ABSTRACT

Significant changes have occurred in the Australian social and economic landscape in the last 20 years, such as greater participation of women in the paid workforce, and more involvement of men in household work.

Time use surveys collect detailed information on the daily activity patterns of men and women in Australia, enabling the examination of how people allocate time to activities such as paid and unpaid work, and the analysis of issues such as gender equality, care giving, and balancing family and paid work responsibilities. Time use information can also be used as an indicator of personal wellbeing and the productive value of households.

This paper outlines some key methodological elements of the Australian time use surveys, from a pilot in 1987 to surveys run in 1992, 1997 and 2006. A selection of findings from recent time use surveys are also presented, which highlight the gender differences in time use in Australia.

I. INTRODUCTION

1. Time use surveys provide detailed information on the daily activity patterns of men and women in Australia. The information is used to examine how people allocate time to activities such as paid and unpaid work, and to analyse issues such as gender equality, care giving, and balancing family and paid work responsibilities. By examining the detailed activities of individuals, it is possible to study changes in the

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Australian social and economic environment. Some of the major changes that have occurred in Australia in the last 20 years have included greater participation of women in the paid workforce, and greater involvement of men in household work.

2. The balance between paid work, unpaid work and leisure influences personal wellbeing and economic welfare. Patterns of time use have assumed increasing importance as a means to measure the productive value of households as economic units. The ABS uses data about time use to derive a monetary value for all forms of unpaid work, which contributes to analysis of the household sector in the national accounts.

3. Since a first pilot was run in 1987, the ABS has continued to refine the methodology used for measuring time use. Comparisons can now be made between time use patterns from full surveys run in 1992, 1997 and 2006. Such comparisons can be used to evaluate social and economic changes in Australia in a range of areas – including the key differences in the way men and women use their time.

II. TIME USE AS A SOCIAL AND ECONOMIC INDICATOR

4. Although each person has 24 hours in a day, the demands on time vary greatly from person to person. While personal choices contribute to differences in time use, life-cycle stage, family commitments, gender and other socio-economic characteristics have determining effects. Time use is a useful indicator of wellbeing, having implications for income, health, equality of access to opportunities, and personal fulfilment. Comparisons can be made between various sub-groups, between a sub-group and the population as a whole, over time, and between Australia and other countries.

Time stress

5. Having too much to do, or too little to do, can both be seen as conditions of disadvantage, affecting income, health and morale. In the most recent 2006 Time Use Survey, the concept of 'time stress' was introduced to reflect these conflicting demands on time. Respondents were asked to record their perception of how often they had too much or too little time, the reasons for this, and satisfaction with their time use.

Paid and unpaid work

6. The wellbeing of many people depends on unpaid work undertaken by individuals. If services such as cooking, cleaning, domestic management, home and car maintenance, care of the frail, sick and those with disabilities, and care of children are not provided 'free', they have to be paid for as a market transaction. Some measurement of unpaid or non-market work, along with measurements of paid work and production, are necessary for a comprehensive picture of national production and consumption.²

² For more information, please refer to the ABS publication Unpaid Work and the Australian Economy, 1997 (cat. no. 5240.0).
III. MEASURING HOW AUSTRALIANS USE THEIR TIME

7. The key data source for assessing time use in Australia is the Time Use Survey (TUS) conducted by the Australian Bureau of Statistics (ABS). The major aims of the TUS are to:

- Establish the current Australian time use profile based on daily personal activities;
- Provide information on differences in patterns of paid work and unpaid household and community work by sex and other characteristics;
- Measure the volume of unpaid household, voluntary and community work, in its own right, and as a basis for a satellite account for unpaid household work;
- Provide information on the ways in which Australians balance work and family obligations.

8. The first pilot test for the TUS was conducted in 1987. This successful pilot paved the way for national surveys in 1992, 1997 and 2006. The ABS now has a 15 year time series of data from the TUS, which allow comparisons over time. The next TUS is expected to be conducted on an integrated basis with the next Survey of Employment Arrangements, Retirement and Superannuation (SEARS) in 2013.

Categories of time use

9. The ABS divides the activities on which people spend their time into four main categories or types of time use: necessary time, contracted time, committed time and free time. These categories are further broken down into nine major activity groups, as shown below in Table 1.

