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FAIR WORK AUSTRALIA REVIEW OF THE TERMS OF VARIOUS MODERN AWARDS

for

A.J. Macken & Co.

Your reference: Chrissie Macken

by

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Date of Issue: 28 September 2012

Our Reference: J082467

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EXECUTIVE SUMMARY

- 1 Data collected by the Australian Bureau of Statistics (ABS) Time Use Survey (TUS) 2006 shows that the types of non-work activities undertaken by individuals are
 - personal care, education, domestic activities, childcare, voluntary work and care, social and community interaction, recreation and leisure
- 2 Analysis of the ABS TUS 2006 shows that these non-work activities are generally undertaken on Saturdays and Sundays, and on weekdays outside the hours of 8 am to 6 pm.
- 3 Analysis of the ABS TUS 2006 shows that compared with standard hours workers, employees who work at times when non-work activities are generally undertaken spend
 - less time in non-work activities,
 - more time alone, and
 - less social interaction and leisure time with family and friends.
- 4 Analysis of the ABS TUS 2006 shows that employees who work on Saturday and Sunday
 - are unable to make up for most foregone time in non-work activities or social contact during the week; and
 - Sunday workers have the most disruption to social interaction and leisure time with family and friends.
- 5 Existing research identifies adverse outcomes of working nonstandard hours and finds that a main cause is that they put employees out of sync with standard patterns of time use, and thereby limit their ability to participate fully in family, social and community activities and to foster their relationships with others.

- 6 In my opinion, in light of the extensive previous research on the negative consequences of nonstandard work, and on the basis of the analyses presented in this report, when work is performed at times when non-work activities are generally undertaken, there are likely adverse consequences for
- employees, including physical and mental health problems, psychological distress, job dissatisfaction, social isolation, poor work-life balance and work-family strain;
 - the families of employees, including higher marital discord and marital dissolution, more parenting stress, poorer educational and social outcomes for children, higher adolescent depression and anxiety, and more time without the workers' participation in family activities; and
 - the community, including less well-functioning families, less effective parenting, less time with elders, lower participation in volunteering and civic activities, lower social productivity and loss of social consistency and cohesion

AUTHOR LYN CRAIG

- 7 I am an Associate Professor and Australian Research Council (ARC) Queen Elizabeth II (QEII) Fellow at the Social Policy Research Centre, University of New South Wales. I am recognised internationally as a leading scholar in work-family and gender issues. I have particular expertise in the analysis and interpretation of work and family time allocation, using nationally representative time use data collected by the Australian Bureau of Statistics and comparable international agencies. Over a period of ten years, I have extensively researched the intra-household effects of social and workplace policy, the gendered division of labour, work-family balance, parenthood and gender equity and the intersections between the family and the economy. My research is widely published and highly cited. My academic Curriculum Vitae is attached as Appendix A.

STATEMENT OF INSTRUCTIONS

- 8 I was engaged by A. J. Macken & Co. Lawyers, solicitors for the Shop, Distributive and Allied Employees Association, and requested in writing to prepare an expert report for use in proceedings in Fair Work Australia (FWA). The following statements are in response to the questions I was requested to answer in my report. My responses are based on analysis of the Australian Bureau of Statistics Time Use Survey 2006 and my knowledge of the relevant research literature, as set out in Report One Fair Work Australia Review of the Terms of Various Modern Awards, provided to A. J. Macken & Co. Lawyers on 13 September 12.

QUESTIONS AND RESPONSES

- 9 **1. Please identify and describe from data collected by the Australian Bureau of Statistics**
- a) **The types of non-work activities undertaken by individuals; and**
 - b) **The days and times when those non-work activities are generally undertaken**
- 10 a) The types of non-work activities undertaken by individuals can be ascertained and quantified from Time Use Surveys (TUS). The Australian Bureau of Statistics (ABS) TUS 2006 is the most recent in a series of three nationally representative surveys. The survey gathers information on the time allocation of all members of sampled households (N=3643) over the age of 15. In a time-diary, respondents record information on all the activities they undertake over two 24-hour time periods to a detail level of five minutes. The TUS identifies the days of the week on which the diary is completed, and the start and finish time of each episode of activity. It thus shows on which days of the week activities occur and gives a full account of all activities that respondents do over the course of each day. In addition to employment related activities (ABS TUS codes 200-299), it collects data on non-work activities, which it groups into broad categories:

1. **Personal care** (ABS TUS codes 100-199); sleeping, sleeplessness, personal hygiene, health care, eating and drinking, associated travel, other
 2. **Education** (ABS TUS codes 300-399); attendance at educational courses, job related training, homework/study/research, breaks at place of education, associated travel, other
 3. **Domestic activities** (ABS TUS codes 400-499, 600-699); total housework, food and drink preparation/clean up, laundry and clothes care, housework, grounds and animal care, home maintenance, household management, purchasing goods and services, associated travel, other
 4. **Childcare** (ABS TUS codes 500-599); physical care of children, minding children, teaching/helping/reprimanding, playing/reading/talking with children, visiting childcare establishment/school, associated travel, other
 5. **Voluntary work and care** (ABS TUS codes 700-799); support for adults, unpaid voluntary work, associated travel, other
 6. **Social and community interaction** (ABS TUS codes 800-899); socialising, visiting entertainment and cultural venues, attendance at sports events, religious activities/ritual ceremonies, community participation, associated travel, other
 7. **Recreation and leisure** (ABS TUS codes 900-999); sport and outdoor activity, exercise, games/hobbies/arts/crafts, reading, audio/visual media, attendance art recreational courses, other free time, talking (including phone), writing/reading own correspondence, associated travel, other
- 11 Each of these broad categories of activity can be disaggregated. For example, subcomponents of personal care include sleeping and eating meals, and subcomponents of leisure include sport and exercise. Alternatively, they can be amalgamated together, for example joining leisure and recreation with

social and community interaction into a variable capturing both. For each time interval in the time-diary, contextual information, including where the respondent was, what else they were doing (secondary activity) and who they were with, was collected.

- 12 To answer the questions above a sample of employed persons aged between 15-64 years (n=3860 diarists) was drawn from the ABS TUS 2006 and information on respondents' activities and when they occurred, and who they spent time with was analysed.
- 13 First, daily minutes in each main non-work activity named above, and the percentage of the population participating in each over the course of each day and over the week, were calculated.
- 14 **b)** Figure 1 shows average time spent in non-work activities by employed persons by day of the week. Each of the main non-work activity groups is represented by a different colour. The figure shows that more time is spent in non-work activities on a weekend than on a weekday. Average time in domestic activities (purple), personal care and sleep (dark blue), recreation and leisure (light blue), and social and community interaction (orange), are all higher on a weekend than on a weekday. Participation in education (green) is highest on a weekday. Thus on average more time is spent on the weekends in rest and relaxation, and in social and community activities, than on Mondays to Fridays. The figure also shows that although the weekend days are more similar to each other than to the weekdays, there are some differences between Saturday and Sunday. In particular, average time in personal care, which includes sleep, and in recreation and leisure, are higher on a Sunday than a Saturday.

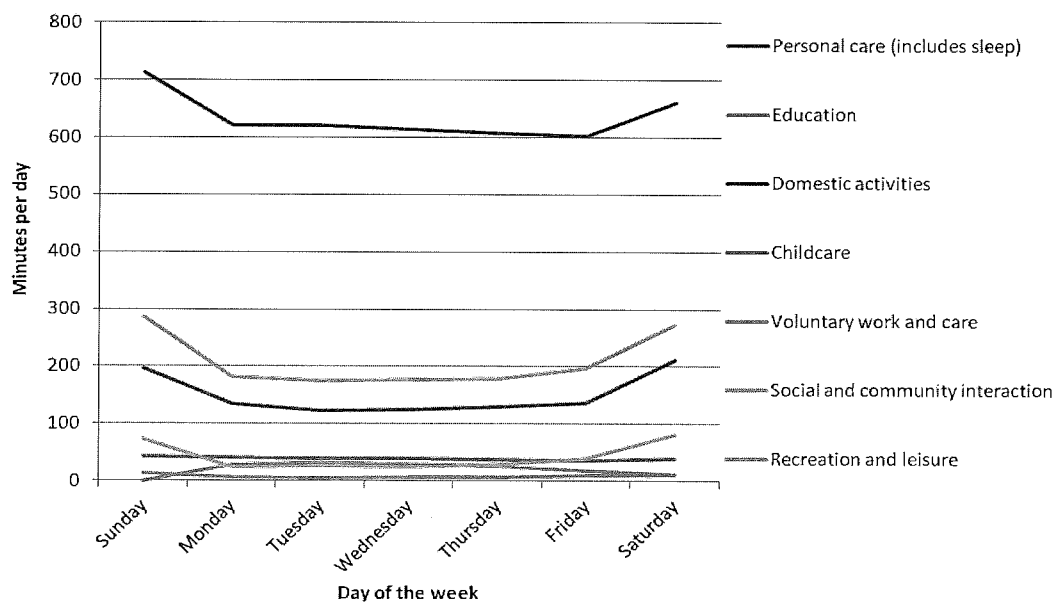


Figure 1: Average minutes per day in non-work activities by day of the week (employed persons aged 15-64)

