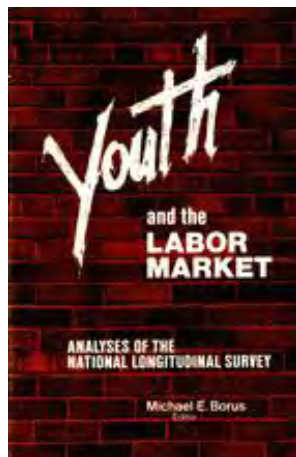

Upjohn Institute Press

The Time-Use Behavior of Young Adults

Ronald D'Amico
Ohio State University



Chapter 7 (pp. 193-238) in:

Youth and the Labor Market: Analyses of the National Longitudinal Survey

Michael E. Borus, ed.

Kalamazoo, MI: W.E. Upjohn Institute for Employment Research, 1984

DOI: 10.17848/9780880996273.ch7

Chapter 7

The Time-Use Behavior of Young Adults

Ronald D'Amico*

I. Introduction

The modern industrial age has become increasingly time-conscious, with the beginnings and endings of daily activities regulated by the clock to an extraordinary degree. In recent years, social scientists have come to appreciate that such synchronization of our daily lives affords unique research opportunities across a range of research areas. At the macro level, for example, time expenditures bear important implications for the quality of life. Thus, how much time is spent on household chores, or in transportation, or in leisure activities, and how time is apportioned while at work might all well serve as useful social indicators. Similarly, time-use patterns constitute useful measures of the preferences and constraints of societies or individuals, especially given time scarcity as an endemic social problem (Linder 1970).

At the micro level, time allocations are also of considerable interest. Economists investigate how time "inputs" are converted to "outputs" of various sorts. For example, family members are hypothesized to apportion their time

*Special thanks to Paula Baker for very capable research assistance, to Joel Rath for programming expertise and to Sherry Stoneman for excellent clerical help.

between market and nonmarket activities in order to maximize the family's consumption of market and home goods (see, for example, Becker 1965; and Gronau 1973). Elsewhere, parent-child interactions are viewed as investments in the child's human capital development (see, for example, Fleisher 1977). For both analyses, quantifying time expenditures becomes necessary for estimating rates of return. Indeed, the possible applications of time-use data are as unbounded as the imagination of creative researchers, as recent work in family sociology (Berk 1979), education (Biddle, et al. 1981), and social ecology (Melbin 1978) attests.

Unfortunately, the time-use research now available is quite fragmentary, largely reflecting the inadequate data on the time expenditures of individuals. Increasingly, however, this inadequacy is being overcome by systematic data collection efforts, where careful measurement strategies are used to record time allocations for large, representative samples of individuals. The research described here represents the fruits of one such endeavor, the time-use data collected in the third wave of the National Longitudinal Survey (NLS). The goals of this chapter are two-fold: (1) to describe briefly the time allocations of young American adults across a set of activities, and (2) to investigate some of the determinants and/or covariates of time-use expenditures.

II. Measuring Time-Use in the NLS

The third wave of the National Longitudinal Survey was administered primarily in the winter and early spring of 1981 to a nationally representative sample of over 12,000 respondents. The sample members were 16-24 years of age at the time. Data on time-use behavior in these critical years of transition to adult roles has heretofore not been available for large samples of respondents. Because the paucity of time-

use research derives partly from inherent measurement difficulties, a brief discussion of how some of these difficulties were dealt with in the NLS is appropriate here.

The earliest efforts at eliciting time-use information in social research consisted of questions asking respondents to estimate their "usual time" expenditures across a range of activities. While some interesting findings emerged from this research, subsequent investigations have shown this measurement approach to be notoriously unreliable in that respondents consistently overestimate their actual time expenditures. An alternative methodology, found to minimize such reporting errors, is the so-called "time-diary" approach, which asks respondents to report what they were doing minute by minute for a single twenty-four hour period.

A series of methodological studies (Robinson 1977; Juster and Stafford 1983) has shown that the time diary does in fact provide a very reliable indicator of what the respondent was doing and for what length of time for the day in question. Moreover, the time diary is unparalleled in producing time estimates across a very detailed set of activity categories. Nevertheless, the diary has certain limitations which makes its use somewhat problematic. To begin with, the open-ended format of the time diary allows respondents considerable discretion in the way they describe their activities. Many respondents, for example, report "time at work" and "time at school" as homogeneous categories, and make no differentiation according to type of job activity (e.g., type of job task, coffee breaks, training time) or school activity (e.g., class time, study time, extracurricular activities). In-depth analyses of work time or school time then become rather uncertain. Second and more important, the time-use information elicited for a single day might be atypical of the way each respondent *usually* allocates time, making each respondent's time expenditure data highly dependent on the day for which the diary was administered. Indeed, Robinson

(1977) reports that a substantial proportion of respondents report their diary day is atypical in important respects. This imprecision in measurement is of minimal consequence if one is interested in describing time-use behavior in the aggregate, since the deviations presumably cancel out when averaged across respondents. However, since the NLS is primarily used for micro-level analyses, this instability can result in seriously downwardly biased effect coefficients.

For these reasons, the time diary was deemed inappropriate for the NLS and an alternative was devised. The approach used asks respondents to report their time expenditures on select activities "during the last seven days." Its advantage derives from the ability to tailor questions to focus in-depth attention on a few activities of greatest general interest. Additionally, as a measurement device it was believed to incorporate some of the desirable characteristics of both the time diary and "usual time" approach. By asking about a specific and recent time period, the recall problems plaguing the "usual time" approach should be minimized; at the same time, by broadening the focus beyond interest in just a single day, the instability of time-use estimates should be attenuated relative to a time diary approach. Finally, asking about a week's activities seems to correspond more closely to the way people actually schedule and organize their time. (For a fuller discussion of the tradeoffs involved in choosing a time-use methodology, see Baker, et al. 1983). A methodological study conducted on pretest data, which explicitly compared time diary and seven-day time estimates, lent further credence to the utility and reliability of adopting a seven-day approach for select activities (Baker, et al. 1983).

Accordingly, the NLS asked respondents in-depth questions about their time expenditures during the last seven days in a number of activity areas. These areas include:

- (1) **Time at work**—Questions asked respondents about total time spent working for pay in each of the last seven days for each of several jobs. Additional items probed what percent of their work time for their major employer was spent reading or writing, working with tools, and dealing with people, and whether they were participating in a formal apprenticeship or job training program while at work. Finally, respondents were asked to estimate the length of time and miles of their usual trip to work.
- (2) **Time at school**—Respondents reported their time spent at school for each of the last seven days. Of the total time spent at school, estimates were then given for the time spent actually attending classes or labs and time spent studying at school. Other time spent studying in the last seven days, as well as distance and usual time spent traveling to school are also available.
- (3) **Time in government or private training programs**—Respondents enrolled in such programs were asked about the time spent attending training sessions, studying for the program and in transportation in the last seven days, in a series of questions parallel to those asked of students in regular schooling.
- (4) **Job search**—An extensive series of questions on job search behavior was asked of those looking for work. This sequence asks which of 10 specific methods the respondent actually used (e.g., placed or answered newspaper ad, checked with friends, used a state employment agency, etc.) and which led to contacts with employers. Time spent on each method in the last seven days was also elicited.
- (5) **Time spent sleeping in the last seven days.**
- (6) **Time spent watching TV in the last seven days.**
- (7) **Additional information** was elicited on the respondent's responsibility for household chores and child care. This

included a scale inquiring whether the respondent was usually the one in the household who did each of a number of chores, including child care. Answers were in response categories ranging from "do it almost never" to "do it almost all of the time." Because pretest results showed that the reliability of time estimates for household chores and child care dropped off sharply when respondents were asked to recall beyond a single day, time-use estimates for these activities were elicited for the day preceding the interview day only.