Table 1. Typology of Time Use

<table>
<thead>
<tr>
<th>Necessary time describes activities which are performed for personal survival, such as sleeping, eating and personal hygiene.</th>
<th>Personal care activities</th>
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</thead>
<tbody>
<tr>
<td>Contracted time describes activities such as paid work and regular education where there are explicit contracts which control the periods of time in which the activities are performed.</td>
<td>Employment activities, Education activities</td>
</tr>
<tr>
<td>Committed time describes activities to which a person has committed himself/herself because of previous social or community interactions, such as establishing a household or volunteering. The consequent housework, other household management activities, child care, shopping or provision of help to others are all examples of committed time activities.</td>
<td>Domestic activities, Child care activities, Purchasing activities, Voluntary work and care activities</td>
</tr>
<tr>
<td>Free time is the amount of time left when the previous three types of time have been taken out of a person's day.</td>
<td>Social and community interaction, Recreation and leisure</td>
</tr>
</tbody>
</table>

IV. AUSTRALIAN TIME USE SURVEY METHODOLOGY

10. The Australian TUS has been reviewed and updated over time to ensure its ongoing relevance to data users, and the appropriateness of the methodology to capture changes in the ways that Australians use their time.

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Scope

11. The survey collects information by personal interview from usual residents of private dwellings in urban and rural areas of Australia, covering about 98 per cent of the people living in Australia. Persons resident in non-private dwellings such as hotels, boarding schools, boarding houses and institutions are excluded. Additional exclusions are persons stationed in Australia from non-Australian defence forces, households containing diplomatic personnel of overseas governments, and very remote communities.

Sample design and response rates

12. In 2006, 3,900 Australian households were surveyed. Because time use activity on weekend days is quite different to time use on weekdays, the proportion of total diary days allocated to weekend days was increased from previous surveys to reduce sample error in many total time use estimates by activity, and to enable better estimates for comparison of time use between Saturday and Sunday individually, and with weekdays.

13. The survey was conducted using a stratified multistage area sample of private dwellings. Different states and regions were allocated sample roughly in proportion to their population so that accurate national estimates could be obtained. All persons aged 15 years and over usually resident within the selected dwellings were included in the survey.

14. Despite the labour intensive nature of the TUS, a targeted household response rate has been consistently achieved and a high personal response within the household, enabling the production of reliable data. In 2006, the response rate for fully or partly responding households was 72.1%, and within these households 90.9% of all persons in scope.

Seasonal effects

15. The survey was conducted over four periods to allow for seasonal effects. Survey enumeration was conducted over four 13-day periods in 2006, chosen to contain a representative proportion of public holidays and school holidays:

- 20 February - 4 March
- 24 April - 6 May
- 26 June - 8 July
- 23 October - 4 November

Collection instruments

16. Information was obtained in the TUS partly by interview and partly by self-completion diary. Trained ABS interviewers collected information about the household and its members, from an adult member of the selected household. The interviewer also provided instructions on how resident adult household members (aged 15 years and over) were to record their activities in the diaries supplied.

17. The layout of the diary was unchanged from the 1997 TUS. It was divided into two separate days, with fixed intervals of five minutes covering 24 hours from 12 am.
Five columns with question headings organised responses into primary and secondary activities, for whom the activity was done, who else was there, and where the activity took place. The diary included several questions at the start and end of each diary day relating to the individual. Diaries were collected by the interviewer or mailed to the ABS.

**Data items**

18. Time allocation data can be analysed in relation to the demographic, socio-economic and other personal characteristics collected in the survey. Basic demographic and socio-economic characteristics collected included age, sex, birthplace, employment, education and equivalised household income.

19. An activity can be categorised in many different ways, to reflect different aspects of time use. An activity episode can contain the following elements:

- Start and finish time;
- Primary activity;
- Secondary activity;
- Person or group 'for whom' the activity is done;
- Location, both physical and spatial;
- Mode of transport for travel items;
- Technology/communication code where relevant;
- Who the respondent was with;
- Age details of any household people present;
- Health details of any household people present.

**V. SURVEY CHANGES OVER TIME**

20. The way people use their time evolves, and as a result, any collection instrument to measure time use must also evolve to maintain the relevance and utility of the data collected. At the same time, the maintenance of a comparable time series of data is very important if one wishes to accurately track these changes over time. The most recent TUS was designed to maximise comparability with the 1997 survey, while making improvements to quality and usefulness.