- 15 Average patterns of time use are further illustrated by Figure 2, which shows the percentage of employed persons aged 15-64 participating in non-work activities by day of the week and time of day. It shows clear daily patterns of participation in non-work activities, and also that participation levels in non-work activities are very different on weekdays than on weekend days. More people participate in domestic activities, the unpaid work of housework, shopping and home maintenance, on the weekend than on weekdays. Also, more people participate in personal care (which includes sleep), leisure and social and community interaction over the course of a weekend day than over a weekday, with the difference greatest between weekdays and Sundays. On weekdays, participation in social and community interaction, recreation and leisure, and personal care is most often outside the hours of 7 am to 6 pm (Figure 2).

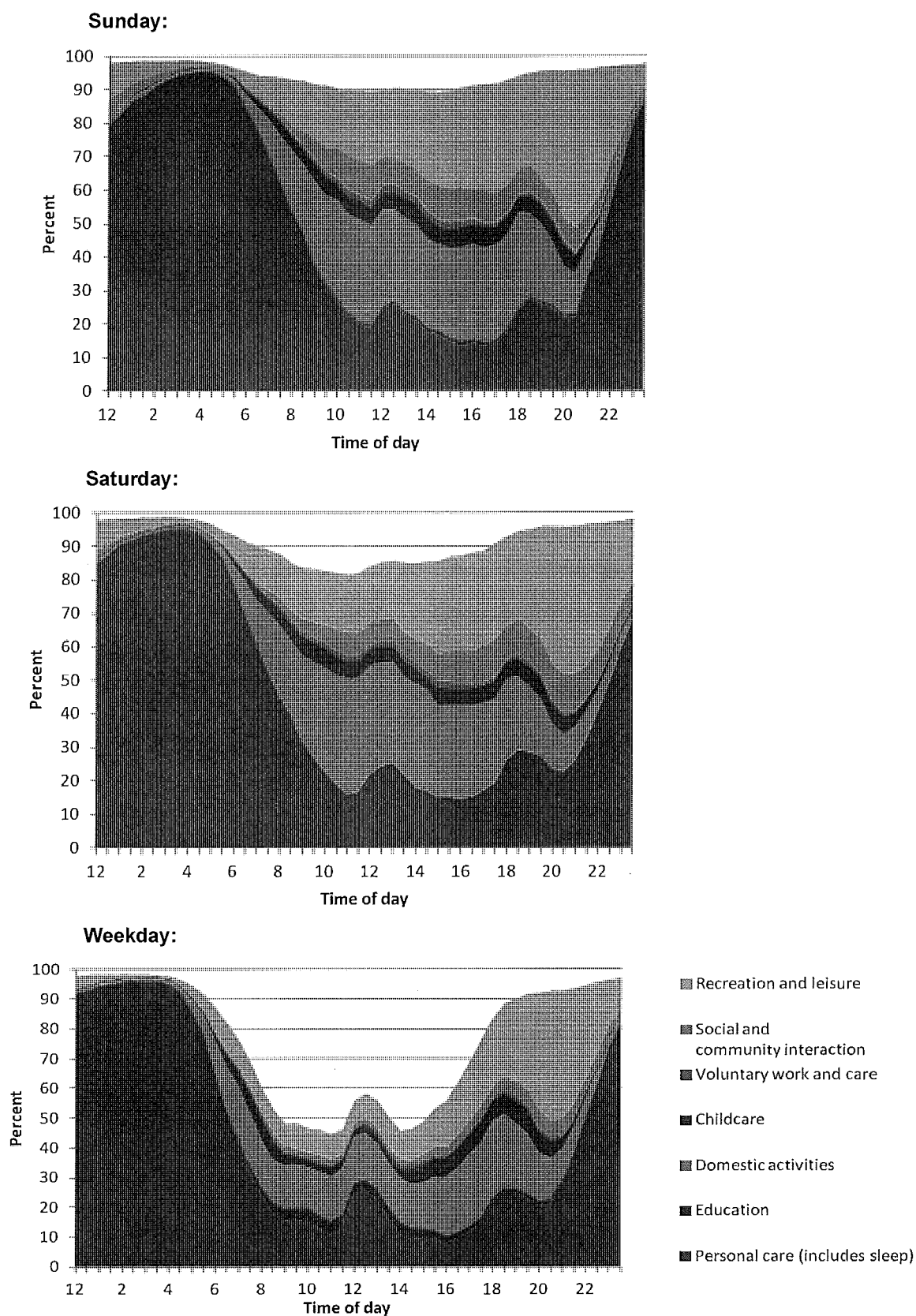


Figure 2: Percentage of employed persons aged 15-64 participating in non-work activities by day of the week and time of day.

- 16 Participation in childcare activities is also higher on a weekend day than on a weekday (Figure 2). Figure 2 shows the participation of the whole sample of employed persons, however, and childcare patterns are particularly relevant to parents. Therefore the time use of parents was separately analysed. Figure 3 shows the percentage of employed parents participating in childcare activities by day of the week and time of day. Fathers' time is shown in the top graph, and mothers' time is shown in the bottom graph. Childcare is subdivided into its component tasks; physical care, teaching, playing, minding children, travel with children, and a small residual category 'other'. More mothers and fathers perform childcare on weekend days and in the evenings than during weekdays 9 am to 5 pm. For fathers, particularly, childcare most often occurs on weekends, and more so on Sunday than on Saturday. Participation in play with children (green), and physical care (blue), are especially higher for fathers on Sunday, suggesting it is this day of the week on which they are most likely to care for and interact with children. Mothers' care is also higher during the day on weekends than on weekdays. On weekdays, there is substantially more participation in the early morning and evening than at other times of the day.