- (8) Finally, time spent reading "yesterday" was also estimated by all respondents.

III. The Concomitants of Time-Use

Following Robinson (1977), time allocations can be conceptualized as being determined by four sets of factors: (1) personal characteristics, including race and social background; (2) role obligations, including whether the respondent is employed, a student, a parent, a spouse, and so on; (3) ecological characteristics, including the respondent's living arrangements; and (4) resources, such as income and the utilization of labor-saving technology. The way each of these relate to time-use expenditures on the activities described above will be considered in the following sections. Since the relationship between sex and time use is certain and strong, all cross tabulations will be presented separately for males and females.

Personal Characteristics

The first set of comparisons regarding the relationship of personal characteristics to time-use behaviors is presented in table 7.1, which reports time-use breakdowns by ethnic origin. Turning first to sex differences in employment characteristics, substantial differences in the proportion of

Table 7.1
Time-Use for Selected Activities: Results by Ethnic Origin and Sex

Activity	Black		Hispanic		White	
	M	F	M	F	M	F
Working for pay						
% with a job	56.1*	41.6 †	63.8	49.6†	68.1	61.7
Hours spent working for pay	32.48	30.31†	35.09	30.84†	32.95	28.44
% time writing/reading ^a	21.5	36.7	17.9	42.4	18.5	38.9
% time working w/hands ^a	75.1	71.4	80.0	72.0	78.1	72.3
% time with people ^a	53.0	60.0†	47.6	65.0	50.7	67.8
Hours spent for trip to work (one-way)	.29	.33†	.27	.28†	.27	.23
Time at school						
% enrolled in school	40.0*	44.6	40.6*	37.2	45.7	42.1
Hours spent at school	29.68*	25.29	24.50*	24.55	27.92	26.16
Hours spent in class	21.77*	19.37	18.35	18.57	19.01	18.92
Hours spent studying at school	4.64	3.81	3.55*	3.10†	5.05	4.37
Other time at school	3.27	2.11	2.60	2.88	3.86	2.87
Hours spent studying not at school	7.88	8.07†	6.70	7.66†	7.49	9.04
Total hours spent studying ^b	12.52	11.88†	10.25*	10.76†	12.54	13.41
Hours spent for trip to school (one-way)	.39*	.37†	.31	.36	.29	.30

Table 7.1 (continued)

Activity	Black		Hispanic		White	
	M	F	M	F	M	F
Training programs^d						
% participating in programs	3.3	4.5	4.2	3.0	4.1	3.3
Hours spent at training programs	16.12	18.64	15.61	21.94	16.37	15.19
Hours spent in class	12.59	15.00	12.56	18.70	13.34	13.23
Hours spent studying at program	1.05	1.83	1.12	.66	1.64	1.38
Other time at program	2.48	1.81	1.93	2.58	1.39	.58
Hours spent studying away	4.45	5.86	4.82	6.72	3.06	5.86
Total hours spent studying ^b	5.50	7.69	5.95	7.38	4.70	7.24
Hours spent for trip to program (one-way)	.29	.39	.36	.42	.36	.33
Leisure						
Hours spent reading (not for school) ^c	6.52*	5.30	5.78	5.29	4.93	5.23
Hours spent watching TV	13.35*	18.60†	12.53	16.04†	11.92	14.28
Hours spent sleeping	51.19*	53.34	53.90*	55.34†	52.22	52.90

Hours spent on household chores ^c	9.06*	17.98†	8.55	18.67†	8.17	15.03
N	1555	1525	950	959	3620	3586
Total by race	3080		1909		7206	

UNIVERSE: Youth age 16-24 on interview date. (N = 33,517,000)

NOTE: All time estimates are hours per last seven days; digits to the right of the decimal point are fractional hours.

a. These items represent percent of time at work spent doing each of these three tasks and were adapted from Kohn (1969). To allow for a respondent to be doing multiple job tasks simultaneously, the question wording for these items specifically permitted double counting. Accordingly, percents sum to greater than 100.

b. These figures are the sum of time studying at school (program) and time studying at home.

c. Since time estimates for these activities were asked of “yesterday” only, time estimates were first weighted to produce a uniform frequency distribution across days of the week, and then multiplied by seven to arrive at an hours per last seven days estimate.

d. Includes government training programs (e.g., CETA) and “special” schools (e.g., technical schools, barber schools).

*T-tests for significant differences between males of different ethnic origin treat white males as the reference group. An asterisk indicates that the starred value is different from the corresponding value for white males at the .05 level.

†T-tests for significant differences between females of different ethnic origin treat white females as the reference group. A cross indicates that the marked value is different from the corresponding value for white females at the .05 level.

respondents who are employed appear. Regardless of ethnic group, males are anywhere from 6 to 14 percentage points more likely to work than are females. Notable racial differences in employment status also emerge, with blacks least likely and whites most likely to be employed. Hispanics occupy an intermediate position between these two groups.

Among those who work, however, the length of the average workweek shows only modest variance across race and sex groups. Hispanic males have the longest workweek, at 35 hours, while white females have the shortest week, at 28 hours. Across all racial groups, women not only have lower labor force participation rates but also work from 2 to 4 fewer hours per week than do males. Presumably these sexual differences in work intensity reflect in part the proclivity of married women, even at this age range, to work only part time while keeping house. Among men, the fact that the average workweek is as low as it is doubtless reflects the inclusion in the sample of students, who also tend to work only part time.

Looking at the kinds of tasks youth perform on their jobs, we see marked sex differences but fairly modest race differences. Females of all race groups spend about twice as much time as males reading and writing; indeed, no more than about one-fifth of the average male workweek involves such tasks. Women similarly spend considerably more time than males dealing with people while on their jobs. Interestingly, males and females spend about equal amounts of time working with their hands, with such tasks comprising the largest part of the workweek for all race and sex groups.

These figures correspond well to what might be expected, given the well-known sex differences in distributions across occupational categories. The clerical and sales positions, at which women typically labor, are reflected in the high time expenditures in reading and writing and working with hands, in the former case, and dealing with people, in the latter.

Similarly, the disproportionate representation of young males in manufacturing and craft positions explains their intensive involvement with manual tasks. In any case, these data provide an informative and useful way of quantifying the sexual division of labor in the American workforce. Along these lines, the surprisingly close correspondence of job task time expenditures across racial groups is noteworthy. Perhaps, as others have found with respect to wages (e.g., Rosenfeld 1980), the races begin to diverge markedly in their job tasks only further along in their careers.

