well. Therefore, total workload performed as either primary or secondary activity is represented by the total height of each bar.³

Figure 1 makes apparent that the second shift is related to both parenthood and gender, and that to see its full dimensions requires acknowledgement of work performed as both a primary and secondary activity.

Paid and unpaid workloads are higher for parents than for non-parents, and this is only really visible when secondary activity is acknowledged. Mothers with a youngest child under five years old spend about 55 hours a week in paid and unpaid work as primary activity. When secondary activity is counted, her total work amounts to over 93 hours a week. So excluding secondary activity underestimates the workload of a mother with a pre-schooler by 90%. When a mother has a youngest child aged 5–11 years, the underestimation is in the order of 30%. Fathers also do more total work than childless men: excluding secondary activity undercounts male time in total work by between 10 (with a youngest child aged 5–11 years) and 15% (with a youngest child aged 0–4 years).

Also, when secondary activity is included in the count, it is apparent that mothers' total work commitment is much higher than fathers'. When primary activity only is considered (shown as the dark parts of each bar), men and women within each family configuration are doing about the same amount of work in total. The approximate equity does not hold when secondary activity is included in the analysis. Looking at the total heights of the bars, which take account of secondary activity as well as primary, shows a substantial gender work gap between parents. This is where the second shift can be found. On average, mothers are working 20 to 25% more than fathers when there is a pre-school child in the family, and 15% more when the youngest child is at primary school.

conclusion

This study tested claims that the gendered second shift is a myth. It challenged assertions that time use research proves that when paid and unpaid work is counted, men and women have similar total workloads. It argued that most previous time use analyses are implicitly gender biased, because they use an incomplete workload measure in that they count main (primary) activity only, and therefore significantly underestimate childcare time, which is most often done as a simultaneous (secondary) activity. Primary activity workload is an androcentric measure, because multitasking is of more often done by women than by men. It is of particular relevance to mothers. To ignore multitasking, as

most previous studies have done, obscures an important gender workload disparity.

By including secondary activity in its measure of total work time, this analysis showed that the second shift is not a fallacy, nor to be only metaphorically true in the sense that women are responsible for most unpaid labour. There is a more literal aspect too. Women do work a second shift in the sense of having a greater workload than men, not just doing a greater share of domestic work. Mothers have greater workloads than fathers because they are doing more work activities at any one time, and also because more of their non-work activities are combined with the care of children.

This study also found that there are some differences in total workload between groups of women. In Australia, women from a non-English-speaking background and women who live in rural areas both have longer (paid and unpaid) working weeks than other women. In contrast, these factors were not associated with variation in male work time. That is, being a recent immigrant or living in a rural area creates more work time differences between women than between men. This suggests that women's lives are more stratified by location and ethnicity than men's, and implies that class and race have differential impacts upon workload by gender. This could be investigated by further research into total paid and unpaid work in countries, such as the US and the UK, where the dimensions of class and race differ from those in Australia.

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Appendix A

Tables A.1 and A.2

Table A.1 Characteristics of the sample

<i>Variables</i>	<i>Men (N=2067)</i>		<i>Women (N=2207)</i>	
	<i>Mean</i>	<i>Std. Dev</i>	<i>Mean</i>	<i>Std. Dev</i>
No children	0.33	0.42	0.32	0.43
Number of children under 15 (parent)	1.40	1.10	1.33	1.11
Youngest child is under five years old	0.36	0.48	0.36	0.48
Youngest child is aged 5–11	0.31	0.46	0.32	0.46
Has university qualifications	0.30	0.45	0.26	0.44
Has vocational or 'other' qualifications	0.38	0.48	0.22	0.41
No post-school qualifications	0.31	0.46	0.50	0.50
Total household income (\$ per week)	1003.28	468.68	958.37	490.84
Usual hours worked by spouse/partner	19.31	18.36	38.95	15.31
Had domestic help within last week	0.07	0.25	0.07	0.25
Hours a week child usually attends daycare	5.29	10.88	4.948	10.58
Born overseas	0.26	0.44	0.25	0.43
Born overseas, or a parent born overseas	0.42	0.49	0.43	0.49
First language was not English	0.15	0.36	0.16	0.36
Main language spoken at home is not English	0.06	0.23	0.06	0.23
Lives in a rural area	0.18	0.38	0.18	0.39
Lives in an urban area	0.83	0.42	0.82	0.45
Aged 25–34	0.33	0.47	0.42	0.49
Aged 35–44	0.42	0.49	0.37	0.48
Aged 45–54	0.23	0.42	0.19	0.39

Source: ABS TUS 1997.

Table A.2 Model specifications

Number and age of children

- No children (omitted category)
- Number of children under 15 (0–3+)
- Youngest child is under five years old (yes=1)
- Youngest child is aged 5–11 (yes=1)
- Number and age of children (interaction term)

Qualifications

- No post-school qualifications (omitted category)
- Has university qualifications (yes=1)
- Has vocational or 'other' qualifications (yes=1)

Weekly household income (\$0–2,300)

Weekly hours usually worked by spouse/partner (0–45+)

Weekly hours child usually attends day care (0–45+)

Domestic outsourcing

- No domestic help within last week (omitted category)
- Had domestic help within last week (yes=1)

Ethnicity

- English-speaking background (omitted category)
- Non-English-speaking background (yes=1)

Locality

- Urban (omitted category)
- Rural (yes=1)
- Rural by parent (interaction term)

Age

- 25–34 (yes=1)
 - 35–44 (omitted category)
 - 45–54 (yes=1)
-

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