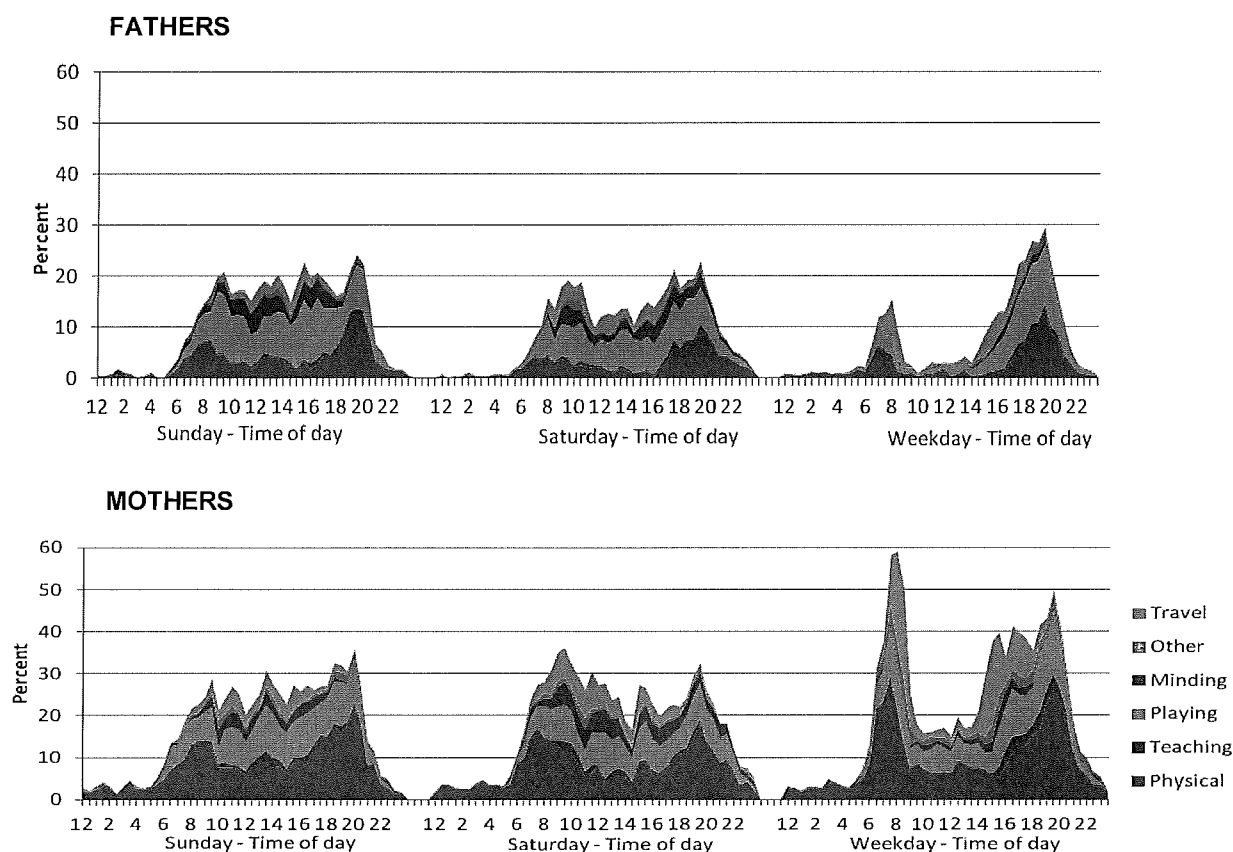


Figure 3: Percentage of employed parents aged 15-64 participating in childcare activities by day of the week and time of day

- 17 **2. In light of your answer to the previous question and existing research in relation to the consequences and effects of work in unsociable hours, in your opinion what are the consequences for**
- a) **employees;**
 - b) **the families of employees; and**
 - c) **the community**
- when work is performed by those employees at times when non-work activities are generally undertaken?**

- 18 When work is performed at times when non-work activities are generally undertaken, it constrains how employees can spend their non-work time. A consequence is that workers spend less time than others do in non-work activities, and miss out on opportunities others have for rest, recuperation,

exercise, household management, family and social activities and civic participation.

- 19 Table 1 shows the difference between daily time allocation to each of the main activity categories set out on Page 4 by standard-hours workers, and by Sunday (column 1), Saturday (column 2), and evening workers (column 3). The independent effect of working on Sunday, Saturday or in the evening between 6 pm and midnight is isolated out through multivariate regression analyses controlling the effects of other factors which may also impact upon time in the activities (age, gender, education, income, hours worked, age of children and professional status). The differences are denominated in minutes per day, and the asterisks indicate the results which show statistically significant differences between those who work at the nonstandard times and those who do not.
- 20 The results summarized in Table 1 show that the impact of evening, Saturday and Sunday work on daily non-work activity time of employees is strong and extensive. All non-work activities are significantly lower for weekend and evening workers than for those who work standard hours, with the single exception of time spent in education activities for Sunday workers. This loss of time in daily non-work activities is consistent with previous research, as covered in detail in Report One (Craig, 2012). (See for example Barnes, Bryson, & Smith, 2006; Bittman, 2005).