Turning to the results for time at school, Hispanic and white males are more likely to be enrolled than female Hispanics and whites, but the opposite pattern holds true among blacks. Indeed, 45 percent of all black females are enrolled, second only to the 46 percent figure for white males. With the exception of black males, all groups spend roughly the same amount of time per week attending classes, just short of four hours per school day. However, there are notable discrepancies in total amount of time various groups spend actually at school per week, suggesting that some groups spend more time in extracurricular or other leisure activities at school. In particular, black and white males spend more time at school than do females, and Hispanics of both sexes spend the least amount of time there. Some of these differentials represent the greater amounts of study time which black and white males spend at school, but equally as notable is their proclivity to spend unstructured "other time" at school, that is, time at school spent neither studying nor attending classes. Apparently, black and white males strongly gravitate towards their neighborhood schools as foci for recreation and leisure time activities. Interestingly, this pattern does not hold for Hispanic males, who spend among the least time of all groups in "other time" at school. Indeed, with their low time expenditures in classes, studying at school, and, at least for males, spending other time at school, Hispanics in general seem least involved in schools as institutions.

Finally, with respect to the school section, some modest differences in total study time emerge across race and sex groups. Whites, and especially white females, study somewhat more on average than do others. Not surprisingly, given their low time investments in educational institutions, Hispanics spend the least total time studying of all groups.

Turning to the results for participation in government sponsored or other vocational training programs (excluding those sponsored by employers or unions), note that Hispanic and white males are about 1 percentage point more likely to participate in such programs than their female counterparts. Surprisingly, this sex differential in participation rates is reversed for blacks. In any case, no more than about 4 percent of any race-sex group participated in such programs in spring 1981. While these data show no notable overall race differences in levels of participation, previous work with NLS data has shown marked race differences in participation rates by *type* of program.

Because of the low participation rates, cell sizes are so small that estimates of participation are somewhat unreliable. Nonetheless, the patterns that do emerge suggest that trainees invest substantial time in these programs, both attending classes and studying, with total time involvements exceeding 20 hours per week.

Elsewhere in table 7.1, American youth are shown to spend substantial parts of their week watching TV, with females watching about 2.3 hours a day and males about 1.8 hours. Blacks, and especially black females, seem to watch a bit more TV per week than either whites or Hispanics.

In contrast to this rather substantial leisure time expenditure, youth spend strikingly little time reading during their week. Including the reading of newspapers, magazines, and all other materials not directly related to school, respondents report spending less than three-quarters of an hour per day on these activities.

Finally, in table 7.1, youth are shown to sleep about 7.5 hours per night, and apparently have some modest responsibility for household chores. On this latter score, unsurprisingly, women of all races spend about twice as much time as males in domestic activities. Time expenditures on household chores will be investigated in more detail in a subsequent section.

Table 7.2 extends the investigation of the relationship between personal characteristics and time-use expenditures by reporting results by family socioeconomic status (SES). While any number of measures of background status could have been used, we chose the Duncan status score of the head-of-household's occupation when the respondent was age 14. The Duncan status measure was chosen because of its long history as a measure of socioeconomic status in social science research (e.g., Blau and Duncan 1967) and because it is a variable for which few sample cases have missing data. Head-of-household's Duncan score was divided into three categories for purposes of this analysis: low (scores from 0 to 30), medium (scores from 31 to 60), and high (scores from 61 to 100).

Note first the concave shape to the relationship between labor force participation and family background status. The heightened participation rate of those from middle-ranking socioeconomic background may well derive from the difficulty those from the least advantaged families have finding a job, on the one hand, and high college enrollment rates of those from the most privileged backgrounds, on the other. Indeed, that many of the employed from high-status families are actually students working part time is suggested by the relatively short average workweek of this group.

The work experiences of youth from various background statuses differ in other important ways. In particular, differences in the way these youth apportion their time while at work are striking. Those from high socioeconomic status

Table 7.2
Time-Use in Hours for Selected Activities: Results by Sex and Duncan Score
of Occupation Held by Head of Household When R was 14

Activity	Duncan of head					
	Low		Medium		High	
	M	F	M	F	M	F
Working for pay						
% with a job	67.4	56.2†	69.3*	64.5†	65.6	60.8
Hours spent working for pay	34.32*	29.82†	34.16*	29.29†	30.20	27.48
% time writing/reading ^a	16.8*	37.2	19.9	40.0	20.8	40.0
% time working w/hands ^a	81.2*	76.1†	78.1*	72.8†	71.9	65.2
% time with people ^a	50.5	65.6	49.9	69.1	53.1	67.6
Hours spent for trip to work (one-way)	.27*	.24	.26	.23	.25	.23
Time at school						
% enrolled in school	34.7*	33.9†	44.5*	40.8†	60.6	57.5
Hours spent at school	27.90	25.82	27.74	25.54	28.05	26.23
Hours spent in class	20.95*	19.85†	19.54*	19.60†	17.36	17.96
Hours spent studying at school	4.22*	3.60†	4.61*	3.84†	5.96	4.56
Other time at school	2.73*	2.37†	3.59*	2.10†	4.73	3.71
Hours spent studying not at school	6.43*	7.84†	6.57*	8.96†	9.54	10.19

Total hours spent studying ^b	10.65*	11.44†	11.18*	12.80†	15.50	14.75
Hours spent for trip to school (one-way)	.33	.33	.29	.30	.30	.31
Training programs ^d						
% participating in programs	4.4*	3.4	4.4*	3.1	2.7	3.3
Hours spent at training programs	17.20	15.96	17.69	13.72	13.33	18.17
Hours spent in class	13.11	14.09	13.36	10.15†	12.10	16.12
Hours spent studying at program	1.61	.86	1.48	2.41	1.39	1.44
Other time at program	2.48*	1.01	2.85*	1.16	0	.61
Hours spent studying away	2.73	5.73	2.73	4.07†	4.99	8.60
Total hours spent studying ^b	4.34	6.59†	4.21	6.48	7.38	10.04
Hours spent for trip to program (one-way)	.35	.35	.39	.28	.36	.25
Leisure						
Hours spent reading (not for school) ^c	4.45*	4.87†	5.37	5.42†	5.94	6.93
Hours spent watching TV	13.60*	16.86†	11.65*	14.97†	9.81	10.83
Hours spent sleeping	52.66*	54.00†	52.07*	52.55	51.19	52.19

(continued)

Table 7.2 (continued)

Activity	Low		Duncan of head Medium		High	
	M	F	M	F	M	F
Hours spent on household chores ^c	8.67	17.41†	7.61	14.44†	8.08	13.34
N	2489	2459	1199	1165	1109	1088
Total N by Duncan category	4948		2364		2197	

UNIVERSE: Youth age 16-24 for which occupation of head of household when respondent was 14 was reported; excludes respondents with head of household in military. (N= 27,785,000)

NOTE: All time estimates are hours per last seven days; digits to the right of the decimal point are fractional hours.

- a. These items represent percent of time at work spent doing each of these three tasks and were adapted from Kohn (1969). To allow for a respondent to be doing multiple job tasks simultaneously, the question wording for these items specifically permitted double counting. Accordingly, percents sum to greater than 100.
- b. These figures are the sum of time studying at school (program) and time studying at home.
- c. Since time estimates for these activities were asked of "yesterday" only, time estimates were first weighted to produce a uniform frequency distribution across days of the week, and then multiplied by seven to arrive at an hours per last seven days estimate.
- d. Includes government training programs (e.g., CETA) and "special" schools (e.g., technical schools, barber schools).

*T-tests for significant differences between males of different background status treat high status males as the reference group. An asterisk indicates that the starred value is different from the corresponding value for high status males at the .05 level.

