# The Time Pressure Illusion: Discretionary Time versus Free Time 

## Author:

Goodin, Robert E.; Rice, James Mahmud; Bittman, Michael; Saunders, Peter

## Publication details:

Working Paper No. 115
SPRC Discussion Paper
0733419666 (ISBN)
1447-8978 (ISSN)

## Publication Date:

2002

## DOI:

https://doi.org/10.26190/unsworks/247

## License:

https://creativecommons.org/licenses/by-nc-nd/3.0/au/
Link to license to see what you are allowed to do with this resource.

Downloaded from http://hdl.handle.net/1959.4/34091 in https:// unsworks.unsw.edu.au on 2024-05-01

# SPRC <br> Social Policy Research Centre 

## THE TIME-PRESSURE ILLUSION: DISCRETIONARY TIME VERSUS FREE TIME

By Robert E. Goodin, James Mahmud Rice, Michael
Bittman and Peter Saunders
SPRC Discussion Paper No. 115
September 2002

Published by
The Social Policy Research Centre
University of New South Wales
Sydney NSW 2052
Australia
© SPRC 2002

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior permission from the SPRC. For information about the Centre's publications, please contact:

Publications
Social Policy Research Centre
University of New South Wales
Sydney, NSW, 2052, Australia.
Phone: +61 (2) 93857800
Fax: +61 (2) 93857838
Email: sprcpub@unsw.edu.au
Website: www.sprc.unsw.edu.au
Social Policy Research Centre Discussion Papers are a means of publishing selected results from the Centre's research, work commissioned by the Centre or research by visitors to the Centre, for discussion and comment in the research community and/or welfare sector before more formal publication.

As with all of the Centre's publications, the views expressed in this discussion paper do not reflect any official position on the part of the Centre.

Natasha Posner
Editor
Corresponding Author: Robert E. Goodin, Social and Political Theory Program, Research School of Social Sciences, Australian National University, Canberra ACT 0200. E-mail: goodinb@coombs.anu.edu.au

# THE TIME-PRESSURE ILLUSION: DISCRETIONARY TIME VERSUS FREE TIME* 

ROBERT E. GOODIN<br>SOCIAL \& POLITICAL THEORY AND PHILOSOPHY PROGRAMS, RESEARCH SCHOOL OF SOCIAL SCIENCES AUSTRALIAN NATIONAL UNIVERSITY.<br>JAMES MAHMUD RICE, MICHAEL BITTMAN AND PETER SAUNDERS<br>SOCIAL POLICY RESEARCH CENTRE, UNIVERSITY OF NEW sOUTH WALES.

ISSN 1446-4179
ISBN 0733419666
© 2002 ROBERT E. GOODIN, JAMES MAHMUD RICE, MICHAEL BITTMAN AND PETER SAUNDERS.

[^0]
#### Abstract

People feel increasingly time pressured, particularly in two-earner households. But much of the time that people devote to paid and unpaid tasks is over and above that which is strictly necessary; in that sense, much of the time pressure that people feel is discretionary and of their own making. The magnitude of this 'time-pressure illusion' varies across population groups, being least among lone parents and greatest among the childless and twoearner couples.


## 1 Introduction

Being 'money poor' is a familiar phenomenon, a simple matter of not having enough money to meet one's needs in any of the many ways those might be specified. Being 'time poor', by analogy, is a matter of not having enough time to do all the things one has to do (Vickery 1977).

Many say that is an increasingly common phenomenon in modern societies, as working women and dual-earner couples more generally put in a 'second shift' at home after a full day in paid labour. Others contest that fact. The US President's Council of Economic Advisers (1999), for example, concludes that the 'time crunch' is real, but some academics dispute that claim. ${ }^{2}$

The facts of the matter may be disputed, but the basic methodology for judging the extent of the 'time bind' is not. To measure 'time pressure', we simply look at how many (or few) hours of 'free time' are left to people, after deducting the number of hours they actually spend in unavoidable activities of daily life: paid labour; unpaid household work; and personal care (eating, sleeping, grooming and so on).

That basic methodology is fundamentally flawed, however. Those activities may be necessary, in the sense that they represent things that must get done, but people may nonetheless spend more time than strictly necessary doing them. Just looking at how much or little time people have left over might therefore be a good way of assessing whether they are 'overworked', in some sense or another (Schor 1991). But it is not a good way of finding out whether they are genuinely 'time poor'.

[^1]For assessing 'time poverty', we would need to distinguish how much time people actually spend on the necessary activities of daily life from how much time they strictly need to spend on them. It should already be apparent that our focus is on the measurable aspect of time and we ignore the implications that arise from its non-measurable experienced dimension. In effect, we treat time commensurately with income, regarding 'an hour is a hour' in an identical fashion to 'a dollar is a dollar'. In ordinary poverty research we would not deem spendthrift millionaires to be in poverty just because they chose to spend all that they have, and more, on the fanciest of food, clothing and shelter (Ringen 1988). So too should the notion of time poverty be defined, not in terms of how people actually spend their time, but rather in terms of what time people strictly need to spend compared to what they have to spend.

Here we seek to specify those crucial variables: how much time it is strictly necessary for people in various social circumstances to spend in unavoidable activities of paid and unpaid household labour and personal care. We dub the residual - what is left over after those necessities have been met - 'discretionary time'. That represents the amount of time that is available to people to do with as they please.

In practice, of course people tend to commit some (often lots) of their discretionary time to achieving more than strictly necessary. They work longer than necessary merely to escape poverty; they spend more time in unpaid household labour and personal care than strictly necessary to keep themselves and their households up to minimally acceptable social standards. They feel time pressured in consequence. But much of that
pressure is of their own making, a consequence of choice rather than necessity. This we dub the 'time-pressure illusion'.

As we shall show by reference to the 1992 Australian Time Use Survey, the amount of discretionary time actually available to people varies considerably depending on their social circumstances. So too does the 'time-pressure illusion', conceptualized as the difference between the amount of discretionary time they have and the amount of free time they actually experience. People (lone parents) who have the least discretionary time are under least illusion. At the other extreme, people (the childless, and to a lesser extent dual-earner couples) whose time commitments leave them with the least free time are not especially short of discretionary time: they are under the greatest time-pressure illusion.

## 2 Free Time versus Discretionary Time: Conceptual Preliminaries

Time-use studies collect information from people about how they use their time, coding their reports into various categories. The methods of collection vary, as do the names given to the categories. But the substantive distinctions separating the categories are by now standard (Sorokin and Berger 1939; Szalai et al. 1972; Robinson 1977; 1985; Andorka 1987). One category is 'time spent in paid labour'. ${ }^{3}$ A second category is 'time spent in unpaid household labour' - cooking, cleaning, child-minding and the physical care of children, shopping and

[^2]so on. ${ }^{4}$ A third category is 'time spent on personal care' - eating, sleeping, grooming and so on. These categories are now utterly conventional in time-use studies, and here we simply take them as given. Those three sorts of activities - paid labour time, unpaid household labour time and personal care time - collectively comprise time that is committed to what might be called 'obligatory activities' (Robinson 1977, ch. 3). The rest of one's time is conventionally called 'free time'. That 'free time' is simply 'the time left over after the activities' in those other three categories (Andorka 1987, 151; Robinson 1977, ch. 4). ${ }^{5}$

Here we propose to use those time-use categories in two ways. Firstly and most straightforwardly, we shall simply adopt the standard time-use notion of 'free time' as our measure of how much time people actually have left over after the 'obligatory' activities of paid and unpaid household labour and personal care. Secondly and more innovatively, we shall adapt those latter three standard categories to develop measures of how much time people need to spend in each of those activities.

There has been surprisingly little previous discussion of how much time people should, or need to, spend on the unavoidable tasks of daily life. ${ }^{6}$ Mother may have told you that you need eight hours of sleep a night; but

[^3]both folk wisdom and learned disquisitions have varied wildly over the past several centuries on this score (Ekrich 2001). Trade unions have long campaigned for the forty-hour work week as an upper limit on paid labour time (ILO 1935/1996), but they have never specified any minimum hours (as opposed to wages) that might be necessary. How much time needs to be spent in various unpaid domestic tasks is generally left up to intra-household negotiations.

We attempt to address these issues head-on. We propose certain standards for how much time it is strictly necessary for people to spend in the three unavoidable activities of daily living: paid labour, unpaid household labour and personal care. 'Necessity', by its nature, refers to bare essentials. Accordingly, our estimates of 'necessary time' in each of these dimensions will be deliberately conservative. We acknowledge that (along with other attempts to develop statistical indicators of basic needs) the notions of necessity developed below rely on a set of judgments relating to the adequacy with which needs are met. The nature of these judgments will become clear as the argument is developed.

We begin with the least controversial of those three: the amount of 'necessary time in paid labour'. Here, the 'bare minimum' - the 'least you can get by with' - is putting in enough paid hours to get your income up to the poverty line. Of course, most people choose to work more than that; but that is up to them, if that is how they choose to spend their 'discretionary' time. Earning a poverty-level income is what should be regarded as strictly 'necessary', in terms of how much time people strictly have to put into paid labour.

Hence we define:

```
'necessary time in paid labour' = the amount of time necessary, at
    an individual's existing wage rate, to earn a poverty-level
    income
```

'Poverty' we define in the usual way, as one-half the median equivalent income across the country. ${ }^{7}$ (In that way 'necessary time in paid labour' is indexed to the country in which one lives - just as are measures suggested below of 'necessary personal care time' and 'necessary time in unpaid household labour'). 'Equivalent income' is an individual's prorata share of total household income, adjusting for the economies of scale associated with larger households. For simplicity, we use the square root of the number of individuals in the household as our equivalence scale, dividing that into the total household income to get the equivalent income to be assigned to each individual within that household.