Works...	Sunday		Saturday		Between 6 -12 pm	
Personal care	-105.82	***	-82.77	***	-71.66	***
Education	-4.44		-7.4	**	-5.47	***
Domestic activities	-107.32	***	-137.33	***	-26.63	***
Childcare	-17.30	***	-23.08	***	-9.94	***
Voluntary work and care	-10.59	***	-8.16	***	-1.56	**
Social and community interaction	-6.95	**	-11.26	***	-13.95	***
Leisure and recreation	-125.09	***	-125.09	***	-89.02	***

***p<0.001, **p<0.01, *p<0.05

Table 1: OLS regression results: the impact of Sunday, Saturday and evening work on non-work activities (minutes per day)

- 21 Nonstandard workers lose substantial time in domestic activities, which means they can spend less time performing essential unpaid work and household management such as cooking, cleaning, laundry, shopping, gardening and home maintenance than other workers do. They also have less time than others in personal care, which includes sleeping, eating, washing, and grooming. The loss of time in these necessary self-care and recuperative activities is highest for Sunday workers.
- 22 The activities that Table 1 shows are lower for nonstandard than for standard workers also include those which involve spending time with others; childcare, voluntary work and care, social and community interaction, and leisure and recreation. This means that reduced time in these activities is not only a loss in itself, but also represents a loss of social contact. It demonstrates that a second consequence of performing work at times when non-work activities are generally undertaken is that it puts employees out of sync with their family, friends and community, limiting opportunities for coordinating activities and spending time with others (La Valle, Arthur, Millward, & Scott, 2002).