21. Changes have been made over time to improve the activity classification used in the survey that often shows gendered differences. While the format and layout of the diary has been maintained over time, and high level comparability remains, some detailed changes made in 2006 included the addition of new communication and technology categories to cover changes in available technology and modes of usage since 1997. Changes were also made to allow for the capture of additional activities conducted 'for whom' categories to distinguish between household members who were well and those who were sick, frail or had a disability, to better understand the dynamics of caring activities. Other changes included a more detailed emphasis on time spent talking, playing and reading with children, to enable better reflection of these activities.  

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4 A full list of changes between the surveys can be found in the ABS publication *How Australians Use Their Time, 2006* (cat. no. 4153.0).
22. In 1997 and in 2006, activities were coded to their basic nature. This is identified as the 'nature of activity' classification. The 'for whom' item was then used in conjunction with the nature classification to derive the 'purpose of activity' classification. The 'purpose of activity' classification provides the maximum information on volunteering, caring and helping. These classifications enable a detailed representation of the activities undertaken by Australians - and particularly volunteering, caring and childcare activities.

VI. SUMMARY OF FINDINGS: THE GENDERED NATURE OF TIME USE

23. Findings from the Australian TUS often show marked differences between men and women. Between 1992 and 2006, the proportion of women who were employed increased from 48% to 55%, leading to an increase in the average time women spent on paid work, by an hour and 15 minutes to an average of 16 hours and 25 minutes per week. As women were assuming a greater role in the workplace, they continued to spend similar amounts of time on household work (child care, domestic activities and shopping, etc.) in 2006, as they had in 1992 (33 hours and 45 minutes per week, on average).

24. Over the same period, men took on more household work. Between 1992 and 2006, the average time men spent on household work rose by an hour and 25 minutes, to 18 hours and 20 minutes per week. Figure 1 shows that the time men spent in paid work remained steady at an average of around 31 hours and 50 minutes per week.

25. In 2006, women still completed around two-thirds of the hours spent on household work, while men did two-thirds of the hours spent in paid work. In terms of total hourly workload, both men and women spent an average of 50 hours and 10 minutes a week in a combination of paid and household work. This represents an increase since 1992 of around two hours per week for both men and women (or around four days over the course of the year).

26. Using the categories of time outlined above, there are also interesting differences shown between men and women (Figure 2). The time spent by men and women was similar for necessary time activities and free time activities. Men spent almost twice as much time, on average, as women on contracted time activities (21% compared with 12%), while women spent nearly twice as much time as men on committed time activities (22% compared with 12%).

Figure 1. Time spent on paid and household work by sex (a), 2006
27. Men and women spent their days in different ways. On average, in 2006, men spent 19% of the day on recreation and leisure, 19% of the day on employment related activities and 7% of the day on domestic activities. Women spent much less time on recreation and leisure (16%), nearly double the time spent by men on domestic activities (12%), and about half the time that men spent on employment related activities (10%).

28. In 2006, men spent, on average, 45% of the day on personal care activities (necessary time) while women spent a little more (46% of the day). Women spent more time on personal hygiene than did men. The main difference compared with 1997 was a slight reduction in the time spent sleeping, down 7 minutes to 8 hours 30 minutes per day for men and down 3 minutes to 8 hours 32 minutes for women. Personal care varies by gender and over the life course, as shown in Figure 3.

29. In 2006, the time spent on social and community interaction was, for both men and women, similar to the time spent in 1997. While the main activities undertaken by men and women were similar, overall women spent a little longer on these activities than did men. Conversely, men spent 4 hours 29 minutes a day on recreation and leisure activities in 2006, compared with the average of 3 hours 57 minutes spent by women. Figure 4 shows the greater amount of time spent by men on recreation and leisure throughout the life course.
VII. CONCLUSION

30. Recent decades have seen significant change in social expectations about gender roles in Australia. This has been reflected in women playing an increasing role in the paid work force, and in men becoming more involved in child care activities. While women still do the majority of household work, men continue to do the majority of paid work. The amount of total work (paid and unpaid) done by men and women is very similar.

31. The future division of labour between men and women will likely be influenced by a range of factors, including institutional arrangements, economic conditions, social expectations, and ultimately by the decisions individuals and families make based on their own circumstances and preferences. Time use will continue to be a valuable indicator of gender differences, wellbeing and economic welfare. The use of time use data to derive a monetary value for unpaid work also supports more complex analysis of the household sector in the national accounts.

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