



AgEcon SEARCH

RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search

<http://ageconsearch.umn.edu>

aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

No endorsement of AgEcon Search or its fundraising activities by the author(s) of the following work or their employer(s) is intended or implied.

Historic, Archive Document

Do not assume content reflects current scientific knowledge, policies, or practices.

John P. Robinson, Survey Research Center, University of Maryland

1982 Agricultural Outlook Conference, Session #10
Washington, D.C.

For Release: Tuesday, November 3, 1981



The time-diary method of measuring time allocation represents a significant advance in accounting for what may be America's most precious natural resource. It provides a complete accounting of time, one resource that is equally distributed to all segments of our society -- at least in the short run. How productively or how wisely that resource is used is another matter.

Time allocations by themselves are limited in what they reveal about human behavior, such as its productivity or wisdom. In order to answer such questions, the analyst must attach some a priori values (either monetary, utilitarian, or moral) about time, or else ask people themselves how much they value what they do or the "output" from how they spend time. While Jan Peskin's paper has taken the former course, this paper is taking the latter.

It will review some data from the same time-use project, with the same small (by government standards) but nationally representative sample. That sample consisted of a cross-section of almost 2,500 American adults and their spouses who were interviewed and completed 24-hour time diaries in the Fall of 1975. The Survey Research Center of the University of Michigan, which conducted this survey, recontacted the respondents by telephone on three subsequent occasions in 1976 asking them to complete another daily time diary on each occasion. An extensive set of background and "subjective" questions about the values respondent attached to various uses of time were also included in this four-wave study. The final data tape for the project consisted of almost 8,000 variables, making it one of the most complex and richest social science data sets in the United States. Reference will also be made to an earlier non-rural national sample of 1,244 respondents who completed single-day time diaries in the Fall of 1965.

Before proceeding to describe some of the analytic results of this study, readers need to be warned that they will likely encounter some unexpected, counterintuitive and even unexplainable findings; these challenge conventional wisdom about how societal life is organized and is changing. The time diary data, for example, indicate that Americans spend less time working than official government figures on the workweek suggest, that we don't watch nearly as much television as Mr. Nielsen's ratings suggest (although it's still too much), and that bowling rather than baseball is our national sport. Popular models of America as a "post-industrial" society -- either in the midst of a flowering of culture,

cuisine and recreating or evolving into a "harried leisure class" -- receive very little support in the time diary data (Robinson 1979). That may help to set the stage for some findings below, which are perhaps more counter-intuitive than for the other ways Americans use their time.

Time Spent on Housework

In both 1965 and 1975 studies of time, women reported close to 80% of all the household work or family care in America¹ -- a figure that is not atypical for other Western or Eastern European countries in which time diary studies have been conducted. While this proportion was lower in 1975 than a decade earlier, that was mainly a result of women doing less housework and not of men doing more housework. Some of the decreased time was due to the fact that more women were in the paid labor force in 1975 than in 1965, and that fewer were married or had children to care for than in 1965: Extensive multivariate analysis, however, revealed that this was part of a historical shift as well (Robinson 1980) -- for the first time in this century, it appeared that (other things being equal) women were simply devoting less time to housework and family care than had previous generations of women.

The time diary data in both 1965 and 1975 also have provided vivid testimony to how insensitive men's family care time was to the pressures that escalate women's family care time. While a woman's family care time increases dramatically when she becomes married or has children and declines dramatically when she enters the paid labor force, men's housework is barely affected by any of these factors. Even when men retire and their housework does increase, that household work is likely to take place outside the home -- either in the yard or garden, or in stores -- rather than inside the dwelling unit where the "hard core" housework is performed; and men's child care time, within that much smaller time they spent with children than women do, is more likely to be spent in "interactional" activity (e.g. play or reading) rather than custodial (e.g. feeding, dressing) activities with the children involved.