This indicator of 'necessary time in paid labour' is not altogether unproblematic. For a start, it is subject to all the familiar controversies surrounding any poverty calculation: whether poverty measures should be absolute or relative; where the line should be drawn (even if relative, whether the mean or median should be used); what equivalence scale should be used to adjust for household size; and so on. ${ }^{8}$ A further

[^4]problem, more specific to our own procedures, is that we assume that people could do the very same job, at the very same wage rate, for substantially fewer (or more) hours a week than they actually work: often that is plainly untrue (Lundberg 1985). Still, whilst our calculations will inevitably prove controversial in all these various respects, some such controversy seems endemic to virtually all analogous economic exercises in these realms. ${ }^{9}$

There is no scholarly or intergovernmental consensus, analogous to that on the 'poverty line' for money, from which we can straightforwardly adduce how much time is necessary for people to spend on personal care and unpaid household labour. In those areas, measures of what is 'necessary' have to be constructed from scratch.

Presumably, 'the necessary' here should be defined somehow by reference to the actual distributions - just as, when specifying a poverty line in the dimension of money, what income is deemed 'necessary' is defined in terms of the actual distribution of income (specifically, as half the median). But we cannot, with time as we do with money, simply take 'half the median' as marking bare necessity. Time, unlike money, is upper- as well as lower-bounded: everyone has only 24 hours a day to allocate; no one can spend more than 24 hours a day on any activity or combination of activities. Taking as our poverty line half the amount of time that the average person spends on that activity would yield

[^5]implausible estimates, in consequence (for example, that people 'need' only just over 4 hours a day to eat and sleep: which is ridiculous).

What we are looking for is some 'lower bound' - some inflection point in the frequency distributions - below which relatively few people seem to fall. That lower bound of 'necessity' should obviously not just be the least that anyone spends. To specify it that way would be to define timepoverty out of existence (like defining money-poverty out of existence by defining the poverty line as equal to the least that anyone in the country earns: politically convenient, but obviously absurd). ${ }^{10}$ Equally obviously, 'necessity' should not just represent the 'average', but rather the least you can 'decently get by with'. (After all, we do not want to leave half the population doing less than necessary, by definition: that would be a distinctly odd sense of 'necessity'). Casual reflection on our own friends and relations confirms that some people clearly do spend lots more time in such activities (like grooming or sleeping or cooking or cleaning or whatever) than is strictly necessary, while others clearly spend lots less time than they really should by any objective standard. ${ }^{11}$

In stipulating how much time is 'necessary' to spend on those unpaid activities of daily life, we are therefore looking for a cutting point somewhere in the bottom half of the distribution. One standard way of specifying that would be to take the 'mean minus $N$ standard deviations' as the cutting point. ${ }^{12}$

10 The 'distance functions' approach shares this same difficulty, albeit in multidimensional space (Travers and Richardson 1993, 44-8).
11 Just recall the phrase, 'sleep deficit' - a phenomenon which parents of newborns know all too well!
12 We use medians in calculating cash poverty lines but means and standard deviations when dealing with unpaid household labour and personal care. The reason is that the distribution of equivalent cash income is typically much more skewed than are the distributions of unpaid household labour (for households of various specific sizes) and personal care. In the Australian Time Use Survey discussed below, for example,

Here we define 'necessary' as the 'mean minus one standard deviation' in the amount of time that people actually spend, in 'unpaid household labour' and 'personal care' respectively. That is our standard of the minimum amount of time it is strictly necessary to spend on each of those activities. Thus:

```
'necessary personal care time' = mean personal care time - one standard deviation in personal care time
```


## Analogously:

$$
\begin{aligned}
& \text { 'necessary unpaid household labour time' }=\text { mean unpaid } \\
& \text { household labour time - one standard deviation in } \\
& \text { unpaid household labour time }
\end{aligned}
$$

Those stipulations satisfy the formal desiderata set out above. Deducting something from the mean makes 'necessary time' fall, by definition, somewhere below the average. Whether these specific procedures (deducting exactly one standard deviation from the mean) make it fall in the 'right' place is something that can only be assessed impressionistically in relation to the actual data. But on the basis of the
data reported in Section II below, these procedures seem the most plausible. ${ }^{13}$

Note that the measures of 'necessary personal care time' and 'necessary time in unpaid household labour' as we have constructed them are 'relative' rather than 'absolute' indicators of what is necessary. How much we deem it necessary for you to do is a function of how much other people in your society do, as specified by the mean and standard deviation in those distributions across the population. Note, however, these 'necessary time' indicators are no more relative in this respect than is the standard 'necessary money' specification of the 'poverty line' as half the average (there, median) equivalent income across the population. Also note that, if there is some absolute necessity involved - as for example the physiological need for sleep - then that should show up through our procedures as low variation (small standard deviations) on that measure.

Everyone has to sleep and eat and bathe, whether they have a dozen kids or live alone. So necessary personal care time will be assumed not to vary according to household structure: it is just the mean minus one standard deviation across the sample. ${ }^{14}$ But it is obvious that we must

[^6]index 'necessary unpaid household labour time' to household structure. If you live on your own, there is less that needs to be done (but there is also no one with whom to share the tasks). If you are a sole parent responsible for a household with lots of young children, then there is much more that needs to be done and again no one with whom to share the tasks. If you are in a two-adult household, there is a little more to do but two pairs of hands to share the tasks. ${ }^{15}$

Finally, in calculations of how much time is necessary in both paid and unpaid household labour, we must be sensitive to the fact that the household's requirement pertains to the aggregate supply across the whole household. The necessities in view are things that need to get done - money raised, meals cooked, diapers changed - by someone or another in the household. But those are things that, if one person in the household does them, others need not. This points to the crucial importance of looking at 'necessary household tasks' in a household perspective (and of looking at 'distribution rules within the household' concerning how they ought be done: but that is the subject of a whole other article).

Our notion of 'discretionary time' - time available to people to 'do with as they please' - consists of time left to them after life's necessities have been taken into account (personal care, paid work and unpaid household labour). Thus, our basic definition of 'discretionary time’ is:

[^7]'discretionary time' $=168$ hours/week (or 24 hours/day) minus 'necessary personal care time' minus 'necessary time in unpaid household labour' minus 'necessary time in paid labour'

Like 'free time' in the standard time-use literature, our 'discretionary time' is a residual notion. Unlike 'free time', it is the residual not of what is left over after people have done all that they choose to do in all these dimensions. Instead, it is the residual of what is left over after they do the minimum they need to do in all these dimensions.

That notion of 'discretionary time' is a measure of 'autonomy', in the first instance (Goodin et al. 1999, 34-6, 222-35). That is to say, it is an indicator of the amount of time over which people have full control, free choice of how to spend it. 'Discretionary time' might be an indirect indicator of 'welfare', as well, with the addition of one further assumption: the assumption that people (either as an empirical generalization or an analytic necessity) choose in such a way as to maximize their own welfare. ${ }^{16}$ Insofar as that is true, then ceteris paribus a wider choice set automatically translates into higher welfare.

16 Revealed-preference economists and liberal political theorists both believe that they do, for example (Goodin 1995, ch. 8).

## 3 Time Use in Australia, 1992

To illustrate the application of these concepts, we turn now to the data contained in the 1992 Australian Time Use Survey. ${ }^{17}$ We briefly describe that data set, before turning to describe how we operationalised our variables using it.

## The Data

The 1992 Time Use Survey was a diary-based exercise conducted by the Australian Bureau of Statistics, involving 7056 persons fifteen years of age and older. Respondents were asked to record in a diary what they were doing, indicating beginning and ending points of each activity within five minutes. ${ }^{18}$ Diaries were to be kept for two consecutive days, with care being taken to ensure equal representation of each day of the week and each period of the year. ${ }^{19}$ Respondents were asked to describe their activities in their own words, which were then coded by the ABS into some ten major categories (which we collapse further into the four categories described above - paid labour, unpaid household labour, personal care and a residual). Respondents were also interviewed to obtain background information on age and sex, employment, education, income and so on.

[^8]The full sample contained persons of all ages fifteen and above. But since our main aim here is to assess the time pressures created by the conjunction of paid and unpaid household labour, we confined our analysis to cases of households where both the head of the household and the spouse (if there is a spouse) were of 'prime working age', between 25 and 54 years of age. (The only exception was in calculating the national poverty line for income, which we did on the basis of the entire sample following standard conventions.) We also confined our attention to 'one-family households', to avoid the complications arising from the disparity of the different types of households lumped together under the 'multiple-family household' category. ${ }^{20}$

## Measuring 'Free Time'

'Free time', as conventionally defined, is the residual that remains after taking account of time that people have actually committed to 'paid labour', 'unpaid household labour' and 'personal care'. Those latter three variables are simply read off the ABS data, combining subcategories in standard ways to form those three aggregate variables. ${ }^{21}$ Table 1 reports the average (mean) amount of time spent in each of those activities. It is well known from the time-use literature that unpaid household labour, in particular, varies substantially between men and women and depends heavily on whether or not they have children and whether or not both partners are in paid labour. ${ }^{22}$ Thus Table 1 reports the mean amount of time spend in each activity among heads of

[^9]households and their spouses, broken down according to gender and household structure (one-adult versus two-adult households; one-earner versus two-earner households; households with and without children).