†T-tests for significant differences between females of different background status treat high status females as the reference group. A cross indicates that the marked value is different from the corresponding value for high status females at the .05 level.

families spend substantially less time than youth from less privileged backgrounds working with their hands. Indeed, the workweek of those of high status, of both sexes, involves about 10 percentage points less time investment in such activities than those in the lowest SES category. By contrast, males from low SES backgrounds are less likely to be writing or reading in their jobs. These results suggest that labor market stratification by socioeconomic group (if not by race) begins at quite an early age.

A high proportion of those from high SES backgrounds are enrolled as full-time students as of the survey date, suggesting that such youth have assimilated the achievement orientation of their parents or at least are confronted with more propitious opportunity structures. Interestingly, total time spent at school shows little variation across socioeconomic groups, but this uniformity masks important differences in the way youth actually spend time while at school. High status youth spend significantly less time attending classes, presumably representing the fact that a higher proportion of them are college rather than high school enrollees. Additionally, the curriculum offered by the high schools attended by those of higher SES may be less structured and offer more opportunity for independent study. In any event, while these youth spend less time attending classes than others, they spend more time studying and spending free time at school. Apparently, because these youth are presumably less alienated from societal institutions, they carry on more extensive social interactions within the school environment.

This section of table 7.2 shows that high SES youth spend about 2 to 5 more hours studying per week than those of low SES families. Conceivably the higher expectations of the parents and teachers of the former group, and their fewer household and employment obligations, account for their greater diligence.

Finally, table 7.2 shows that time expenditures for TV watching significantly decrease and reading time increases as family background status increases. Nevertheless, even in the highest SES category, youth spend nearly twice as much time watching TV as reading. Sleeping time and time on household chores show only modest variation across SES category, though it is worth noting that the sex differential on time expenditures for household chores is narrowest for those from the highest SES backgrounds.

Enrollment Status

Table 7.3 presents the first set of comparisons showing the relationship between respondents' role obligations and time-use expenditures. This table presents the relation between the youth's enrollment status and time allocations, once again shown separately by sex.

Not surprisingly, the first rows of this table show that a larger percentage of nonstudents are employed and that employed nonstudents work twice as long in their workweek as employed students. What is surprising, however, is the extent of the work involvement of both high school and college full-time enrollees. About one-half of high school and college students of both sexes held a job during the survey week, and for each of these groups the length of the workweek is on average about sixteen hours for females and about eighteen hours for males.

While each of the three groups shown in this table demonstrates substantial work commitment, the nature of the job tasks of each noticeably varies. Moreover, important sex-by-enrollment status interactions emerge. Among males, high school students perform the most manual tasks of the three groups and are least likely to be writing or reading or dealing with people on the job. Just the opposite is true for male college students; they are least likely to be working with their hands and are most likely to be dealing with paper work

and with people. Nonstudents occupy an intermediate position between these two extremes.

For women, the situation is somewhat more complicated. As with males, high school women are most likely and college women least likely to be engaged in manual tasks. In a departure from the pattern observed for males, however, nonstudents are most likely to be reading or writing on the job and least likely to be dealing with people. These sex differentials undoubtedly reflect the fact that female nonstudents of college age are frequently employed in clerical positions, while male nonstudents of like age are more likely to be employed in blue-collar occupations. Also of interest in these rows of table 7.3 is the observation that the sex differences in job tasks remain fairly constant across enrollment status. Among nonstudents, females are nearly as likely as males to work with their hands but are substantially more likely to be dealing with paper work and with people. As if in anticipation of their post-student roles, the sex differences in job tasks remain much the same for both high school and college enrollees. Apparently, the sex typing of job tasks extends even to the very youngest employees with only casual labor force attachments.

In the sections dealing with time at school in table 7.3, note that about 5 percent of nonfull-time students are enrolled part time. However, the total time investment of this subset in school-related activities, including time at school and time studying, is not inconsequential, amounting to over two and one-half hours per week day. Elsewhere, across all enrollment categories, males spend more time at school than females. As observed in a previous table, however, this finding primarily reflects the greater amounts of "other" time males spend at school, rather than any actual sex differences in time attending classes. High school students of both sexes spend more time at school and more time actually attending classes than college goers, but the latter group spends about twice as much time as the former in total time studying.

Table 7.3
Time-Use in Hours for Selected Activities: Results by Sex and Enrollment Status

Activity	High school		College		Nonstudents	
	M	F	M	F	M	F
Working for pay						
% with a job	47.3	44.7	50.4	49.4†	78.8*	65.4†
Hours spent working for pay	17.31	15.40	19.22*	16.64	39.54*	34.56†
% time writing/reading ^a	11.4	25.3	22.6*	34.4†	20.0*	42.9†
% time working w/hands ^a	84.7	77.2	69.7*	63.4†	77.7*	72.7†
% time with people ^a	49.2	78.1	60.0*	71.0†	49.5	63.5†
Hours spent for trip to work (one-way)	.19	.17	.20	.20†	.31*	.27†
Time at school						
% enrolled in school	100	100	100	100	5.4*	5.4†
Hours spent at school	30.80	29.33	27.23*	24.56†	9.40*	8.77†
Hours spent in class	23.52	23.26	15.46*	15.34†	6.85*	6.44†
Hours spent studying at school	3.51	3.18	7.49*	6.19†	2.07*	1.81†
Other time at school	3.77	2.89	4.28	3.03	.48*	.52†
Hours spent studying not at school	5.14	6.85	11.19*	12.15†	5.99	6.40
Total hours spent studying ^b	8.65	10.03	18.68*	18.34†	8.06	8.21†
Hours spent for trip to school (one-way)	.33	.35	.25*	.27†	.41	.31

Training programs ^d						
% participating in programs	5.8	2.7	1.5*	1.8	3.9*	4.1†
Hours spent at training programs	11.41	10.47	e	e	18.72*	17.16†
Hours spent in class	10.72	9.27	e	e	14.60*	14.41†
Hours spent studying at program	.86	.68	e	e	1.72	1.59
Other time at program	0.00	.52	e	e	2.40*	1.16
Hours spent studying away	1.08	1.73	e	e	4.49*	6.66†
Total hours spent studying ^b	1.94	2.41	e	e	6.21*	8.25†
Hours spent for trip to program (one-way)	.33	.22	e	e	.36	.38†
Leisure						
Hours spent reading (not for school) ^c	4.68	5.54	6.83*	5.44	5.04*	5.24
Hours spent watching TV	12.85	13.54	8.80*	8.07†	12.86	17.42†
Hours spent sleeping	54.38	54.28	50.59*	50.52†	51.71*	53.38†
Hours spent on household chores ^c	6.66	10.68	7.64*	11.64†	9.14*	16.16†
N	1423	1262	814	838	3888	3970
Total N by enrollment status	2685		1652		7858	

(continued)

Table 7.3 (continued)

UNIVERSE: Youth age 16-24 on interview date. (N = 33,517,000)

NOTE: All time estimates are hours per last seven days; digits to the right of the decimal point are fractional hours. Those classified as "High school" and "College" are full-time students only. Part-time students, as well as the nonenrolled, are classified as "nonstudents."