How, then, do women react to the imbalances in this generally sexist division of household labor? Do they find their lives less satisfying, or their free time less fulfilling? Do they look for more help from their husbands in household or child care? The answers to these questions when asked of these same women, in large part, seems to be "No" -- at least in terms of the subjective questions referred to earlier. Even women in the most time-demanding conditions -- employed full-time and with young children at home -- do not describe their lives or their free time as less

¹In this paper, we include in family care, all household cleaning, meal preparation, laundry, child care and shopping. For further data on the methodology of time-diaries, see Szalai et. al. (1972) and Robinson (1977).

satisfying than women who have neither of these responsibilities. Nor do most married women say they expect or wish for more help from their husbands (Robinson 1977). While the proportion of women expressing such opinions in 1975 did increase from the 19% stating that wish in 1965, it still amounted to less than a third of all wives.²

The limits to how much the male-female imbalance in household tasks will be redressed in future marriages may also be suggested by further data about the territoriality of housework evident in the time diaries. One interesting comparison is between single men and single women, neither of whom have marital partners nor children who require attention. Single women (without children) still do two to three times as much housework as their male counterparts. Not that the current state-of-affairs means that women have less free time generally than men. On the whole, adult men and women have roughly equivalent amounts of free time across the life cycle. But, of course, that is because of the imbalance between full-time homemakers (who have more free time than men) and women in the labor force (who have less). What the time-diaries do make abundantly clear is that it is the married working mother who comprises the "harried leisure class" in our society. The quantitative data are reinforced by subjective indicators in the study. Far higher proportions of married working mothers described themselves as "always feel rushed to do the things you have to do" than any other social segment of the population responding to the question.

That is in large part due to their dual career in the home. Table 1 shows the major variations in time devoted to family care activities by women in and out of the paid labor force. For this purpose, the comparable 1965 and 1975 data have been combined into a single data file. The roughly 2-to-1 margin of family care reported by full-time homemakers in Table 1 (442 minutes per day) compared to employed women (224 minutes) was found in both the 1965 study (455 vs. 234 minutes) and the 1975 study (412 vs. 209 minutes). The first column of Table 1 also shows how much other background factors appear to influence family care time, particularly marital status and the age and number of children in the household.

The figures for many of the factors in Table 1 are confounded by this correlation of age with marriage and children. For example, the higher than average housework for women age 30-39 is due to these being the peak years when more and younger are present; the same confounding is present in the figures for women who lived in owned rather than rental housing, or women with lower educational levels. In order to control for the effects of these outside influences, therefore, the data were subjected to

²This results was not apparently an artifact of how the question was phrased or whether the husband was present when it was asked. Follow-up open-end questions reveal that women deeply feel housework is not in their husband's "territory." Moreover, more women expressed a desire for more husband help when the husband was present during the interview than when the woman was interviewed by herself.

the Multiple Classification Analysis (MCA) of Andrews et al. (1969). The MCA program statistically "purifies" these figures for each category for each variable of the effects of other factors that are related to the dependent variable -- here family care time.

The first rows of Table 1 show that when corrected for the effects of all these other factors, employed women still only spend two-thirds as much time on family care (248 minutes per day) as do housewives (406). It is to the economic and social ramification of these differences that we now turn our attention.

The Output from Family Care

Are there benefits from housework time that employed women sacrifice when they invest their time at the workplace as well as the household? What is it that makes them as satisfied with their lot in life as women who do not work? Is there any return for their sacrifice of free time, or their more harried life style? In particular, what differences in "output" from their lower time spent at housework can we identify?

The notion of outputs from uses of time arises, naturally, from attempting to apply the models from the science of economics to how people spend their time. While it may be arguable whether such "rational man" models that economics uses to describe how people (men) spend their money should apply to how women spend their time, many economists have taken that notion very seriously -- particularly in order to explain or predict such a "productive" use of time as housework (e.g. Becker 1965). The problem for the economists then becomes one of specifying the outputs from such allocations of time, and the (male) economists I have been working with in the project have struggled mightily to develop some credible measure of household output. The results of our struggle are clearly not the final word on this issue, but what we have found with our imperfect measures so far may be instructive. If they do no more than to stimulate someone else to devote the effort to developing some better measures of output, the struggle will not have been in vain.