Table 1: Free time (mean hours per week)

|  | male |  |  | female |  |  | total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no kids | $\left\lvert\, \begin{aligned} & \text { with } \\ & \text { kids } \end{aligned}\right.$ | total | no kids |  | total | no kids | $\begin{aligned} & \text { with } \\ & \text { kids } \end{aligned}$ | total |
| TWO-ADULT, ONE-EARNER HOUSEHOLDS |  |  |  |  |  |  |  |  |  |
| -actual time in paid labour | 25.04 | 38.55 | 36.56 | 9.94 | 2.95 | 3.98 | 34.98 | 41.49 | 40.54 |
| -actual time in unpaid household labour | 20.47 | 18.66 | 18.93 | 34.35 | 52.88 | 50.16 | 54.82 | 71.54 | 69.08 |
| -actual time in personal care | 70.00 | 68.74 | 68.93 | 72.87 | 70.66 | 70.98 | 142.86 | 139.40 | 139.91 |
| Free time (168 hrs/wk minus all of above) | 52.49 | 42.05 | 43.58 | 50.85 | 41.51 | 42.89 | 103.34 | 83.56 | 86.47 |
| $\mathrm{N}=$ | 50 | 290 | 340 | 50 | 290 | 340 | 50 | 290 | 340 |

TWO-ADULT, TWO-EARNER HOUSEHOLDS

| -actual time in paid labour | 44.73 | 41.90 | 42.71 | 34.60 | 23.46 | 26.64 | 79.33 | 65.36 | 69.34 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| -actual time in unpaid household labour | 14.53 | 19.78 | 18.28 | 22.34 | 40.04 | 35.00 | 36.87 | 59.82 | 53.28 |
| -actual time in personal care | 67.31 | 66.12 | 66.46 | 70.73 | 68.66 | 69.25 | 138.04 | 134.78 | 135.71 |
| Free time (168 hrs/wk minus all of above) | 41.43 | 40.20 | 40.55 | 40.33 | 35.83 | 37.12 | 81.76 | 76.03 | 77.67 |
| $\mathrm{N}=$ | 126 | 316 | 442 | 126 | 316 | 442 | 126 | 316 | 442 |

Table 1: Continued

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ONE-ADULT, ONE-EARNER HOUSEHOLDS |  |  |  |  |  |  | (* multiply one-adult household totals $x 2$ for comparability with "total" columns above) |  |  |
| -actual time in paid labour | 39.38 | 30.19 | 38.65 | 35.08 | 33.99 | 34.57 | 37.31* | 33.63* | 36.13* |
| -actual time in unpaid household labour | 14.38 | 16.72 | 14.56 | 18.44 | 29.21 | 23.52 | 16.33* | 28.03* | 20.09* |
| - actual time in personal care | 66.96 | 69.44 | 67.16 | 67.74 | 67.82 | 67.78 | 67.33* | 67.97* | 67.54* |
| Free time ( $168 \mathrm{hrs} / \mathrm{wk}$ minus all of above) | 47.29 | 51.65 | 47.63 | 46.74 | 36.98 | 42.14 | 47.02* | 38.37* | 44.24* |
| $\mathrm{N}=$ | 81 | 7 | 88 | 75 | 67 | 142 | 75 | 67 | 142 |

In Table 1, 'free time' ranges from a low of 35.83 hours a week for mothers in two-earner households to a high of 52.49 hours a week for men in childless, one-earner couples. Most values cluster in the low 40s. Men invariably have more 'free time' than women, but only occasionally by a large margin. People without children almost invariably have more 'free time' than people with children, almost invariably by a much wider margin. ${ }^{23}$

[^10]Much the most striking feature of Table 1, however, is the fact that people in dual-earner households have systematically less 'free time' than people in either of the other household types. That is true whether they are women or men; and that is true whether they have children or not. ${ }^{24}$

That finding is of course familiar to followers of the time-use literature. But on the face of it, that finding should still be surprising. Of course, it is no surprise that two-earner couples might enjoy less 'free time' than one-earner couples: more time goes into paid labour there, after all. Naively, however, we should surely expect 'free time' to be lowest of all among lone parents, who have to do all the household's paid work and all the household's unpaid work all by themselves, without a partner to help. It is thus genuinely surprising that both men and women, and both childless couples and couples with children, have less 'free time' in twoearner couples than in any other household type.

## Measuring 'Discretionary Time'

'Discretionary time', as we have defined it, is what is left over after three different 'temporal necessities' have been met: 'necessary time in paid labour'; 'necessary time in unpaid household labour'; and 'necessary personal care time'. Those variables were estimated from the 1992 Australian Time Use Survey in the ways set out in Section 1 above.
unpaid household labour - which is a function of the number of people in their household - is less because they tend to have fewer children living with them (1.14 on average, as compared to lone mothers' 1.58 and couples' 2.22 where there is only one wage-earner and 2.04 where both partners are in paid labour).

To estimate 'necessary personal care time' - how much time is strictly necessary for sleeping, eating, grooming and so on - we begin by noting how much people actually spend on those activities, as in Table 1. Across the sample of prime-aged heads of households and their spouses, the average (mean) amount of time spent on these activities was 69.60 hours a week, with a standard deviation of 11.73 . Following the procedures set out in Section I, we then reckon 'necessary personal care time' to be the mean less one standard deviation of that distribution, or 57.87 hours per week. In Table 3, we assign that value to everyone. ${ }^{25}$
'Necessary paid labour time' is defined in Section 1 in terms of how long people would have to work, at their existing wage rates, to achieve a poverty-level income. We calculate a 'poverty line' of the sort discussed in Section I for the entire sample (here, and only here, including respondents of all ages), based on income as reported in the Australian Time Use Survey. ${ }^{26}$ We then calculate how much income would be needed by each household to escape poverty by multiplying that individual-level poverty line by the square root of the number of members of that household (the equivalence scale we used in constructing the poverty line). That represents the amount of income needed by the household.

To determine how long people in the household would have to spend in paid labour to earn that much money, we calculate their wage rates,

25 As seen from Table 1, there is a little variation between men and women in actual personal care time, but not much - too little, we think, to justify ascribing different amounts of 'necessary personal care time' to each of them. There is greater variation across household types, but that is more likely a result of people in timepressed households skimping on personal care. It is unlikely that people's need for time to eat or sleep varies depending on how many children they have.
The median weekly equivalent income in this survey was $\mathrm{A} \$ 366.04$, which is broadly in line with evidence from other surveys of the same period. The poverty line is half the median, or A $\$ 183.02$ per week.
simply by dividing their reported weekly income by their reported hours of work. ${ }^{27}$ In households where there is only one wage-earner, we allocate responsibility for necessary paid labour to the sole wage-earner. The amount of 'necessary time in paid labour' for the sole earner is simply the amount of money the household needs to escape poverty (as calculated above), divided by the sole earner's wage rate. Other people in the household, if present, are assumed to have minimal responsibilities for necessary (as opposed to discretionary) paid labour.

In households with two wage-earners, we apportion necessary paid labour responsibilities between earners in proportion to their actual incomes. Thus, we determine the total amount of income actually received by the head of the household and the spouse, and what proportion of this amount the head of household and the spouse each provides; we determine how much total income the household needs to escape poverty; and we then assign each wage-earner responsibility for earning the same share of that sum as each presently provides of total income. ${ }^{28}$ How much time it is necessary for each wage-earner to spend in paid labour is that sum, divided by that person's own wage rate.

Following the logic set out in Section I, how much 'necessary unpaid household labour time' must be performed in any given household is set at the 'mean minus one standard deviation' of the amount presently being done. As evident in Table 1, the amount presently being done (and

[^11]so too, by our definition, the amount that needs to be done) varies with household structure - and 'necessarily' so, at least as regards the time costs of extra members of the household. ${ }^{29}$ We therefore calculate 'necessary unpaid household labour time' for households of different sizes, as reported in Table 2.

## Table 2: Necessary unpaid household labour time, by household size

| number of <br> people in <br> household | time in unpaid household labour <br> (hrs/ wk) |  |  |
| :--- | :--- | :--- | ---: |
|  | actual |  | necessary <br> (mean minus <br> standard <br> deviation) |
|  | mean | standard <br> deviation | 5.28 |
| 1 person | 17.91 | 12.63 | 17.76 |
| 2 people | 41.70 | 23.94 | 32.27 |
| 3 people | 59.11 | 26.84 | 42.47 |
| 4 people | 69.13 | 26.66 | 47.79 |
| 5 people | 73.81 | 26.02 | 54.05 |
| $\geq 6$ people | 84.04 | 29.99 |  |

The standard deviations in unpaid household labour time are high relative to the mean, certainly much higher than in the case of personal care time (where the mean was 69.60 hours a week and the standard

Other variations between households types - such as the larger total amount of unpaid household labour performed in two-adult, one-earner households as compared to two-adult, two-earner ones - is more likely to be discretionary. Attempting to be conservative in our specification of what is strictly 'necessary', we decline to take those differences into account. That conservatism also leads us to specify unpaid household labour time costs in terms of the number of extra members of the household, without differentiating between extra adults and extra children. Time-use data show that people spend much more time in unpaid household labour when a second adult is added to the household than when the first child is added to a single-person household. The most plausible explanation of this is that they enjoy doing so: it is implausible that they need to spend more time taking care of their partner than their first child.
deviation only 11.73). But this is unsurprising. After all, 'personal care' - eating and sleeping, showering, brushing your teeth and so on - is something that everyone has to do every day. Hence, time-use studies based on diaries kept over one or two days inevitably catch everyone doing those sorts of things; and the standard deviation in time spent on those activities is correspondingly small. Some aspects of 'unpaid household labour' are daily activities broadly like that (cooking and caring for the children, for example). Others however, (weekly grocery shopping, the weekend washing, the spring cleaning) clearly are not. Daily time-use diaries will inevitably catch some people doing once-aweek (or once-a-year) unpaid household tasks, making the standard deviation there much higher.

Assuming that the number of hours spent in each of those activities is roughly normally distributed across the population - which is the case with respect to time spent in unpaid household labour as well as personal care - roughly the same proportion of the population (15.87 per cent) will lie one full standard deviation or more below the mean, regardless of how large or small that standard deviation is relative to the mean.

