

SOCIAL ACTIVITY AND INTERNET USE IN DUAL-EARNER FAMILIES: A WEEKLY TIME DIARY APPROACH

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ABSTRACT

[\(Data Available\)](#)

The ability of time-diary studies to document trade-offs in daily behavior is hampered by their focus on a single day's activities, since there is little time to capture the full range of activities that may result from engaging in any single activity (like IT usage) on a single day. The present study takes advantage of a year 2000 data collection involving a national sample of more than 400 working middle-class families, all of whose members kept a complete weekly account of all their activities. The sample has the additional advantage of being restricted to a relatively homogeneous population group in terms of age, family circumstance and life stage.

The major differences found between Internet users and nonusers in this study is in terms of the 4+ lower paid work hours of Internet users that offset their 4+ weekly hours of Internet use, which took place mainly at home (not at work). That meant that these Internet users did spend more time alone during the week, but not significantly more and not at the expense of contact with family members, relatives or friends. Otherwise the diary figures of Internet users and nonusers are strikingly similar.

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Special appreciation is acknowledged to the Alfred P. Sloan Foundation for their grant support of the data collection analyzed in this article.

Time-diary studies have been used to contrast the daily lives of people in differing social circumstances. In Gershuny (2001), Robinson and Godbey (1999) and studies by other diary analysts, the daily activities of men and women, parents and non-parents and older and younger people are contrasted to draw conclusions about what being in those different social circumstances means in behavioral terms. Similar strategies have been employed to assess the impact of new technologies (Robinson 1972; Gershuny 2001; Nie and Hillygus, this issue).

A major limitation of these diary studies is their short-time focus, usually the single day. That focus provides only a short time perspective of how life is affected. Someone who sleeps three hours more than usual or plays a five-hour game of golf on a diary day has little opportunity to "make up" that time with more normal or needed activity. The problem is further exacerbated if the diary day chosen is a weekend day, a holiday or a vacation day.

One way to circumvent this limitation is to ask respondents to keep diaries over longer time periods, such as two days or a weekend and two weekdays. The problem here, of course, is the added respondent burden of additional reporting that can cause significant and costly declines in respondent cooperation. In the present study, these burdens were virtually maximized since the project sponsors were interested in examining the lifestyles of a population at the peak of time burdens, namely parents and children in dual-income, middle-class families.

SURVEY METHODS

Parents in this national sample of over 400 dual-income families came from three different samples. The first sample was originally contacted as part of the University of Maryland Survey Research Center's 2000 National Survey of Parents (NSOP). These families were identified from a Random Digit Dial (RDD) sample of about 1200 parents, using an initial screen question asking whether there were any children under 18 living in that contacted household. If there was at least one child, a random parent in that household was selected to complete a 25 minute survey about their general patterns of child rearing, along with a detailed time diary of their previous day's activities that took up about half of that interview. At the end of that interview, those parents who were married and employed, whose spouses were also employed and who had at least some college education (or whose spouse was college educated), were asked to participate in a further weekly diary study to be completed by mail. Participants were offered between \$70 and \$100 to participate, depending on the number of children in the family.

Families who agreed to participate were then mailed a weekly time diary packet, which contained a separate diary for each parent and all children in the household. Each diary was for all seven days of the week, asking for each activity for the 24 hours of each day, the time each activity began and ended, the location and other persons present (secondary activity data were not collected).

The “persons present”—or “with whom”—entry identified each child by whether it was the oldest child in the household, the youngest or a middle child. Interviewers at the Survey Research Center called each family by phone about a week after its mailing to determine whether they had received the packet and understood its instructions. They were then called a few days later to further confirm participation and instructions, particularly the need to have completed diaries for *all* members of the family. Upon completion of the weekly diary, each family mailed the completed family diaries back to the University of Maryland.

Of the initial sample of 1200 families, only 450 met the criteria for inclusion into the Sloan Foundation study criteria, namely being a parent in a middle-class family in which both parents worked 20 or more hours per week. Of these families who were mailed the diary packet, only 128 returned diaries that met the criteria for providing full weekly accounts for all family members.