Our measures of output have focused on the "quality" of the final product involved. Quality here refers to how clean and neat the house is, how clean or adequate is the supply of laundry, how good or adequate is the supply of food in the house, and how well-brought up are the children? Probably the ideal way to measure such quality of output is to have standardized ratings of such factors made by experts in the fields of household sanitation, high cuisine or developmental psychology. But that option was clearly not feasible with a national sample scattered across the country and already burdened with providing us with over four hours of information. At this point, then, we were forced to rely mainly on the subjective reactions of the respondents themselves; and it may be argued, as the final consumers of the products involved, they are in the best positions to judge its value.

We, therefore, asked our respondents to rate these various outputs using a 0 to 10 scale (like the one now widely recognized both from television's Gong Show and the movies' depiction of Bo Derek). If they found the cleanliness of the household to be completely satisfactory, they were to rate it a ten and, if they found it completely dissatisfactory, they were to rate it a zero; to the extent they were less than completely satisfied they were to rate it that many numbers below ten or about zero.

Very few householders rated themselves a ten, or even a nine, on this scale. The average rating for household cleanliness was 7.26, with men's ratings being slightly higher than women's. But it is to the women's ratings that we devote most attention, and particularly to the employed women who in Table 1 reported only half to two-thirds much family care time as their homemaker counterparts. These data are shown in Table 2 before and after correction by MCA, with the control factors of age, income, marital status, sex, race and education in the analysis equation. As Table 2 shows, this correction is important because the significantly greater satisfaction with household cleanliness among full time housewives (average score 7.38) than employed women (7.01) does not hold up after these other factors are controlled. In other words, when one takes in account the differential composition of women in and out of the paid labor force in age, income, etc., women's employment per se does not emerge as significant predictor of how satisfied they are with household output.

Moreover, the same pattern tends to be repeated when satisfactions with other household outputs are examined in Table 2. Only for one output, quality of the main meal, is a significant difference found after these other six factors are taken into account; and this only holds at the .05 level of significance. With regard to the amount of food in the house, the cleanliness or availability of laundry or the time spent with or the accomplishments of children, no significant differences existed between employed women (who spend minimal time with it due to outside job pressures) and women who devote at least half again as much time to it in their roles as full-time homemakers.

It might well be argued, however, that our question tapped only the respondent's standards and that women who have entered the paid labor force have simply lowered their standards of achievement; that would account for this lack of difference. We wrestled with this problem for many months and examined many possible remedies. The following approach is the one that we settled on and it involved introducing a quasi standard bearer of performance as a judge. There was no way we could think of to make it the same standard bearer for all respondents. But when we introduced the concept of "a person who is very picky about things", most respondents had no trouble identifying the type of standard bearer we had in mind. We then asked our respondents to say how this "picky person" would rate their household's output on our 0-10 scale for three of our criteria -- cleanliness of the household, cleanliness of the laundry and quality of the main meal. These average ratings are shown in Table 4.

In general, the introduction of the picky person did serve the intended purpose of deflating the values on the 0-10 scale. On the house cleanliness scale, for example, the average rating decreased almost one whole scale point from 7.26 to 6.36. Otherwise, Table 4 shows the adjusted scale produced the same pattern of responses as in Tables 2 and 3: housewives rated their various productivity characteristics higher than employed women did, but not significantly beyond chance after correction for outside factors, i.e. once these other differences were taken into account. The one exception appears to be in the quality of meals, but even here the difference is not highly significant statistically.³

Realizing that this still may not be considered the final word on the topic and that we are still at the mercy of our respondents reporting, I can report that similar results were obtained with what might be considered more objective set of ratings. These were made by the interviewers of the Survey Research Center at the time of their first and only visit to the respondents' premises. The observation about the cleanliness of the household were recorded immediately after the interview; using a scale from 1 (very clean) to 5 (dirty). The average scale rating by the interviewers were 1.91 or close to the "clean" rating on this five-point scale, which is roughly how the respondents rated the cleanliness of their own houses on the 0-10 scale.