In one-adult households, we simply assigned the relevant value from Table 2 as the 'necessary unpaid household labour time' to be done by the sole adult in the household. That assumes (as we shall similarly assume in the case of other households as well) that full responsibility for all the necessary unpaid household labour falls to the adult members of that household, and to them alone. Undoubtedly, children particularly older children - do perform useful chores around the house. Our assumption is merely that it is the adult(s) in the household who bear
ultimate responsibility for seeing to it that all strictly necessary tasks are performed in the running of the household.

In households with two adults, we apportion necessary unpaid household labour responsibilities between them in proportion to the amount of unpaid household labour they actually do at present. That is to say, for each household we determine how many total hours of unpaid household labour are being done by all the adults in it, and what proportion each adult is presently doing; and we then assign to each adult an amount of 'necessary unpaid household labour time' that corresponds to the same proportion of the total necessary for the person's household as a whole, as given in Table 2.
'Discretionary time' is just what is left over, after all three types of 'necessary time' have been deducted. To calculate the mean amount of 'discretionary time' available to people in each sort of household, we simply deduct from the total number of hours in a week (168) the number of 'necessary hours in paid labour', 'necessary hours in unpaid household labour' and 'necessary hours in personal care activities'.

Table 3: Discretionary time (mean hours per week)

|  | male |  |  | Female |  |  | total |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no <br> kids | with kids | total | no <br> kids | with <br> kids | total | no kids | $\begin{aligned} & \text { with } \\ & \text { kids } \end{aligned}$ | total |
| TWO-ADULT, ONE-EARNER HOUSEHOLDS |  |  |  |  |  |  |  |  |  |
| -necessary time in paid labour | 13.53 | 26.37 | 24.48 | 4.02 | 2.08 | 2.37 | 17.54 | 28.45 | 26.85 |
| -necessary time in unpaid household labour | 6.27 | 10.41 | 9.81 | 11.49 | 32.10 | 29.07 | 17.76 | 42.51 | 38.87 |
| -necessary personal care time | 57.87 | 57.87 | 57.87 | 57.87 | 57.87 | 57.87 | 115.73 | 115.73 | 115.73 |
| Discretionary time (168 hrs/wk minus all of above) | 90.34 | 73.35 | 75.85 | 94.63 | 75.95 | 78.70 | 184.97 | 149.31 | 154.55 |
| $\mathrm{N}=$ | 50 | 290 | 340 | 50 | 290 | 340 | 50 | 290 | 340 |

Table 3 Continued
TWO-ADULT, TWO-EARNER HOUSEHOLDS

| -necessary <br> time in paid <br> labour | 11.40 | 22.10 | 19.05 |  | 8.93 | 11.61 |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| -necessary <br> time in <br> unpaid <br> household <br> labour | 6.54 | 13.14 | 11.26 |  | 11.22 | 28.26 |  |  |  |
| -necessary <br> personal care <br> time | 57.87 | 57.87 | 57.87 |  | 57.87 | 57.87 |  |  |  |


| Table 3 Continued |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| ONE-ADULT, ONE-EARNER HOUSEHOLDS |

The results of these calculations are presented in Table 3. 'Discretionary time' as reported there ranges from a low of 61.43 to a high of 94.63 hours a week. Intervening values are dispersed through the 70s, 80s and 90s. Women have marginally more 'discretionary time' than men in traditional one-breadwinner households; the situation is reversed, by an equally modest margin, among two-earner couples or lone parents. The one constant is that people without children invariably have considerably more 'discretionary time' than people with children.

Whereas in Table 1 it was two-earner couples who enjoyed systematically less 'free time' than all others, in Table 3 it is only lone mothers who are remarkably short of 'discretionary time'. Single people without children, in contrast, have about as much 'discretionary time' as people without children living in couples. Similarly, people (especially men, but to a large extent women as well) in two-earner couples have about as much 'discretionary time' as do people in one-earner couples with how much, exactly, depending on whether or not they have children.

## 4 The Time-Pressure Illusion

Comparing the results of those two previous sets of calculations allows us to assess the extent to which the time pressures people are under are the products of 'choice' or 'necessity'.

Table 4 reproduces means of 'free time' from Table 1 and means of 'discretionary time' from Table 3, for people in various social circumstances. The extent of the 'time-pressure illusion' reported in Table 4 is simply the difference between means of 'discretionary time' and 'free time' for each group. That statistic is offered as an indicator of
the extent to which people have chosen to devote more of their time than strictly necessary to the unavoidable tasks of paid labour, unpaid household labour and personal care.

Two comments are in order, before turning to the findings contained in that table. One concerns the extent to which people really have a 'free choice' over how much extra time to devote to those tasks. There may be reason to doubt that, at both the micro and macro levels. At the micro level, any particular individual is always in some very particular circumstances. People with serious illnesses may need to sleep more than others; people with disabled children may need to spend more time in unpaid caring labour than others; some people with inflexible jobs and few employment options might have to work lots of hours in order to remain in paid work at all.

But those are just the sorts of personal idiosyncrasies that talking in terms of 'means' is supposed to avoid. At the macro level, one might suppose that there are 'social expectations' constraining people's choice to devote very much less time than they actually do to those tasks. But those are just the sorts of social norms that are supposed to be captured by indexing our standards of what is 'necessary' in each dimension to the average (mean or median) of what is actually done, give or take a standard deviation or a half.

A second issue concerns the appropriateness of the term 'illusion' in this context. In one sense, the time pressure that people are actually under is not at all an illusion. They really are working, cooking and sleeping all those hours; they really do have only that much free time left over. What is illusory is merely the sense of 'pressure' - the suggestion that they were 'forced' to do all those extra hours, above and beyond what was (by
our standards) necessary. In another sense, too, the use of the psychologised term 'illusion' is slightly out of place in the present context. We have no data on people's subjective mental states: just on their objective time commitments. Hence, strictly speaking, we are dealing here with 'grounds' for illusion - with how much free time people would have left over after doing what is minimally necessary to discharge their other commitments. Whether those objective facts give rise to a subjective sense of being under time pressure is something that cannot be answered through the 1992 Australian Time Use Survey (though there is much evidence which suggests that they do). ${ }^{30}$

Table 4: Time-pressure illusion (mean hours per week committed to necessary tasks, in excess of that necessary to commit to them)

|  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | no kids | with | total | no <br> kids | $\begin{array}{\|l\|l} \text { with } \\ \text { kids } \end{array}$ | total | no <br> kids | $\begin{array}{\|c} \text { with } \\ \text { kids } \end{array}$ | total |
| TWO-ADULT, ONE-EARNER HOUSEHOLDS |  |  |  |  |  |  |  |  |  |
| Discretionary time (mean per week) | 90.34 | 73.35 | 75.85 | 94.63 | 75.95 | 78.70 | 184.97 | 149.31 | 154.55 |
| Free time (mean per week) | 52.49 | 42.05 | 43.58 | 50.85 | 41.51 | 42.89 | 103.34 | 83.56 | 86.47 |
| Timepressure illusion (difference between the above) | 37.85 | 31.30 | 32.27 | 43.78 | 34.44 | 35.81 | 81.63 | 65.75 | 68.08 |
| TWO-ADULT, TWO-EARNER HOUSEHOLDS |  |  |  |  |  |  |  |  |  |
| Discretionary time (mean per week) | 92.20 | 74.89 | 79.83 | 89.98 | 70.26 | 75.88 | 182.18 | 145.15 | 155.71 |
| Free time (mean per week) | 41.43 | 40.20 | 40.55 | 40.33 | 35.83 | 37.12 | 81.76 | 76.03 | 77.67 |
| Timepressure illusion (difference between the above) | 50.77 | 34.69 | 39.28 | 49.65 | 34.43 | 38.76 | 100.42 | 69.12 | 78.04 |

## Table 4: Continued

| ONE-ADULT, ONE-EARNER HOUSEHOLDS |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | (* mult househ <br> for com <br> "total" | tiply on old tot parabil column | e-adult als $\mathbf{x}$ ity with above) |
| Discretionary time (mean per week) | 91.28 | 73.78 | 89.89 | 90.27 | 61.43 | 76.66 | 90.80* | 62.60* | 81.72* |
| Free time (mean per week) | 47.29 | 51.65 | 47.63 | 46.74 | 36.98 | 42.14 | 47.02* | 38.37* | 44.24* |
| Timepressure illusion (difference between the above) | 43.99 | 22.13 | 42.26 | 43.53 | 24.45 | 34.52 | 43.78* | 24.23* | 37.48* |

With those issues addressed, we can now turn to examine the evidence on the extent of the 'time-pressure illusion' in Table 4. What we see there is that the 'time pressure illusion' is greater for childless people than for those with children. People in couples without children devote between 37.85 and 50.77 more hours a week to paid and unpaid household labour and personal care than they strictly need to; and lone childless individuals fall around the middle of that same range. Among couples with children, the time pressure is less illusory. People there devote only 31.30 to 34.69 more hours a week than necessary to those tasks. And for lone parents, the time pressure is still less of an illusion. They devote only between 22.13 and 24.45 hours a week more than strictly necessary to those tasks.

The second major conclusion to be derived from Table 4 is that the group of people with systematically the least 'free time' - two-earner couples - is also the group which is systematically most under the 'timepressure illusion'. Comparing like-for-like down each column ('men without children in two-earner couples' to 'men without children' in the other two household types, and so on), we see that people in two-earner couples almost invariably score higher on the 'time-pressure illusion' than do people in other household types. ${ }^{31}$ The differences are sometimes fairly modest (as when comparing 'two-earner couples with children' to 'one-earner couples with children'), but other times the differences are substantial. The 'time-pressure illusion' experienced by parents in twoearner households is between 41 and 57 per cent greater than that experienced by lone parents.