- a. These items represent percent of time at work spent doing each of these three tasks and were adapted from Kohn (1969). To allow for a respondent to be doing multiple job tasks simultaneously, the question wording for these items specifically permitted double counting. Accordingly, percents sum to greater than 100.
- b. These figures are the sum of time studying at school (program) and time studying at home.
- c. Since time estimates for these activities were asked of "yesterday" only, time estimates were first weighted to produce a uniform frequency distribution across days of the week, and then multiplied by seven to arrive at an hours per last seven days estimate.
- d. Includes government training programs (e.g., CETA) and "special" schools (e.g., technical schools, barber schools).
- e. Fewer than 25 respondents fall in this category. Time estimates are not reported due to unacceptable instability.

*T-tests for significant differences between males of different enrollment status treat high school males as the reference group. An asterisk indicates that the starred value is different from the corresponding value for high school males at the .05 level.

†T-tests for significant differences between females of different enrollment status treat high school females as the reference group. A cross indicates that the marked value is different from the corresponding value for high school females at the .05 level.

Turning to the training section, male high school students and nonstudents of both sexes are the prime beneficiaries of training programs. While participation rates are quite small for all groups, time investments among those who do participate are substantial, especially for nonstudents. Moreover, total time spent studying is also quite marked for this group. Differences in study time across enrollment status doubtless reflect the fact that high schoolers are most likely to be enrolled in CETA or other government sponsored programs, while nonstudents are mostly attendees of business or technical schools.

Finally in table 7.3, note that high schoolers spend the most time sleeping of all groups, while college students spend the least time watching TV and, for males, the most time doing nonschool-related reading. Time expenditures on household chores vary significantly but not markedly between high school and college goers, but nonstudents, and especially nonstudent females, spend substantially longer than any other group on such tasks. Doubtless this reflects the fact that a substantial number of this group are housewives.

Employment Status

In order to consider in somewhat greater detail the time expenditures of nonstudents, table 7.4 reports time-use estimates for this group separately for the employed, the unemployed, and those out of the labor force. The working for pay figures for the employed, shown in this table, are the same as those already shown as column three of table 7.3; accordingly, these data will not be described anew.

Of interest elsewhere in table 7.4 is the finding that such a small proportion of the unemployed and out of the labor force are part-time enrollees or are involved in a training program of any sort. Indeed, the employed are actually more likely to be participating in such programs than the

Table 7.4
Time-Use in Hours for Selected Activities: Results by Sex and Employment Status,
Universe of Nonstudents and Part-time Enrollees

Activity	Employed		Unemployed		Out of labor force	
	M	F	M	F	M	F
Working for pay						
% with a job	100	100	0*	0†	0*	0†
Hours spent working for pay	39.54	34.56	-	-	-	-
% time working/reading ^a	20.00	42.92	-	-	-	-
% time working w/hands ^a	77.66	72.69	-	-	-	-
% time with people ^a	49.51	63.51	-	-	-	-
Hours spent for trip to work (one way)	.31	.27	-	-	-	-
Time at school						
% enrolled in school	5.5	6.4	3.1*	3.3†	8.7	3.6†
Hours spent at school	8.46	7.00	e	e	e	e
Hours spent in class	6.33	5.34	e	e	e	e
Hours spent studying at school	1.75	1.22	e	e	e	e
Other time at school	.41	.44	e	e	e	e
Hours spent studying not at school	6.00	5.42	e	e	e	e

Total hours spent studying ^b	7.75	6.64	e	e	e	e
Hours spent for trip to school (one way)	.46	.33	e	e	e	e
Training programs^d						
% participating in programs	3.0	4.1	3.0	3.9	14.5*	4.3
Hours spent at training programs	13.90	14.97	e	e	28.09*	22.34†
Hours spent in class	10.75	12.67	e	e	21.36*	19.21†
Hours spent studying at program	1.31	1.50	e	e	2.85	1.62
Other time at program	1.84	.80	e	e	3.88	1.51
Hours spent studying away	3.41	5.12	e	e	6.81*	8.58†
Total hours spent studying ^b	4.72	6.62	e	e	9.66*	10.20
Hours spent for trip to program (one way)	.39	.37	e	e	.36	.41
Leisure						
Hours spent reading (not for school) ^c	4.91	5.38	6.88*	5.96†	5.56	4.42†
Hours spent watching TV	11.28	12.78	19.80*	23.96†	16.54*	26.98†

(continued)

Table 7.4 (continued)

Activity	Employed		Unemployed		Out of labor force	
	M	F	M	F	M	F
Hours spent sleeping	50.91	52.28	54.46*	55.16†	55.36*	55.49†
Hours spent on household chores ^c	8.11	14.34	15.82*	22.10†	12.10*	28.10†
N	2946	2414	617	517	325	1039
Total N by employment status	5360		1134		1364	

UNIVERSE: Youth age 16-24 who were part-time students or not enrolled in school at interview date. (N=20,046,000)

NOTE: All time estimates are hours per last seven days; digits to the right of the decimal point are fractional hours.

a. These items represent percent of time at work spent doing each of these three tasks and were adapted from Kohn (1969). To allow for a respondent to be doing multiple job tasks simultaneously, the question wording for these items specifically permitted double counting. Accordingly, percents sum to greater than 100.

b. These figures are the sum of time studying at school (program) and time studying at home.

c. Since time estimates for these activities were asked of "yesterday" only, time estimates were first weighted to produce a uniform frequency distribution across days of the week, and then multiplied by seven to arrive at an hours per last seven days estimate.

d. Includes government training programs (e.g., CETA) and "special" schools (e.g., technical schools, barber schools).

e. Fewer than 25 respondents fall in this category. Time estimates are considered unreliable and are not reported.

*T-tests for significant differences between males of different employment status treat employed males as the reference group. An asterisk indicates that the starred value is different from the corresponding value for employed males at the .05 level.

†T-tests for significant differences between females of different employment status treat employed females as the reference group. A cross indicates that the marked value is different from the corresponding value for employed females at the .05 level.

unemployed. And while those out of the labor force show the highest involvements in such programs, at least among males, still at least 75 percent of them are neither enrolled in school part time nor participating in training programs. The females among them are likely to be full-time housewives; the males among them may well be mostly discouraged job seekers.

With their daily time-use largely unaccounted for by any structured activities (at least those measured in this survey), the unemployed and those out of the labor force spend more time than the employed sleeping, watching TV, and performing household chores.

Job Search

Also of interest, especially for the unemployed, is the nature of and time investment in job search activities. Table 7.5 shows time expenditures in various job search methods for unemployed nonstudents and for those full-time students and employed nonstudents who were looking for work. These results show, as one might have expected, that the unemployed spend more time on job search than either of the other two groups. At the same time, however, unemployed males report spending only about 5.7 hours and females about 3.4 hours on all job search activities per week.

These results also give some sense of the wide range of job search methods which are utilized, especially by the unemployed. The most commonly used method by all categories of job seekers is checking with friends or relatives. Substantial numbers also contact state employment agencies, check newspaper ads, and apply directly to employers. Once again, with scant exception, unemployed nonstudents are more likely to use each method (except checking with teachers or school counselors) than are students or employed job seekers; by implication, the unemployed are more likely to utilize multiple job search methods.