- 23 The extent of this consequence is shown clearly when measures of with whom time is spent (co-presence) are analysed directly. Table 2 shows differences between standard-hours workers and Sunday, Saturday and evening workers in time spent alone and in social and community interaction or leisure and recreation time with others, specifically a spouse, other family including children and older family, and friends. These measures of time alone and with others exclude time spent sleeping. Spouse time is calculated only for those in a couple, and child time only for parents. The independent effect of working on Sunday, Saturday or in the evening between 6 pm and midnight is isolated out through multivariate regression analyses controlling the effects of other factors which may also impact upon time in the activities (age, gender, education, income, hours worked, age of children and professional status). The differences are denominated in minutes per day, and the asterisks indicate which are statistically significant.

Works...	Sunday		Saturday		Between 6 -12 pm	
Time alone	36.052	**	45.48	***	12.80	***
Social and community interaction/leisure and recreation with...						
Spouse	-126.49	***	-103.72	***	-	***
Family excluding spouse	-54.46	***	-57.82	***	-	***
Children	-131.06	***	-110.14	***	-	***
Older family	-10.77	***	-5.62		-4.40	***
Friends	-60.03	***	-55.63	***	-	***

***p<0.001, **p<0.01, *p<0.05

Table 2: OLS regression results: the impact of Sunday, Saturday and evening work on time alone or in social interaction or leisure with others (minutes per day)

- 24 Weekend workers and those working in the evening spend more time alone and less time in social interaction and leisure with friends and family than standard-hours workers do (Table 2). The differences are substantial and statistically significant. With a single exception (time with older family for Saturday workers), social and leisure time with all the categories of significant others is lower for nonstandard than for standard workers. Differences in spouse time, time with children, with older family and with friends are all most for Sunday workers, confirming the research set out in Report One (Craig,

2012) that suggested that Sunday work was associated with most disruption to family time (see for example Bittman, 2005; Kirby, 1992; La Valle et al., 2002; Martin, Wittmer, & Lechhook, 2011).

- 25 Taken together, the results indicate that on the days they work nonstandard workers lose out on both non-work activities, and on time that standard-hours workers can spend with friends and family. A further question is whether this lost activity or social contact time can be rescheduled to other times, and thereby recouped. This could be ascertained by looking at whether non-work activities or shared social/community interaction and leisure/recreation time is higher for nonstandard than for standard workers on other days of the week. If it were, this would suggest that activity time and social contact lost through weekend work is made up on other days. (Due to data restrictions we could not directly examine whether time lost by evening workers is recouped).

Works on a...	Sunday	Saturday
Personal care	-0.19	0.06
Education	14.23 *	8.88 *
Domestic activities	-0.02	-0.68
Childcare	-8.83 ***	-0.38
Voluntary work and care	2.49	-1.85 *
Social and community interaction	0.03	1.22
Leisure and recreation	-8.05	-6.02

***p<0.001, **p<0.01, *p<0.05

Table 3: OLS regression results: the impact of weekend work on non-work activities on a weekday (minutes per day)

- 26 Table 3 summarizes the results of multivariate regression models testing the impacts of working on a Saturday or Sunday on non-work activities on other days of the week (net of age, gender, education, income, age of children and paid work hours and professional status). Numbers with no asterisk mean that time in the designated activity is not statistically significantly different on a weekday for those who work Sunday and Saturday, respectively, from that of weekday workers. A non-significant result means that the time in the activity is not higher for weekend than for weekday workers, and indicates that activities

that Table 1 showed are lower for weekend workers are not compensated for during the week. Results show that education is the only activity which is higher on weekdays for weekend workers. Personal care, social and community interaction, unpaid work and leisure and recreation time is not higher for weekend workers, so their lost time in these activities is not made up on other days of the week (Table 3). Childcare is neutral for Saturday workers, and negatively affected for Sunday workers. That is, in addition to the losses in this activity on the days they work, Sunday workers do even less childcare through the week than other workers. If Sundays are worked, voluntary work is neutral, so lost time in this activity is not made up, whereas Saturday workers do less on a weekday than other workers. Overall, results suggest that weekend workers are unable to make up for non-work activity time lost and that in some instances, most notably childcare for Sunday workers, there is further time loss during the week.

27 Table 4 shows that weekend workers are also unable to compensate for lost social and community interaction and leisure/recreation time with others. Most results for Saturday workers are neutral, which means that compared with weekday workers their time alone is not less, and shared social and leisure time with family, spouse, and older family is not more, on other days of the week. So they do not compensate for the lost social and leisure time with others noted in Table 2. In the case of shared time with children, they have even less on a weekday than standard-hours workers.