31 The partial exception is women with children in one-earner households, whose time pressure illusion is virtually identical to that of mothers in two-earner couples.

## 5 Conclusions

The aims of this article have been two-fold. One has been methodological. We have introduced a new concept - that of 'discretionary time' - and we have attempted to show how it might be operationalised through the sort of data available in ordinary time-use surveys. Here we have illustrated one particular application of that concept, albeit by adopting a uni-dimensional notion of statistically measurable time, to issues of 'time pressure'. But the same 'discretionary time' concept has potentially far wider applicability as a measure of autonomy and social welfare, more generally. ${ }^{32}$ In that role, we might use it in any of the many other ways we use such social standards - in crosstime and cross-country (as well as, obviously, cross-gender) comparisons, in assessing issues of poverty and social inequality and in recommending remedies to alleviate them.

The second and more substantive aim of this paper has been to explore whether the 'time pressure' that people feel they are under is real or imagined - or, more precisely, in our terms whether it is a matter of choice or of necessity. That people work long hours, at home and on the job, is one thing; whether they have to or not is quite another. Ordinary time-use measures of 'free time' address the former question alone. We address the latter question, by looking at 'discretionary time' alongside those more traditional measures. Doing so suggests that those who feel most overworked - those who have least 'free time' - largely do it to themselves.

## References

Andorka, Rudolf (1987), 'Time budgets and their uses', Annual Review of Sociology, 13: 149-64.
Atkinson, A. B. (1987), 'On the measurement of poverty', Econometrica, 55: 747-64.
Atkinson, A. B. (1995), Incomes and the Welfare State, Cambridge University Press, New York.
Atkinson, A. B. (1998), Poverty in Europe. Blackwell, Oxford.
Australian Bureau of Statistics (ABS), (1993), Time Use Survey, Australia, User's Guide, ABS Catalogue No. 4150.0.

Australian Bureau of Statistics (ABS), (1994), How Australians Use Their Time, Revised ed, Catalogue No. 4153.0.

Australian Bureau of Statistics (ABS), (1996), In Tune: Time Use News and Events, available at: http://www.stmarys.ca/partners/iatur/choi7103.htm ; accessed 7 June 2001.

Australian Bureau of Statistics (ABS), (1998), How Australians Use Their Time, 1997, Revised ed, Catalogue No. 4153.0.

Baxter, Janeen and Diane Gibson (1990), Double Take: The Links Between Paid and Unpaid Work, Australian Government Publishing Service, Canberra.
Beckerman, Wilfred (1978), Measures of Leisure, Equality and Welfare, Paris: Organisation for Economic Co-operation and Development.
Bittman, Michael (1992), Juggling Time: How Australian Families Use Time, 2nd ed., Office of the Status of Women, Canberra.

Bittman, Michael (1999), Social Participation and Family Welfare: The Money and Time Cost of Leisure, SPRC Discussion Paper No. 95, Social Policy Research Centre, University of New South Wales, Sydney.

Bittman, Michael and Jocelyn Pixley (1997), The Double Life of the Family, Allen and Unwin, Sydney.
Bittman, Michael and Judy Wacjman (2000), 'The rush hour: the character of leisure time and gender equity', Social Forces, 79(1), 165-89.

Campbell, Angus, Philip E. Converse and Willard L. Rogers (1976), The Quality of American Life, Russell Sage, New York.
Ekirch, A. Roger (2001), 'Sleep we have lost: pre-industrial slumber in the British Isles', American Historical Review, 106(2), 34386.

Esping-Andersen, Gøsta (1999), Social Foundations of Postindustrial Economics, Oxford University Press, Oxford.
Garfinkel, Irving and Robert H. Haveman (1977), 'Earnings capacity, economic status and poverty', Journal of Human Resources, 12, 49-70.

Garfinkel, Irving and Robert H. Haveman (1978), Earnings Capacity, Poverty and Inequality, Academic Press, New York.
Gershuny, Jonathan (2000), Changing Times: Work and Leisure in Post-Industrial Society, Oxford University Press, Oxford.
Goldschmidt-Clermont, L. and E. Pagnossin-Aligisakis (1995), Measures of Unrecorded Economic Activities in Fourteen Countries, Occasional Paper No. 20, Human Development Report Office, United Nations Development Program.
Goodin, Robert E. (1995), Utilitarianism as a Public Philosophy, Cambridge University Press, Cambridge.
David Schmidtz and Robert E. Goodin (1998), 'Social welfare and individual responsibility', in Social Welfare as a Collective Social Responsibility, Cambridge University Press, Cambridge, 97-194.

Goodin, Robert E. (2001), 'Toward a post-productivist welfare state', British Journal of Political Science, 31, 13-40.
Goodin, Robert E., Bruce Headey, Ruud Muffels and Henk-Jan Dirven (1999), The Real Worlds of Welfare Capitalism, Cambridge University Press, Cambridge.
Haveman, Robert H. (1993), 'Who are the nation's truly poor? Problems and pitfalls in (re)defining and measuring poverty', Brookings Review, 11(1), 24-27.
Haveman, Robert H. and Andrew Bershadker (1998), Self-reliance as a poverty criterion: Trends in earnings-capacity poverty, 19751992, American Economic Review (Papers and Proceedings), 88(2), 342-47.
Haveman, Robert and Andrew Bershader (2001), 'The inability to be self-reliant', Review of Income and Wealth, 47(3), 335-60.

Haveman, Robert H. and L. F. Buron (1993), 'Escaping poverty through work - the problem of low earnings capacity in the United States, 1973-88', Review of Income and Wealth, 38, 115.

Hochschild, Arlie Russell (1989), The Second Shift: Working Parents and the Revolution at Home, New York, Viking, New York.
Hochschild, Arlie Russell (1997), The Time Bind, Metropolitan Books, New York.

International Labour Office (1996), Convention concerning the Reduction of Hours of Work to Forty a Week [signed 1935; came into force 1957]. International Labour Conventions and Recommendations, Geneva: ILO, 1, 261-63.

Ironmonger, Duncan (1996), 'Counting outputs, capital inputs and caring labour: estimating gross household product', Feminist Economics, 2(3), 37-64.
Jacobs, J.A. and K. Gerson (1998) 'Who Are the Overworked Americans?', Review of Social Economy, 56, 442-59.
Jacobs, J.A. and K. Gerson (2001) 'Overworked individuals or overworked families? Explaining trends in work, leisure and family time', Work and Occupations, 28, 40-63
Linder, Steffan B (1970), The Harried Leisure Class, Columbia University Press, New York.
Lundberg, Shelly (1985), 'Tied wage-hours offers and the endogeneity of wages', Review of Economics and Statistics, 67, 405-10.

Organisation for Economic Co-operation \& Development (OECD) (1995), Household Production in OECD Countries: Data Sources and Measurement Methods, Paris.

Ringen, Stein (1988), 'Direct and indirect measures of poverty', Journal of Social Policy, 17, 351-65.
Robinson, John P. (1977), How Americans Use Time, Praeger, New York.

Robinson, John P, F. T. Juster and F. P. Stafford (1985), The Validity and Reliability of Diaries Versus Alternative Time Use Measures, Time, Goods and Well-Being, ed. Ann Arbor: Survey Research Centre, Institute for Social Research, 33-62, University of Michigan.

Robinson, John P. and Geoffrey Godbey. (1997), Time for Life: The Surprising Ways Americans Use their Time, University Press, University Park, Pennsylvania.
Saunders, Peter. (1994), Welfare and Inequality: National and International Perspectives in the Australian Welfare State, Cambridge University Press, Melbourne.
Saunders, Peter; Inge O'Connor; and Timothy Smeeding, (1994), The Distribution of Welfare: Inequality, Earnings Capacity and Household Production in Comparative Perspective, Discussion Papers No. 51 Social Policy Research Centre, University of New South Wales.

Schor, Juliet B. (1991), The Overworked American: The Unexpected Decline of Leisure, Basic Books, New York.
Sorokin, Pitrim and Clarence Berger, (1939), Time-budgets of Human Behavior, Harvard University Press, Cambridge, Mass.

Stinson, Linda L. (1999), 'Measuring how people spend their time: A time-use survey design', Monthly Labour Review, 122(8): 1219. Available at: http://stats.bls.gov/opub/mlr/1999/08/art3full.pdf.
Sullivan, Oriel and Jonathan Gershuny (2001), ‘Cross-national changes in time use: Some sociological (hi)stories reexamined', British Journal of Sociology, 52(2), 331-47.
Szalai, Alexander, Philip Converse, Pierre Feldheim, Erwin Scheuch and Philip Stone (1972), The Use of Time, The Hague, Mouton.
Travers, Peter and Sue Richardson (1993), Living Decently: Material Well-being in Australia, Oxford University Press, Melbourne.
U.S. Council of Economic Advisers (1999), Families and the Labour Market, 1969-1999: Analyzing the 'Time Crunch', Government Printing Office, Washington, D.C. http://clinton4.nara.gov/media/pdf/famfinal.pdf
Van Parijs, Philippe, (1995) Real Freedom for All, Clarendon Press, Oxford.
Vickery, Claire, (1977), 'The time-poor: a new look at poverty', Journal of Human Resources, 12, 27-48.