Because of the small sample size, and the high cost of reaching and recruiting cooperating families, a more cost-efficient method of locating families was required. That involved using the sample facilities of two organizations that already had recruited large national panels of respondents willing to participate in various surveys. Because of their large sample base and previous determination of the demographic composition of their samples, both firms were readily able to contact families meeting the study’s strict sampling criteria (roughly one eligible family for each 8–12 telephone numbers called). The two panel sample studies, one from Market Facts and the other National Family Opinion (NFO), were conducted separately using diary forms, data collection procedures and payment schedules determined to be most appropriate for each organization. In both studies, about a third of the panel families contacted returned satisfactorily completed family diaries. These samples, about 200 from Market Facts and 130 from NFO, also completed other survey questions asked of parents in the University of Maryland NSOP.

Comparison of the weekly time diaries showed rather consistent results across the three data collection efforts. Parents in the commercial panel sample reported somewhat more time in religious and other organizational activity in their diaries than in the University of Maryland survey (both the weekly diary and the initial NSOP telephone survey), and the mothers in these samples reported somewhat less time at work. Overall, however, the three samples reported similar enough weekly behavior to warrant combining them into the single sample examined in the following analysis.

This analysis follows the logic and procedures used in the preceding article for analyzing diary data. Thus, those 351 parental respondents who reported any time using the Internet or personal computer at any time during the diary week were coded as being “users”, while the remaining 451 parents were coded as nonusers. The difference between the data in Tables 1 and 2 in the present analysis (which are equivalent to those reported in Tables 3–5 of the preceding article) is that the comparisons are over a complete weekly time period and not a single day—one in which it is possible that a single long

episode or type of day chosen could overly influence a full range of activities to be represented. The other value of the analysis in the present tables is that they are for a highly homogeneous sample, and not one where age, gender, education, employment or life-stage could account for the differences that are found. Moreover, the MCA procedures employed in the previous article are again used to adjust for any undue influence of these factors.

RESULTS

Activities: The weekly hour differences in Table 1 generally indicate very little difference in the social lives of parents who use IT and those who don't. Religious, organizational, visiting, event-going, home conversation and telephone activities of the two groups are all within a half hour per week on the right side of the table—as are media and other free-time activities. Among non-free time activities, family care is about 10 percent higher among IT users; but that is not statistically significant, nor is the one hour less in personal care or the small difference in total travel.

What does distinguish the two groups in Table 1, naturally enough, is the 4.5 hours of greater IT use of users. That seems to come at the expense of about five hours less work time. Whether there is a direct trade-off involved, perhaps as IT users do their work at home or use IT as a substitute for work, cannot be determined from these data using the present data set at this time.

There are important gender differences underlying the Table 1 results. While the results for men (fathers) hold much as in Table 1, the results for mothers are more complex. Among non-free time activities, Internet-using women report doing three hours more housework and doing four hours less personal care than mothers who were not using computers. In their free time, mothers who were online reported two hours more time in the various social activities identified in Table 1 and an hour more mass media use; offsetting this was about 4 hours less time in fitness/hobby and other free-time activities.

With Whom and Location: Work time also emerges as the pivotal factor in the Table 2 breakout of with whom and location factors. IT users spend 5+ less hours with work colleagues, which is significantly less and a figure that is about 15 percent less than that for nonusers. IT users also spend 3+ hours more time alone, or about 10 percent higher than for IT nonusers. Otherwise, time spent with spouse and children, with friends and with others is about the same in both groups.

Again, the patterns are different for mothers, who report less diary time alone and with relatives; among fathers, Internet users spend more time alone *and* with friends, and spend less time with spouses, children and co-workers than nonusers.