The important point, however, is that the average interviewer ratings were once again not significantly different for employed women and for housewives. To be sure, the measures themselves were subject to several uncontrolled sources of interviewer variation and could have been greatly improved with greater recording detail or with proper interviewer training. But the fact that the results converge so well with those from the subjective ratings of respondents themselves leads me to believe that hours spent away from home at the workplace may not be an important source of variation on some very significant criteria of household productivity.

Summary and Conclusions

Despite the large differences in the time spent in housework and other family care activities by full-time homemakers and women in the paid labor force, little evidence was found to indicate that household production suffered significantly as a consequence of employment. Employed women rated the cleanliness of their households almost as favorably as did full-time homemakers, and our outside (interviewer) ratings agreed with that assessment. Little difference was also found in ratings between employed women and housewives in how they evaluated the amount of food, amount and cleanliness of laundry and the accomplishment of their children. While housewives rated the quality of their main meals significantly higher than employed women, it was only at marginal levels of significance.

³Moreover, the differences are reduced into insignificance when other factors are added into the analysis, factors such as the enjoyment the woman derives from the cooking or the energy and effort she devoted to it.

These results do not stand in complete isolation. For example, there does not seem to be any convergent evidence that children raised by mothers who work are any worse off psychologically or emotionally as a result (E.G. Hoffman and Nye, 1974). This raises basic questions about the assumption that household productivity can be properly accounted for strictly in terms of hours spent. If an employed woman can accomplish much the same levels of productivity -- and without feeling more dissatisfied in the process -- then it becomes difficult to argue that all hours of housework should be valued equally.

All of this, of course, hinges on our present tentative measures of output or productivity. As noted earlier, these measures need far more verification of their validity and reliability. In this regard we are currently analyzing the correlation between respondent and interviewer ratings of cleanliness, as well as the ratings of husbands of wives who are employed or not employed in the paid labor force -- since they too are affected by the quality of household output. We have also examined more directly quantitative measurements of output; while it is true that housewives do cook more meals and wash more loads of laundry, the amounts involved fall far short of the two-to-one or three-to-two ratios of time expenditure in Table 1.

Our results are intended to raise questions, rather than to answer them. They are limited by the sex and academic disciplines of the investigators involved. Nonetheless, this reinforces the need for more definitive and comprehensive study of what happens in the household as a result of what women invest and sacrifice in it with their time and energy. At a time when so many women are conflicted about the costs and benefits of dual careers, the time for careful and considered answers is clearly upon us.

Table 1: Differences in Women's Family Care Time by Background Factors

		<u>Combined 1965 - 1975 data</u>	
(N=1138)		<u>Before</u> <u>Correction</u>	<u>After</u> <u>Correction</u>
<u>Paid Labor Force</u>			
Employed	(560)	224 min./day	248 min./day
Housewife	(513)	442	406
Unemployed	(44)	266	335
Student	(21)	169	251
<u>Adults in Household</u>			
One	(236)	228	324
Two	(755)	359	324
Three +	(147)	288	315
<u>Age</u>			
18-29	(329)	301	290
30-39	(284)	379	320
40-49	(250)	337	342
50-65	(274)	280	347
<u>Race</u>			
White	(953)	332	327
Black	(116)	269	295
Other	(69)	283	295
<u>Marital Status</u>			
Married	(779)	369	336
Widowed	(118)	233	293
Divorced	(95)	259	307
Single	(125)	163	281
<u>Children</u>			
None	(471)	231	257
One, over 4 years	(135)	291	295
One, under 4 years	(61)	393	390
Two, over 4 years	(227)	382	355
Two, under 4 years	(130)	434	406
Three+, over 4 years	(46)	417	388
Three+, under 4 years	(59)	535	499
<u>Home</u>			
Owner	(722)	349	322
Renter	(356)	288	323
Both	(25)	234	305
Not Known	(35)	187	355