## SOCIAL POLICY RESEARCH CENTRE DISCUSSION PAPERS

- No longer available.
$\diamond$ Published in Journal (list follows)

1. $\star$ The Labour Market Position of Aboriginal People Russell Ross August in Non-Metropolitan New South Wales
2. Welfare Fraud, Work Incentives and Income Bruce Bradbury August Support for the Unemployed 1988
3. $\uparrow$ Taxation and Social Security: An Overview Peter Whiteford August 1988
4. $\uparrow$ Income Inequality in Australia in an International

Peter Saunders \&
August
1988
5. $\uparrow$ Family Size Equivalence Scales and Survey

Bruce Bradbury December
Evaluations of Income and Well-Being
1988
6. $\uparrow \quad$ Income Testing the Tax Threshold

Peter Whiteford
December
1988
7. Workers' Compensation and Social Security

Don Stewart \&
December Expenditure in Australia: Anti-Social Aspects of the 'Social' Wage
8. Teenagers in the Labour Market: 1983-1988 Russell Ross December 1988
9. A Legacy of Choice: Economic Thought and Paul Smyth May 1989 Social Policy in Australia, the Early Post-War Years
10. $\uparrow$ The 'Family Package' and the Cost of Children Bruce Bradbury May 1989
11. Towards an Understanding of Commonwealth Peter Saunders May 1989 Social Expenditure Trends
12. $\uparrow$ A Comparative Study of Home and Hospital Cathy Boland July 1989 Births: Scientific and Normative Variables and their Effects
13. Adult Goods and the Cost of Children in Australia Bruce Bradbury July 1989
14. $\uparrow$ Some Australian Evidence on the Consensual Peter Saunders \& July 1989 Approach to Poverty Measurement

15 ४ Income Inequality in Australia and NewZealan d:
Peter Saunders,
September International Comparisons and Recent Trends

Garry Hobbes \&
1989 Helen Stott

| $16{ }^{\text {- }}$ | Trends in the Disposable Incomes of Jennifer Doyle \& Peter Whiteford Australian Families, 1982-83 to 1989-90 | Bruce Bradbury, | January 1990 |
| :---: | :---: | :---: | :---: |
| 17. $\downarrow$ | Selectivity and Targeting in Income Support: The Australian Experience | Peter Saunders | February 1990 |
| 18. 入 | How Reliable are Estimates of Poverty in Australia? Some Sensitivity Tests for the Period 1981-82 to 1985-86 | Bruce Bradbury \& Peter Saunders | February 1990 |
| 19. $\downarrow$ * | The Labour Supply Behaviour of Single Mothers and Married Mothers in Australia | Russell Ross \& Peter Saunders | July 1990 |
| 20. $\downarrow$ | Income Poverty Among Aboriginal Families with Children: Estimates from the 1986 Census | Russell Ross \& Peter Whiteford | July 1990 |
| 21. ${ }^{\text {® }}$ | Compensating Low Income Groups for Indirect Tax Reforms |  <br> Peter Whiteford | $\begin{array}{r} \text { August } \\ 1990 \end{array}$ |
| 22. ¢ | Reflections on the Review of the Home and Community Care Program | Peter Saunders | $\begin{array}{r} \text { August } \\ 1990 \end{array}$ |
| 23. | Sole Parent Families in Australia | Peter Saunders \& George Matheson | $\begin{array}{r} \text { September } \\ 1990 \end{array}$ |
| 24. $\stackrel{\text { ¢ }}{ }$ | Unemployment, Participation and Family Incomes in the 1980s | Bruce Bradbury | eptember $1990$ |
| 25 - | Employment Growth and Poverty: An Analysis of Australian Experience, 1983-1990 | Peter Saunders | September 1990 |
| $26{ }^{*}$ | Gender, Social Policy Regimes and the Welfare State | Sheila Shaver | November 1990 |
| 27. | A Probit Analysis of the Factors Influencing labour Market Success of Aborigines in New South Wales | Russell Ross | November 1990 |
| 28 - $\widehat{\text { - }}$ | Efficiency and Effectiveness in Social Policies: An International Perspective | Peter Saunders | December 1990 |
| 29. | Take-up of Family Income Supplement in 1986 A Research Note | Peter Whiteford \& Jennifer Doyle | February <br> 1991 |
| 30. $\stackrel{\text { ® }}{ }$ | An Ever-Rising Tide? Poverty in Australia in the Eighties: | Peter Saunders \&George Matheson | May 1991 |
| 31. ${ }^{\text {® }}$ | Are Immigrants Over-Represented in the Australian Social Security System? | Peter Whiteford | $\begin{array}{r} \text { March } \\ 1992 \end{array}$ |
| 32. | Measuring the Cost of Children | Bruce Bradbury | May 1992 |


| 33. $\stackrel{\text { r }}{ }$ | The Impact of Family Assistance Changes on Patterns of Unemployment Benefit Receipt | Bruce Bradbury | $\begin{array}{r} \text { August } \\ 1992 \end{array}$ |
| :---: | :---: | :---: | :---: |
| 34. ${ }^{\text {® }}$ | Recent Trends in the Size and Growth of Government in OECD Countries | Peter Saunders | September 1992 |
| 35. ${ }^{\text {® }}$ | Noncash Income, Living Standards, Inequality and Poverty: Evidence from the Luxembourg Income Study | Peter Saunders et al | November 1992 |
| 36. - | The Mixed Economy of Support for the Aged In Australia: Lesson for Privatisation | Peter Saunders \& Michael Fine | November 1992 |
| 37. | The Welfare Interpretation of Family Size Equivalence Scales | Bruce Bradbury | November 1992 |
| 38. $\downarrow$ | Body Rights, Social Rights and the Liberal Welfare State | Sheila Shaver | December <br> 1992 |
| 39. $\stackrel{\text { r }}{ }$ | Unemployment and Income Support: Challenges for the Years Ahead | Bruce Bradbury | May 1993 |
| 40. $\stackrel{\text { ® }}{ }$ | Married Women's Earnings and Family Income Inequality in the Eighties | Peter Saunders | May 1993 |
| 41. | Women and the Australian Social Security System: From Difference Towards Equality | Sheila Shaver | June 1993 |
| 42. | Male Wage Inequality Before and After Tax: A Six Country Comparison | Bruce Bradbury | June 1993 |
| 43. | The Fragmented Structure of Community Support Services: A Community Case Study | Michael Fine | June 1993 |
| 44* 入 | The Recognition of Wifely Labour by Welfare States | Sheila Shaver \& Jonathan Bradshaw | $\begin{array}{r} \text { August } \\ 1993 \end{array}$ |
| 45. | Postmodernism and Social Policy: A Great Leap Backwards? | Peter TaylorGooby | September 1993 |
| 46. $\stackrel{\text { ® }}{ }$ | Making Ends Meet in Australia and Sweden: A Comparative Analysis of the Consensual Approach to Poverty Measurement | Peter Saunders, Björn Halleröd \& George Matheson | $\begin{array}{r} \text { October } \\ 1993 \end{array}$ |
| 47. | Economic Adjustment and Distributional Change: Income Inequality and Poverty in Australia in the Eighties | Peter Saunders | November 1993 |
| 48. $\stackrel{\text { - }}{ }$ - | Poverty and Inequality: Social Security in Australia in the 1990s | Peter Saunders | May 1994 |
| 49. $\stackrel{\text { r }}{ }$ | Rising on the Tasman Tide: Income Inequality in Australia and New Zealand in the 1980s | Peter Saunders | June 1994 |


| 50. | A New Approach to the Direct Measurement of Consensual Poverty | Björn Halleröd | $\begin{array}{r} \text { October } \\ 1994 \end{array}$ |
| :---: | :---: | :---: | :---: |
| 51. | The Distribution of Welfare：Inequality，Earnings Capacity and Household Production in a Comparative Perspective | Peter Saunders Inge O＇Connor \＆ Timothy Smeeding | November 1994 |
| 52．今 | Immigrants and the Distribution of Income： National and International Comparisons | Peter Saunders | November 1994 |
| 53．$\widehat{\text { r }}$ | The Role，Value and Limitations of Poverty Research | Peter Saunders | November 1994 |
| 54．$\widehat{\text { r }}$ | The Use of Replacement Rates In International Comparisons of Benefit Systems | Peter Whiteford | February $1995$ |
| 55．今 | Two Papers on Citizenship and the Basic Income | Peter Saunders \＆ Sheila Shaver | $\begin{gathered} \text { April } \\ 1995 \end{gathered}$ |
| 56．$\downarrow$ | Improving Work Incentives in a Means－tested System：The 1994 Australian Social Security Reforms | Peter Saunders | May 1995 |
| 57． | Corporatism in Australia | Peter Kriesler \＆ Joseph Halevi | May 1995 |
| 58. | Universality and Selectivity in Income Support：A Comparative Study in Social Citizenship | Sheila Shaver | May 1995 |
| 59. | Household Semi－public Goods and the Estimation of Consumer Equivalence Scales：Some First Steps | Bruce Bradbury | May 1995 |
| 60．今 | Wage and Income Inequality in Two Welfare States：Australia and Sweden | Peter Saunders \＆ Johann Fritzell | $\begin{array}{r} \text { August } \\ 1995 \end{array}$ |
| 61． | The Changing Mix of Welfare in Health Care and Community Support Services | Michael Fine | $\begin{array}{r} \text { August } \\ 1995 \end{array}$ |
| 62．§ | Evaluation and Research in Social Policy | Peter Saunders\＆ Michael Fine | December 1995 |
| 63．今 | Unpacking Inequality：Wage Incomes，Disposable Incomes and Living Standards | Peter Saunders | December 1995 |
| 64． \ | A Challenge to Work and Welfare：Poverty in Australia in the 1990s | Peter Saunders | December 1995 |
| 65． ४ | Social Policy and Personal Life：Changes in State， Family and Community in theSupport of Informal Care | Sheila Shaver \＆ Michael Fine | December 1995 |
| 66. | Household Income Sharing，Joint Consumption and the Expenditure Patterns of Australian Couples and Single People | Bruce Bradbury | May 1996 |