Finally, in terms of location, it is again time at offices and other work locations that is significantly (6 hours) lower among IT users, while time at

**TABLE 1: ACTIVITY DIFFERENCES BETWEEN INTERNET USERS AND NONUSERS:
WEEKLY DIARY BASIS FOR WORKING PARENTS (YEAR 2000–2001 WEEKLY TIME DIARY DATA
FOR WORKING PARENTS—IN ACTUAL HOURS PER WEEK)**

	IT Nonuser (n=451)	IT User (n=351)	IT Difference	Free Time Activities	IT Nonuser (n=451)	IT User (n=351)	IT Difference
Non-Free Time Activities							
Work/Education	40.9	35.1	-5.8*	Social: Religion	1.3	1.2	-.1
				Organizations	1.4	1.4	0
Family Care	21.3	23.4	+2.1	Social Events	1.4	1.6	+2
				Social/Visit	3.1	3.0	-.1
Personal Care	73.3	72.3	-1.0	Conversation/Home	2.1	2.4	+3
				Telephone	4.0	4.0	0.0
Total Non-Free Time	<u>135.5</u>	<u>130.8</u>	<u>-4.7*</u>	Mass Media	14.3	14.2	-.1
				Other (fitness/hobby)	4.9	4.8	-.1
Travel	11.0	10.8	-.2	Computer	0	4.6	+4.6*
				Total Free Time	32.5	37.2	+4.7*
				Total Time (Hrs/wk)	168.0	168.0	0.0

**TABLE 2: IT USER VS. NONUSER DIFFERENCES IN SOCIAL COMPANY AND SOCIAL LOCATION:
WEEKLY DIARY BASIS (YEAR 2000–2001 WEEKLY DIARY DATA—IN ACTUAL HOURS PER
WEEK)**

	Weekly		
	Non-IT Users (n=451)	IT Users (n=351)	IT Difference
I. Social Company			
Time alone (awake)	36.9	40.3	+3.4
Spouse	76.2	74.5	-1.7
Oldest child	29.6	29.8	+2
Middle child	7.8	8.7	+9
Youngest child	28.3	28.0	-.3
Coworkers	30.8	25.6	-5.2*
Friends	3.3	3.5	+2
Others	11.0	10.3	-.7
II. Location			
At Home	101.3	106.7	+5.4*
Others' Home	15.1	14.3	-.8
Office/Factory	34.0	28.0	-6.0*
Grocery Store	.7	.8	-0.8
Mall/Store	1.8	2.1	+3
School	1.0	1.1	+1
Restaurant/Bar	2.0	1.9	-0.1
Car	10.3	10.6	+3
Other vehicle	2.0	2.4	+4

*Difference significant at less than .05 level

home is 5 or more hours higher. No significant differences are found for time in others' homes, in stores, in schools, in restaurants—or in other locations. Again the higher times at home and lower times at workplaces are found most clearly among fathers.

SUMMARY AND CONCLUSIONS

In comparing the weekly social activities of IT users among the relatively homogeneous population segment of college-educated parents in dual-income families, little evidence of constrained social life in terms of visiting, organized get togethers, scheduled social events or conversations is found. IT users do spend significantly more time alone and at home, and less time with work colleagues and in work settings. However, IT users do not spend significantly less time with family members, with friends or with others.

It is not clear what social trade-offs may be involved in the clear difference between IT time alone at home and the work colleague contact time at the workplace evident in several places in Tables 1 and 2. How much of that workplace time involves actual conversation or interaction is not clear because secondary activity conversation data were not collected in these diaries. Whatever the difference, there seems minimal interference in the other aspects of social life of more active IT users. For reasons that are not entirely clear at present, these differences apply more to fathers than to mothers.

Some preliminary analyses have also been conducted on the weekly diaries for the more than 700 children who live in these families, about half of whom reported any IT use during the diary week. Again, there were minimal differences (about 2 hours more) in the social activities of Internet using children, who also averaged about 5.5 more hours of IT use along with 2 hours more media use than children who were nonusers. Offsetting this were about 5 hours less time in fitness/hobby/other free time and about 5 hours less time in personal care. As with parents, then, there is little evidence of declining social activity among Internet-using children.