Table 7.5
Time-Use in Hours and Percent Using Various Job Search Methods
Results by Sex and Enrollment and Employment Status

Activity	Full-time students		Nonstudents & part-time enrollees			
	M	F	Employed		Unemployed	
	M	F	M	F	M	F
% looking for work	26.4*	23.5†	19.3*	18.6†	100.0	100.0
Hours spent looking for work last week (all methods)	2.27*	1.87†	3.30*	2.69	5.67	3.41
N	632	502	542	399	585	471
% checked with state employment agency	12.1*	12.5†	31.3*	20.8†	52.9	41.7
Job contact (%)	19.5*	33.6	31.9	44.2	35.3	38.3
Job offer (%)	6.5	11.6	8.2	9.6	8.7	8.0
% checked with private employment agency	8.5*	7.6†	14.6*	21.2	26.0	20.2
Job contact (%)	57.0	46.8	55.3	52.5	44.6	45.0
Job offer (%)	20.2*	14.2	16.6	29.2†	8.6	12.4
% checked with friends or relatives	75.6*	77.1	86.1	78.4	84.3	79.9
Job contact (%)	51.0*	47.2	53.9*	48.8	44.2	48.4
Job offer (%)	15.0	10.1	20.3*	16.0	12.6	12.4

% checked with newspaper ads	31.7*	39.9†	44.7*	52.9†	57.1	61.9
Job contact (%)	56.3	54.9	64.8*	57.9	55.7	62.5
Job offer (%)	10.9*	12.4	20.8*	18.1	5.7	12.7
% took Civil Service test or filed for government job	4.8*	6.2	11.4	11.5	11.9	8.9
Job contact (%)	40.3	52.8†	35.6	29.8	41.1	28.0
Job offer (%)	2.1	22.6†	1.3	6.7	1.8	3.6
% checked with CETA or community action group	5.2*	8.8†	8.9*	5.3†	15.2	14.3
Job contact (%)	36.7	25.3	28.9	a	19.7	34.7
Job offer (%)	13.5	13.0	9.2	a	9.4	5.4
% checked with school placement office	21.6*	24.8†	6.0	9.4†	7.8	4.5
Job contact (%)	51.5*	39.1	38.4	37.9	26.6	a
Job offer (%)	10.7*	10.7	5.7	17.9	2.9	a
% checked with teachers or professors for job leads	22.7*	24.4†	9.4	7.3	11.8	6.8
Job contact (%)	26.8	22.8†	38.5	19.1†	38.2	45.2
Job offer (%)	5.1	7.7	6.8	6.0	12.0	20.2

(continued)

Table 7.5 (continued)

Activity	Full-time students		Nonstudents & part-time enrollees			
	M	F	Employed		Unemployed	
	M	F	M	F	M	F
% checked with labor union	1.6*	.9	7.1	.6	10.1	1.3
Job contact (%)	a	a	33.5	a	38.2	a
Job offer (%)	a	a	17.2*	a	3.8	a
% applied directly to employers	68.9*	70.0	68.5*	67.7	77.9	71.6
Job contact(%)	-	-	-	-	-	-
Job offer (%)	21.5*	16.7†	22.5*	22.8†	11.5	10.7

UNIVERSE: Youth age 16-24 who reported they were looking for work at time of interview or within last 4 weeks. (N=8,530,000)

NOTE: Time estimates are hours per last seven days; digits to the right of the decimal point are fractional hours. For each method the percentage figures are: % of job seekers who used that method in the last 4 weeks, % of those using the method who had a job contact result, and % using the method who had a job offer result.

a. Fewer than 25 respondents used this method. Estimates are considered unreliable and are not reported.

*T-tests for significant differences between males treat nonstudent unemployed males as the reference group. An asterisk indicates that the starred value is different from the corresponding value for unemployed nonstudent males at the .05 level.

†T-tests for significant differences between females treat unemployed nonstudent females as the reference group. A cross indicates that the marked value is different from the corresponding value for unemployed nonstudent females at the .05 level.

Using these data to draw inferences regarding the success of job search methods is rather hazardous. This sequence of job search questions was asked only of those looking for work; currently employed nonjob-seekers were not asked how they found their jobs. Accordingly, we have here a sample of recent or longer term unsuccessful job seekers (more recent NLS data can be used to address the issue of method of job finding, however; see Wielgosz 1983). This explains why the unemployed appear by these data to be the least successful in eliciting job offers. Employed or student job seekers are in all probability in less need of a (new) job and therefore have the luxury of turning down job offers once made. By contrast, unemployed nonstudents are more likely to accept whatever job offers they receive, and thus those who have been made an offer are less likely to appear in our sample.

At the same time, these data are suggestive of the effectiveness of alternate job search methods. If one takes the goal of any search to be putting one in contact with employers, differences in effectiveness across methods are striking. By this standard, information from friends or relatives, newspaper ads, and private employment agencies are all reasonably effective. For students, school placement services are also rather successful in putting students in contact with employers. As others have shown, state employment services are relatively ineffective in leading to job contacts or job offers, though this may reflect the employability of those who use the state services (Wielgosz 1983).

Working Versus Nonworking Students

We have thus far looked at time expenditures of those with various role obligations. Given that time-use is a zero-sum proposition, it is interesting to observe which time-use tradeoffs are implemented for youth as multiple role obligations accumulate. Must students who work, for example, sacrifice valuable study time to carry out their employment

obligations? Or do they forsake leisure time activities? Table 7.6 addresses these and related issues by comparing the time expenditures of nonworking high school students, nonworking full-time college students, working high school students and working full-time college students.

As shown previously, employed high school and college youth work on average from about 16 to 20 hours per week. The time for this employment seems to be taken away from a range of activities rather than from any one or two. Employed students spend less time at school, less time actually attending classes (perhaps some are work-study students), less time studying and less "other" time at school (males only), less time sleeping, less time watching TV, less time doing leisure reading (except for college females) and less time doing chores, and most of these differences are significant. Indeed, with the scant exception noted, employed students spend less time on every other category of activity for which time estimates are collected in the NLS. Interestingly, the time-use tradeoffs made by employed male and female high school and college students appear quite similar, though males may sacrifice more study time than females, and high schoolers seem to sacrifice a greater proportion of their TV watching.

Ecological Factors

This section of the paper focuses on the role of ecological factors, and, especially, living arrangements on the household and child care responsibilities of youth. Table 7.7 reports the mean time expenditures and also the degree of responsibility for various household and child care tasks. These results show the greater time expenditure committed by women to household chores across all categories of living arrangements. This sex differential is 2-5 hours for those living alone, with peers or with parents, but is fully 13.5 hours for those who are married. These data dramatically illustrate the extent of the sexual division in the burdens of household obligations.