| 67. | Explaining Changes in the Social Structure of Employment: The Importance of Geography | Boyd Hunter | June 1996 |
| :---: | :---: | :---: | :---: |
| 68. | Liberalism, Gender and Social Policy | Sheila Shaver | July 1996 |
| 69. | Redistribution by the State in Austria | Alois Guger | October 1996 |
| 70. | Economic Crisis and Social Policy in Finland in the 1990s | Hannu Uusitalo | $\begin{array}{r} \text { October } \\ 1996 \end{array}$ |
| 71. | Sole Mothers in Australia: Supporting Mothers to Seek Work | Marilyn McHugh \& Jane Millar | November 1996 |
| 72. | 'All Else Confusion': What Time Use Surveys Show About Changes in Gender Equity | Michael Bittman \& George Matheson | November 1996 |
| 73. | Are the Low Income Self-employed Poor? | Bruce Bradbury | December |
| 74. | Social Policy in East Asia and the Pacific Area in the Twenty-First Century: Challenges and Responses | Peter Saunders | December 1996 |
| 75. | Dawning of a New Age? The Extent, Causes and Consequences of Ageing in Australia | Peter Saunders | December 1996 |
| 76. | Poverty, Choice and Legitimacy | Peter Saunders | $\begin{aligned} & \text { March } \\ & 1997 \end{aligned}$ |
| 77. | The Restructuring of the Canadian Welfare State: Ideology and Policy | Maureen Baker | June 1997 |
| 78. | Developing Policy Planning and Research Capabilities in the Asia Pacific | Peter Saunders | October |
| 79. | New Relations of Welfare in the Contracting State: The Marketisation of Services for the Unemployed in Australia | Tony Eardley | October 1997 |
| 80. | Coordinating Health, Extended Care and Community Support Services: Issues for Policy Makers and Service Providers in Australia | Michael Fine | $\begin{array}{r} \text { October } \\ 1997 \end{array}$ |
| 81. | How do the Elderly in Taiwan Fare CrossNationally? Evidence from the Luxembourg Income Study Project | Peter Saunders \& Timothy M. Smeeding | $\begin{gathered} \text { April } \\ 1998 \end{gathered}$ |
| 82. | An Australian Model for Labour Supply and Welfare Participation in Two-adult Households | Guyonne Kalb | June 1998 |
| 83. | The Land of the Lost Long Weekend? Trends in Free Time Among Working Age Australians, 1974-1992 | Michael Bittman | June 1998 |


| 84. | Defining Poverty and Identifying the Poor: <br> Reflections on the Australian Experience | Peter Saunders | June 1998 |
| :--- | :--- | :--- | ---: |
| 85. | An Equivalence Scale for Time | Michael Bittman <br> \& Robert E. <br> Goodin | July 1998 |
| 86. | The Changing Boundary Between Home and <br> Market: Australian Trends in Outsourcing <br> Domestic Labour | Michael Bittman, <br> Gabrielle <br>  <br> George Matheson | July 1998 |
| 87. | Incomes, Incentives and the Growth of Means | Gerry Redmond |  |


| 101. | Home and Away: Reflections on Long-term Care <br> in the UK and Australia | Melanie <br> Henwood | June 1999 |
| :---: | :--- | :--- | ---: |
| 102. | Australian Attitudes to Unemployment and <br> Unemployed People |  <br> George Matheson | June 1999 |
| 103. | The Costs of Children: Budget Standards <br> Estimates and the Child Support Scheme | Marilyn McHugh |  |$\quad$ July 1999

## SOCIAL POLICY RESEARCH CENTRE REPRINTS

1. Russell Ross (1988), ‘The Labour Market Position of Aboriginal People in Non-metropolitan New South Wales', Australian Bulletin of Labour, 15(1), December, 29-56.
2. Peter Whiteford (1989), 'Taxation and Social Security: An Overview', Australian Tax Forum, 6(1), 2-39.
3. Peter Saunders and Garry Hobbes (1988), 'Income Inequality in an International Comparative Perspective,' Australian Economic Review, 3rd Quarter, 25-34.47
4. Bruce Bradbury (1989), ‘Family Size Equivalence Scales and Survey Evaluations of Income and Well-being', Journal of Social Policy, 18(3), July, 383-408.
5. Peter Whiteford (1989), 'Taxation Reform and the Tax Threshold', in John G. Head, ed., Australian Tax Reform in Retrospect and Prospect, papers presented at a conference organised by the Centre of Policy Studies, Monash University, Conferences Series no. 8, Australian Tax Research Foundation, Sydney, 219-47.
6. Bruce Bradbury (1989), 'The "Family Package" and the Cost of Children', Australian Social Policy, 1(12), Winter, 21-51.59
7. Cathy Boland (1989), 'A Comparative Study of Home and Hospital Births: Scientific and Normative Variables and Their Effects', in Celebrating a Revolution in Birth: Proceedings of 10th National Homebirth Conference, Sydney, 19-33.
8. Peter Saunders and Bruce Bradbury (1991), 'Some Australian Evidence on the Consensual Approach to Poverty Measurement', Economic Analysis and Policy, 21(1), March, 47-73.
9. Peter Saunders, Helen Stott and Garry Hobbes (1991), 'Income Inequality in Australian and New Zealand: International Comparisons and Recent Trends', Review of Income and Wealth, 37(1), March, 63-79.
10. Bruce Bradbury, Jenny Doyle and Peter Whiteford (1993), 'Trends in the Disposable Income and Housing Costs of Australian Families', Greg Mahoney, ed., The Australian Economy under Labor, Allen and Unwin, Sydney, 137-158.
11. Peter Saunders (1991), 'Selectivity and Targeting in Income Support: The Australian Experience', Journal of Social Policy, 20(3), 299-326.
12. Bruce Bradbury and Peter Saunders (1990), 'How Reliable are Estimates of Poverty in Australia? Some Sensitivity Tests for
the Period 1981-82 to 1985-86', Australian Economic Papers, 29(55), December 154-81.
13. Russell Ross and Peter Saunders (1993), ‘The Labour Supply of Sole Mothers and Married Mothers in Australia: Evidence from the 1986 Income Distribution Survey', Australian Economic Papers, Vol. 32, June, 116-133.
14. Russell Ross and Peter Whiteford (1992), 'Poverty in 1986: Aboriginal Families with Children', Australian Journal of Social Issues, 27(2), May, 92-111.
15. Peter Saunders and Peter Whiteford (1990), ‘Compensating Low Income Groups for Indirect Taxes', Australian Tax Forum, 7(4), 443-64.
16. Peter Saunders (1990), 'Reflections on the Review of the HACC Program', in A. Howe, E. Ozanne and C. Selby Smith, eds, Community Care Policy and Practice: New Directions in Australia, Public Sector Management Institute, Monash University, Victoria, 201-12.
17. Peter Saunders and George Matheson (1991), 'Sole Parent Families in Australia', International Social Security Review, 44(3), 51-75.
18. Bruce Bradbury (1992), 'Unemployment, Participation and Family Incomes in the 1980s', Economic Record, 68(203), December, 328-42.
19. Peter Saunders (1991), 'Employment Growth and Poverty: An Analysis of the Australian Experience 1982-1990’, in Michael Johnson, Peter Kriesler and Anthony D. Owen, eds, Contemporary Issues in Australian Economics, The Economic Society of Australia, Macmillan, Australia, 105-33. (Also excerpts in ACTCOSS News, 5 October, 12-14.)
20. Peter Saunders (1991), 'Efficiency and Effectiveness in Social Policies: an International Perspective', in T. P. Hardiman and Michael Mulreany, eds, Efficiency and Effectiveness in the Public Domain, Institute of Public Administration, Dublin, 78-117.
21. Peter Saunders and George Matheson (1991), 'An Ever Rising Tide?: Poverty in Australia in the Eighties', Economic and Labour Relations Review, 2(2), December, 142-71.
22. Peter Whiteford (1991), 'Are immigrants over-represented in the Australian social security system?', Journal of the Australian Population Association, 8(2), November, 93-109.
23. Bruce Bradbury (1993), 'Family Assistance and the Incomes of Low Wage Families', Social Security Journal, March, 1-18. and
Bruce Bradbury (1993), 'Family Assistance, Replacement Rates and the Unemployment of Married Men', Australian Bulletin of Labour, Vol. 19, No. 2, June, 114-132.
24. Peter Saunders (1993), 'Recent Trends in the Size and Growth of Government in OECD Countries', in Normal Gemmell, ed., The