<u>Religion</u>			
Catholic	(348)	331	321
Protestant	(706)	322	328
Jewish	(50)	315	297
None, other	(34)	272	353
<u>Education</u>			
Grade			
school	(127)	328	313
Some high school	(187)	331	320
High school grad	(507)	330	327
Some college	(176)	306	301
College grad	(134)	308	352
<u>Income (1965)</u>			
Under \$3000	(136)	262	321
\$3000-5999	(158)	317	336
\$6000-9999	(171)	347	328
\$10,000-14,999	(218)	337	321
\$15,000+	(391)	335	318
<u>Year</u>			
1965	(700)	345	331
1975	(438)	288	309

Table 2: Differences between Employed Women and Housewives in Ratings of Satisfaction with Household Cleanliness
 (on scale between 0 = completely dissatisfied and 10 - completely satisfied)

	1975 Data Only	
	<u>Before Correction</u>	<u>After Correction</u>
In paid labor force (n=349)	7.01	7.13
Outside paid labor force (n=324)	<u>7.38</u>	<u>7.30</u>
Difference	.37	.17
Approx. t-value	2.81	1.31
Significance	.01	NS

Table 3: Differences Between Employed Women and Housewives in Satisfaction Levels with Various Household Outputs

	1975 Data Only	
	<u>Uncorrected</u>	<u>Corrected</u>
<u>FOOD</u>		
a) How good are the main meals?		
In paid labor force (349)	7.65	7.76
Outside paid labor force (322)	<u>8.14</u>	<u>8.06</u>
Difference	.49	.30 (Sig \pm at .05 level)
b) Amount of food in the house		
In paid labor force (350)	8.04	8.24
Outside paid labor force (322)	<u>8.47</u>	<u>8.33</u>
	.43	.09 (NS)
<u>CLOTHING</u>		
a) How clean is the laundry?		
In paid labor force (350)	8.71	8.78
Outside paid labor force (322)	<u>9.02</u>	<u>8.93</u>
	.31	.15 (NS)
b) The amount of clean clothes available		
In paid labor force (350)	8.74	8.85
Outside paid labor force (322)	<u>9.14</u>	<u>9.04</u>
	.40	.19 (NS)
<u>CHILDREN</u>		
a) The amount of time you spend with your children		
In paid labor force (169)	6.88	6.95
Outside paid labor force (175)	<u>7.32</u>	<u>7.18</u>
	.44	.23 (NS)
b) How well your children are doing in life		
In paid labor force (169)	8.28	8.36
Outside paid labor force (175)	<u>8.43</u>	<u>8.35</u>
	.15	-.01 (NS)

Table 4: Differences between Employed Women and Housewives on Hypothetical Production Ratings of a "Picky Person"

	<u>Uncorrected</u>	<u>Corrected</u>
How clean your house is?		
In paid labor force (347)	6.13	6.33
Outside paid labor force (316)	<u>6.52</u>	<u>6.36</u>
	.39	.03 (NS)
How clean your laundry is?		
In paid labor force (346)	8.00	8.12
Outside paid labor force (314)	<u>8.26</u>	<u>8.13</u>
	.26	.01 (NS)
How good the main meal of the day is?		
In paid labor force (347)	7.30	7.42
Outside paid labor force (318)	<u>7.92</u>	<u>7.80</u>
	.62	.38 (Sig \pm at .05 level)

References:

- Andrews, Frank, John Sonquist and James Morgan (1969) Multiple Classification Analysis: Ann Arbor, Michigan, Institute of Social Research
- Becker, Gary (1965) "A Theory of the Allocation of Time"
Economic Journal, 11, p. 493-517
- Hoffman, Lois and I. Nye (1974) Working Mothers, San Francisco: Jossey-Bass
- Robinson, John P. (1977) How Americans Use Time, New York: Praeger
- Robinson, John P. (1980) "Household Technology and Household Work" in Sarah F. Berk Women and Household Labor, Beverly Hills, California: Sage Publications, p. 53-67
- Robinson, John P. (1979) "Toward a Post-Industrious Society"
Public Opinion, July/August