Table 7.6
Time-Use in Hours for Selected Activities: Results by Sex, Employment Status
and Enrollment Status, Universe of Full-Time Students Only

	Employed full-time students				Nonworking full-time students			
	High school		College		High school		College	
	M	F	M	F	M	F	M	F
Working for pay								
% with a job	100*	100†	100*	100†	0	0	0	0
Hours spent working for pay	17.31	15.40	19.22	16.64	-	-	-	-
% time writing/reading ^a	11.36	25.32	22.56	34.36	-	-	-	-
% time working w/hands ^a	84.73	77.16	69.75	63.39	-	-	-	-
% time with people ^a	49.25	78.12	59.99	71.05	-	-	-	-
Hours spent for trip to work (one-way)	.19	.17	.20	.20	-	-	-	-
Time at school								
% enrolled in school	100	100	100	100	100	100	100	100
Hours spent at school	28.65*	27.63†	23.93*	23.51†	32.73	30.71	30.60	25.57
Hours spent in class	22.89*	21.63†	14.60*	14.62†	24.08	24.58	16.34	16.03
Hours spent studying at school	2.83*	3.07	5.90*	5.77	4.12	3.28	9.09	6.59
Other time at school	2.93*	2.93	3.43*	3.12	4.53	2.85	5.17	2.95
Hours spent studying not at school	4.81*	6.73	10.07*	11.70	5.44	6.95	12.33	12.58
Total hours spent studying ^b	7.64*	9.80	15.97*	17.47	9.56	10.23	21.42	19.17
Hours spent for trip to school (one-way)	.33	.33	.29*	.29	.34	.35	.21	.25

Table 7.6 (continued)

	Employed full-time students				Nonworking full-time students			
	High school		College		High school		College	
	M	F	M	F	M	F	M	F
Training programs ^d								
% participating in programs	5.5	3.1	.5*	1.0	5.9	2.8	2.1	2.2
Hours spent at training programs	10.36	7.73	16.53	16.42	12.26	12.17	23.54	20.17
Hours spent in class	9.24	5.54†	11.41	15.53	11.53	11.57	15.94	21.11
Hours spent studying at program	1.19	1.29	1.50	.67	.59	.31	4.32	1.84
Other time at program	0	.90	3.62	.22	.14	.29	3.28	0
Hours spent studying away	1.66*	1.18	6.41	5.63	.61	2.06	5.26	8.91
Total hours spent studying ^b	2.85	2.47	7.91	6.30	1.20	2.37	9.58	10.75
Hours spent for trip to program (one-way)	.25*	.12†	.31	.42†	.38	.28	.35	.21
Leisure								
Hours spent reading (not for school) ^c	4.38	4.78†	6.07*	5.75	4.94	6.23	7.91	5.07
Hours spent watching TV	10.98*	11.06†	8.38	7.39†	144.51	15.56	9.23	8.73
Hours spent sleeping	53.28*	53.37†	50.19	49.59†	55.36	55.02	51.00	51.43
Hours spent on household chores ^c	5.75*	8.92†	7.07*	10.12†	7.56	10.44	8.43	13.36
N	623	486	412	422	800	776	402	416
Total N by employment status	1109		834		1576		818	

UNIVERSE: Youth age 16-24 who were full-time students at interview date. (N = 13,471,000)

NOTE: All time estimates are hours per last seven days; digits to the right of the decimal point are fractional hours.

a. These items represent percent of time at work spent doing each of these three tasks and were adapted from Kohn (1969). To allow for a respondent to be doing multiple job tasks simultaneously, the question wording for these items specifically permitted double counting. Accordingly, percents sum to greater than 100.

b. These figures are the sum of time studying at school (program) and time studying at home.

c. Since time estimates for these activities were asked of “yesterday” only, time estimates were first weighted to produce a uniform frequency distribution across days of the week, and then multiplied by seven to arrive at an hours per last seven days estimate.

d. Includes government training programs (e.g., CETA) and “special” schools (e.g., technical schools, barber schools).

*There are two reference groups for males in this table; employed high school males are compared with nonworking high school males and employed college males are compared with nonworking college males. An asterisk indicates that the starred value is different from the corresponding value for nonworking high school/college males at the .05 level.

†There are two reference groups for females in this table; employed high school females are compared with nonworking high school females and employed college females are compared with nonworking college females. A cross indicates that the marked value is different from the corresponding value for nonworking high school/college females at the .05 level.

Table 7.7
Time-Use Behaviors for Household Chores and Child Care: Results by Sex and Living Arrangement

Chores and child care	R's living on own away from parents						R's living with parents or guardian	
	Alone or with kids		With spouse		With adult (nonspouse)		M	F
	M	F	M	F	M	F		
Household chores								
Hours spent on all chores	9.42*	11.48 ^b	12.55*	25.96†	8.64*	13.92†	7.29	11.85
Degree of responsibility for: ^c								
meals	3.68*	4.40†	1.71*	4.51†	2.53*	3.35†	1.45	2.04
dishes	3.77*	4.62†	1.69*	4.53†	2.61*	3.49†	1.60	2.79
laundry	3.75*	4.68†	1.55	4.59†	3.02*	3.89†	1.53	2.48
cleaning	4.05*	4.69†	1.84*	4.53†	2.69*	3.45†	1.76	2.80
shopping	4.10*	4.56†	2.54*	4.23†	2.74*	3.42†	1.43	1.84
errands	4.28*	4.47†	3.18*	3.50†	3.02*	3.09†	2.40	2.53
outdoor chores	3.35*	2.97†	3.74*	2.20†	2.70*	1.85	2.84	1.84
house repairs	3.80*	3.42†	4.16*	1.96†	2.92*	1.95†	2.57	1.56
paperwork	4.14*	4.25†	2.82*	3.52†	2.35*	2.69†	1.23	1.38
Child care								
% with own children in home	0*	38.5†	45.0*	54.5†	2.9*	13.9†	1.2	9.5
Degree of responsibility for care of own children ^c	a	4.86†	2.40	4.43	a	4.61	2.62	4.49
Hours spent dressing and feeding	a	20.13	7.01*	22.27†	a	19.59	3.32	19.03
Hours spent reading and playing	a	21.25	15.21	22.04	a	22.59	15.56	21.42
Other time in supervision	a	45.49	13.11*	46.02†	a	45.38	8.72	39.61

% with siblings or other children in home	1.4*	.1†	2.0*	.9†	12.9*	8.3†	41.7	40.1
Degree of responsibility for care of other children ^c	a	a	a	a	1.84	2.54†	1.72	2.16
Total hours spent taking care of children in home	a	a	a	a	11.54*	14.78†	2.98	5.83
Hours spent dressing/feeding	a	a	a	a	1.89*	2.43†	.22	.90
Hours spent reading/playing	a	a	a	a	4.13*	7.14†	1.37	2.51
N	315	478	754	1387	697	726	3632	3099
Total N by living arrangement	793		2141		1423		6731	

UNIVERSE: Youth age 16-24 not living in dorms, barracks, or other group quarters. (N = 30,456,000)

NOTE: All time estimates are hours per last seven days; digits to the right of the decimal point are fractional hours. Since time estimates for household chores and child care were asked of “yesterday” only, time estimates were first weighted to produce a uniform frequency distribution across days of the week, and then multiplied by seven to arrive at an hours estimate for the last seven days.

a. Fewer than 25 respondents in the cell. Estimates are considered unreliable and are not reported.

b. To make the inter-sex comparison for those “living alone” more meaningful, this time estimate refers to those “living alone” with no children in the home. This was done because only a very small number of males “living alone” have children living with them, and the time-use of women “living alone” with and without children differs drastically.

c. The degree of responsibility for each chore was assessed by asking respondents to place themselves on a five-point scale, with 1 = R almost never does the chore to 5 = R has almost sole responsibility for doing this chore.

*T-tests for significant differences between males with different living arrangements treat males living with their parents as the reference group. An asterisk indicates that the starred value differs from the corresponding value for males living with their parents at the .05 level.