Growth of the Public Sector: Theories and International Evidence, Edward Elgar, Aldershot, 17-33.
35. Timothy M. Smeeding, Peter Saunders, John Coder, Stephen Jenkins, Johan Fritzell, Aldi J. M. Hagenaars, Richard Hauser and Michael Wolfson (1993), 'Poverty, Inequality and Family Living Standards Impacts Across Seven Nations: The Effects of Noncash Subsidies for Health, Education and Housing', The Review of Income and Wealth, Series 39, No. 3, September, 229-256.
36. Peter Saunders and Michael Fine (1992), ‘The Mixed Economy of Support for the Aged in Australia: Lessons for Privatisation', Economic and Labour Relations Review, 3(2), December, 18-42.
38. Sheila Shaver (1993), 'Body Rights, Social Rights and the Liberal Welfare State', Critical Social Policy, Issue 39, Winter 1993/94, 66-93.
39. Bruce Bradbury (1993), 'Unemployment, and Income Support: Challenges for the Years Ahead', Economic Papers, Vol. 12, No. 2, June, 14-31.
40. Peter Saunders (1993), 'Married Women's Earnings and Family Income Inequality in the Eighties', Australian Bulletin of Labour, Vol. 19, No. 3, 3-22.
44. Sheila Shaver and Jonathan Bradshaw (1995), ‘The Recognition of Wifely Labour by Welfare States', Social Policy and Administration, Vol. 29, No.1, March, 10-25.
46. Peter Saunders, Björn Halleröd and George Matheson (1994), 'Making Ends Meet in Australia and Sweden: A Comparative Analysis Using the Subjective Poverty Line Methodology', Acta Sociologica, Vol. 37, No. 3, 3-22.
48. Peter Saunders (1993), 'Poverty and Inequality: Social Security in the 1990s', in J. Disney and L. Briggs, eds, Social Security Policy: Issues and Options, papers from the Conference, 'Social Security Policy: The Future', November, AGPS 29-48.
49. Peter Saunders (1994), 'Rising on the Tasman Tide: Income Inequality in Australia and New Zealand', Social Policy Journal of New Zealand, Issue 2, July, 97-114.
52. Peter Saunders, ‘The Immigrant Dimension of Income Inequality' in J. Neville, ed., As the Rich Get Richer: Changes in Income Distribution, Committee for the Economic Development of Australia (CEDA), Sydney, 66-86.
53. Peter Saunders (1995), 'In Defence of a Poverty Line', Just Policy, No. 4, September, 9-16.
54. Peter Whiteford (1995), ‘The Use of Replacement Rates in International Comparisons of Benefit Systems’, International Social Security Review, Vol. 48, No.2/95, 3-30.
55. Peter Saunders (1995), 'Conditionality and Transition as Issues in the Basic Income Debate', in Income Support in an Open Economy: Basic Income Seminar, Victorian Council of Social Service and the Good Shepherd Youth and Family Services, Melbourne, 51-62.
56. Peter Saunders (1995), 'Improving Work Incentives in a Means-Tested Welfare System: The 1994 Australian Social Security Reforms, Fiscal Studies, Vol. 16, No. 2, May, 145-70.
60. Johan Fritzell and Peter Saunders (1995), 'Wage and Income Inequality in Two Welfare States: Australia and Sweden', in F. Engelstad, R. Kalleberg, A. Lura and L. MjØset, eds, Comparative Social Research, Volume 15: Institutional Aspects of Work and Wage Determination, JAI Press, Greenwich, CT, 187-229.

Also in Comparative Social Research Yearbook
62. Peter Saunders and Michael Fine (1997), 'Evaluation and Research in Social Policy', Australian Journal of Social Research, Vol. 3, No. 1, January, 75-94.
63. Peter Saunders (1996), 'Unpacking Inequality: Wage Incomes, Disposable Incomes and Living Standards', in The Industry Commission Conference on Equity, Efficiency and Welfare, Conference Proceedings, AGPS, Canberra, 225-55.
64. Peter Saunders (1996), 'Poverty in the 1990s: A Challenge to Work and Welfare', in P. Sheehan, B. Grewal and M. Kumnick, eds, Dialogues in Australia's Future: In Honour of the Late Professor Ronald Henderson, Centre for Strategic Economic Studies, Victoria University of Technology, Melbourne, 325-50.
65. Sheila Shaver and Michael Fine (1996), ‘Social Policy and Personal Life: Changes in State, Family and Community in the Support of Informal Care' in Aged and Community Care Division and Office of Disability, Department of Human Services and Health, Towards a National Agenda for Carers, Workshop Papers, No. 22, AGPS, Canberra, 19-36.


[^0]:    * For earlier discussions of these issues we are grateful to Frank Castles, Jay Gershuny, Diane Gibson, Bob Haveman, Bruce Headey, Charlotte Koren, Jane Millar, Axel West Pedersen, Stein Ringen, David Soskice and to participants at conferences of the Paris Group on 'Social Policy and Political Theory' and RC19 of the International Sociological Association in Orviedo, Spain and in departmental colloquia at the University of New South Wales, the University of Bergen and the Norwegian School of Business and Economics.

[^1]:    2 Compare Linder 1970; Hochschild 1989; 1997; Baxter and Gibson 1990; Schor 1991;
    Bittman 1992; 1999; Robinson and Godbey 1997; Esping-Andersen 1999, ch. 4; Bittman and Wacjman 2000; Gershuny 2000; Sullivan and Gershuny 2001. Jacobs and Gerson 1998; Jacobs and Gerson 2001.

[^2]:    3 We here try to confine ourselves to the narrowest form of this variable. We include time spent in one's main or other job, overtime and work brought home and unpaid work for family business or farm. These seem to be most comparable with what respondents would normally have in mind when reporting their 'usual hours worked'. Among the things we excluded (but which are often included) in this variable are: breaks at work, job search activities, communication associated with labour force activities and travel associated with labour force activities.

[^3]:    4 Analogous tasks of caring for dependent relatives living in households other than one's own fall under 'voluntary work and community participation'. We do not include that as part of 'unpaid household labour time' here, because we have no count of how many people outside one's own household one is responsible for caring for, analogous to the number of people in one's own household to which we here index 'necessary unpaid household labour time'.
    5 'Free time', is 'distinguished from leisure, which means some subjectively gratifying activity leisure time' (Andorka 1987, p. 151). People who have 'too much free time' may not find it subjectively gratifying (Campbell, Converse and Rogers 1976, 356-7; Robinson 1977, ch. 6; cf. Gershuny 2000, 202-11).
    6 Robinson $(1977,45)$ canvasses these issues, but he quickly despairs that 'these distinctions between "obligatory" and "discretionary" time become ... difficult and arbitrary' and he abandons any attempt to distinguish whether time spent in 'obligatory activities' (paid and unpaid household labour and personal care) is itself 'obligatory' or 'discretionary'.

[^4]:    7 See, generally, Atkinson 1998. Ideally, we ought to analyze 'disposable income' net of government taxes and transfers here; but income reports on time-use surveys are invariably in 'gross' (pre-tax) terms alone, and that is what we will use in consequence.

[^5]:    9 Similar problems to the last arise, for example, with all estimates of people's 'earnings capacity' (Garfinkel and Haveman 1977; 1978; Haveman 1993; Haveman and Bershadker 1998; 2001; Haveman and Buron 1993) and with all adjustments of GDP to take into account the imputed value of 'household production' (Beckerman 1978; Saunders, O'Connor; and Smeeding 1994; Goldschmidt-Clermont and PagnossinAligisakis 1995; OECD 1995; Ironmonger 1996). Those calculations effectively assume that a large number of new workers could enter the labour market, yet the wage rate associated with any given suite of human capital characteristics would remain unaltered.

[^6]:    13 Our benchmark - because it is based on widely accepted conventions about how to set a poverty line in terms of money - is the proportion of people who fall below the cast poverty line. In the 1992 Australian Time Use Survey data reported below, 13.90 percent of the sample under consideration do so. Ideally, we would like to set our standards for what is 'necessary time in personal care' and 'necessary time in unpaid household labour' in such a way that around the same percentage of the sample under consideration fall short of those marks. These measures meet that criterion well: 12.53 per cent of people in the sample under consideration fall below that standard of 'necessary personal care time', and 15.01 per cent of people fall below that standard of 'necessary unpaid household labour time'. compositions; but the variation is not great and the grounds for thinking that less is 'necessary' in one household type rather than another are sufficiently tenuous that we prefer here simply to ignore those modest variations.

[^7]:    15 One of the set-piece battles in the war between the sexes, when it comes to unpaid household labour, is over whether all that work that women typically do in the household is really necessary after all - though empirical evidence suggests that, when asked separately what really is necessary, men and women tend actually to be in pretty close agreement (Bittman and Pixley 1997, 159-64).

[^8]:    17 We use this survey rather than the subsequent (1997) one because, in virtue of his time as a researcher in the Australian Bureau of Statistics, one of the authors had access to fuller income data for the 1992 survey. Our results are broadly (but not precisely) replicable on the version of that data file that is publicly available.
    If they were doing several things at once they were asked to distinguish their 'main activity' and 'what else they were doing'; here we confine our attention to 'main activity' codes alone. For a sample page from the Australian survey see Stinson (1999). On the 'diary' versus 'recall' methodologies, see Robinson (1985).

[^9]:    20
    We also confined the sample to households populated only by: husbands, wives, lone parents, people living alone or children of any age. Thus, for example, households in which the head's sibling also resides would additionally be excluded.
    21 Although, as discussed in footnote 3 above, our 'paid labour' variable is more restrictive than is often the case.
    22 It varies according to other things, too: particularly the number of children and the age of the youngest child. But to keep the table manageable we confined our report to a simple 'no children' versus 'with children (of any age)' breakdown.

[^10]:    23 Lone fathers are a striking exception. The sample contains few (only seven) households of this type, so those statistics might be unreliable. Still, on that evidence it seems that lone fathers have more free time than childless single men (or indeed any except one other group in Table 1). Lone fathers report doing less time in either paid labour or unpaid household labour than fathers in the other two household categories. One explanation might be that they need to do less. The wage rates of lone fathers are higher ( $\mathrm{A} \$ 21.04 / \mathrm{hr}$ ) than any of the other subgroups we examine, by a wide margin (lone men without children is next highest, at A\$ 15.85; working mothers in one-earner households are lowest, at A $\$ 12.59$ ). Thus lone fathers can earn more money working fewer hours in paid labour. Similarly, their

[^11]:    27 We assigned a wage rate to people in this way only if they reported that 'wages and salaries' constituted their 'main source of income'. Insofar as these people also receive some income from other sources (investments, gifts, government), they will need to work less hours in paid labour than we here estimate to get their household's income up to the poverty line; but since the 1992 Australian Time Use Survey does not itemize income by source, we have no way of adjusting our estimates to avoid this effect.