28 Sunday workers' time with others is even more negatively affected than is Saturday workers. Their time disparities with weekday workers at the weekends are deepened by several further negative disparities during the week (Table 4). Specifically, compared to weekday workers, Sunday workers spend significantly more time alone, and have less social interaction and leisure/recreation time with their spouse and other family, including elders, through the week. Together with the results above, this underlines that Sunday is important not only because of what is done on the day, but who it is done with. Opportunities for sharing time with others, including leisure,

recreation and social interaction with friends and family are diminished by all types of nonstandard work, but most especially by Sunday work. This is consistent with the literature reviewed in Report One (Craig, 2012), which found Sunday work to be associated with the most disruption to civic participation and family leisure time, the greatest interference between work and non-work activities, and that workers were unable to make up for foregone activities or social contact during the week (Bittman 2005).

Works on a...	Sunday	Saturday
Time alone	30.78 **	4.75
Social and community interaction/leisure and recreation with...		
Spouse	-31.63 ***	-2.54
Family excluding spouse	-11.85 **	-4.30
Children	-12.28	-8.32 ***
Older family	-3.66 **	-1.84
Friends	6.08	-2.31

***p<0.001, **p<0.01, *p<0.05

Table 4: OLS regression results: the impact of weekend work on time alone or in social interaction or leisure with others on a weekday (minutes per day)

- 29 A large body of literature, reviewed in Report One (Craig, 2012), concludes that the performance of work on weekday evenings and nights, or on Saturdays and on Sundays, has detrimental effects on the employees concerned, their families, and the community. The research suggests the major cause of the adverse outcomes is that employees who work outside standard hours have schedules which limit their ability to participate fully in family, social and community activities and to foster their relationships and cement their bonds with others (see for example Alexander & Baxter, 2005; Baxter, Gray, Alexander, Strazdins, & Bittman, 2007; La Valle et al., 2002; Strazdins & Broom, 2004; Strazdins, Korda, Lim, Broom, & D'Souza, 2004). The analyses above, using the most recent nationally representative Australian time use data, identify the same patterns of time use as those to which the literature attributes these adverse outcomes. They show that Australian employees who work at times when non-work activities are generally undertaken miss out on non-work activities, spend more time alone,

and do not participate in social and community interaction and shared recreation and leisure to the same extent as standard-hours workers.

30 In my opinion, in the light of research reviewed in Report One (Craig, 2012) and on the basis of the analyses presented above, when work is performed at times when non-work activities are generally undertaken, there are likely adverse consequences for

- employees, including physical and mental health problems, psychological distress, job dissatisfaction, social isolation, poor work-life balance and work-family strain;
- the families of employees, including higher marital discord and marital dissolution, more parenting stress, poorer educational and social outcomes for children, higher adolescent depression and anxiety, and more time without the workers' participation in family activities; and
- the community, including less well-functioning families, less effective parenting, less time with elders, lower participation in volunteering and civic activities, lower social productivity and loss of social consistency and cohesion.

EXPERT'S DECLARATION

31 I Jocelyn Craig declare that

- i) I understand that my overriding duty is to assist the court impartially on matters relevant to my area of expertise.
- ii) I have set out in my report what I understand from the instructing solicitors to be the questions regarding which my opinions as an expert are required.
- iii) In responding to the questions asked of me, I have done my best to be as accurate as possible. All of the matters on which I have expressed an opinion lie within my field of expertise.
- iv) I have not included anything in the report that has been suggested to me by anyone, including the solicitors instructing me, without forming my own independent opinion.

- v) At the time of signing the report I consider it to be full and accurate. If for any reason I subsequently consider that the report requires any correction, amendment or qualification, I will notify those instructing me.
- vi) I understand that this report will be the evidence that I will give under oath, subject to any correction, amendment or qualification I may make before swearing to its veracity.
- vii) I have attached to this report a list of the documentation reviewed for this report, which include the substance of the facts and instructions given to me which are material to the opinions given in this report or upon which those opinions are based.

32 I confirm that the opinions I have expressed represent my true and complete professional opinion.

Assoc Prof Jocelyn (Lyn) Craig
B.A., Dip Soc. Wk., Dip Bus St., B Soc. Sci (Hons) Phd

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