†T-tests for significant differences between females with different living arrangements treat females living with their parents as the reference group. A cross indicates that the marked value differs from the corresponding value for females living with their parents at the .05 level.

The within sex comparisons across ecological arrangements are also revealing. In general, youth allocate the least time to household responsibilities when they are living with their parents, but surprisingly this burden increases only modestly for youth living alone or with friends. Presumably youth living alone occupy modest accommodations and are able to keep necessary household chores to a minimum. By contrast, living with one's spouse leads to a proliferation of house management responsibilities. Indeed, wives spend over 100 percent and husbands nearly 35 percent more time on household chores than their peers who live alone. Looked at another way, a male and female married and living together spend between them over 38 hours per week on chores, but only about 20.5 hours per week on average if unmarried and living apart.

Questionnaire items also ask respondents to assess their degree of responsibility for individual chores on a five-point scale from 1, —almost never does the chore, to 5, —has almost sole responsibility for it. For preparing meals, doing dishes, doing the laundry, cleaning house and shopping, women report a greater level of responsibility than males in every type of living arrangement. Similarly, regardless of living arrangement, men claim a greater level of responsibility for outdoor chores and house repairs. For the remaining chores listed, doing paperwork and running errands, relative responsibility level varies depending upon the ecological arrangement. Differentials in responsibility levels are most extreme in the case of married couples, where the division of labor is clearcut for most chores, and narrowest for those living alone, where both males and females report high responsibility levels for all chores.

Looking at within sex differences, youth of both sexes report the lowest absolute levels of responsibility when living with parents. For females, those levels show a marked jump for those living with others and a still further increment, to the highest levels reported for females, for those living alone

or with a spouse. This pattern differs noticeably for males. Starting from the lowest responsibility levels for males living with parents, the level of obligation increases modestly for most household chores for those who are married and for those living with others. A still further jump is detected for those living alone, bringing male responsibility levels nearly up to or greater than those reported by females.

Turning to the time-use estimates for child care in table 7.7, once again a marked, if not unexpected, sexual difference in time expenditures emerges, especially for those with their own child. Among parents, women claim notably higher levels of responsibility for child care and report spending over three times as long as males in dressing/feeding the child and in supervision time. The sexual inequalities are reduced somewhat when playing with the child is considered, but they remain pronounced.

Youth report remarkably little time taking care of their siblings (under age 14) and here the sexual disparities are far more modest. Females living in their parents' dwelling unit with younger siblings in the household report spending only about 5.8 hours per week on child care and supervisory activities of all sorts. For males, this figure is about three hours per week.

Table 7.8 extends this investigation by considering whether husbands assume more responsibility for household chores as wives accumulate additional role obligations. The universe in this table is restricted to those nonenrollees who have their own children. Time expenditures are reported for working and nonworking women and for males whose spouses are working and nonworking.

As table 7.8 shows, males whose wives work spend a non-significant two additional hours per week on household chores than males whose wives are not employed. Moreover, the variables measuring degree of responsibility for various chores show an only occasionally significant shifting of

Table 7.8
Time-Use Behaviors for Household Chores and Child Care: Results by Sex and Wife's Employment Status
Universe of Nonstudents and Part-Time Enrollees with Children

Chores and child care	Nonstudents and part-time enrollees with own children				
	Males with children		Females with children		
	Wife not working	Wife working	Spouse present		No spouse present
			R not working	R working	
Household chores					
Hours spent on all chores	11.7	13.12	34.54	25.36†	24.72†
Degree of responsibility for:^a					
meals	1.44	1.60*	4.64	4.41†	3.69†
dishes	1.38	1.49	4.74	4.31†	3.98†
laundry	1.41	1.41	4.76	4.57†	4.00†
cleaning	1.63	1.81*	4.72	4.37†	4.14†
shopping	2.43	2.37	4.27	4.29	3.64†
errands	3.06	3.11	3.48	3.58	3.58
outdoor chores	3.71	3.66	2.28	2.20	2.44
house repairs	4.03	4.15	2.03	1.86	2.48†
paperwork	2.82	2.46	3.50	3.68	2.97†
Child care					

Degree of responsibility for child care	2.34	2.47	4.67	4.10†	4.62
Hours spent dressing and feeding children	6.17	5.57	24.67	19.30†	19.58†
Hours spent reading and playing with children	16.03	14.28	21.86	22.46	14.76
Other time in supervision	14.55	11.12	52.35	37.16†	41.60†
% with a job	83.8	87.1	0	100†	34.1†
Hours spent working for pay	40.2	43.6	-	29.9	34.3
Hours spent reading (not for school)	3.9	3.5	4.2	2.7†	3.7
Hours spent watching TV	17.1	14.9	29.7	17.5†	23.3†
Hours spent sleeping	51.9	52.0	54.7	52.7†	53.0†
N	200	220	439	323	718

UNIVERSE: Youth age 16-24 with children who were part-time students or not enrolled in school at interview date. (N = 4,235,000)

NOTE: All time estimates are hours per last seven days; digits to the right of the decimal point are fractional hours. Since time estimates for household chores, child care, and reading were asked of "yesterday" only, time estimates were first weighted to produce a uniform frequency distribution across days of the week, and then multiplied by seven to arrive at an hours estimate for the last seven days.

a. The degree of responsibility for each chore was assessed by asking respondents to place themselves on a five-point scale, with 1 = R almost never does the chore to 5 = R has almost sole responsibility for doing this chore.

*T-tests for significant differences between males treat males whose wives are not working as the reference group. An asterisk indicates that the starred value is different from the corresponding value for males whose wives are not working at the .05 level.

†T-tests for significant differences between females treat women who are not working for pay as the reference group. A cross indicates that the marked value is significantly different at the .05 level from the corresponding value for women not working for pay.

responsibility such that wives who work claim somewhat less responsibility for several chores than wives who do not work and males whose wives work claim somewhat more responsibility on meal preparation and cleaning than males whose wives are not employed. In all these cases, however, the shifting in responsibility is slight. Perhaps most dramatic in this table, however, is the substantial drop in the amount of time working women spend doing chores relative to non-working wives. Since we have just shown no such dramatic increase in males' contribution to household maintenance where both spouses work, we can conclude that third parties, including the service economy, assume some of these housekeeping burdens (e.g., an increased number of meals are eaten out) or that a downward redefinition of what are considered essential household chores occurs. In any event, working wives are still shown to spend nearly twice as long as their spouses discharging household obligations.

Something very much like this scenario applies where child care is concerned. Males report slightly more, females slightly less responsibility for child care where the wife is employed. The woman's time expenditure for dressing and feeding and supervising her child drops markedly when she is employed, though her time spent playing with the child remains essentially unchanged. Interestingly, the husband's time expenditure on all facets of child care also tends to decline somewhat when his spouse is employed. Thus, these findings suggest that when a wife is employed, a greater burden of child care does not devolve to the husband. Instead one can assume that third parties (e.g., relatives or day care facilities) take up the slack.

Looking at the various other relevant components of time-use which the NLS provides, we note that mothers who work apparently must sacrifice substantial parts of their leisure activities. Such women sleep somewhat less on average, watch considerably fewer hours of TV, and read a bit less per week than mothers who are not employed. Nonetheless, in the context of husbands' time expenditures for these activities,

the reductions seem less dramatic; indeed, working mothers sleep as much as their husbands do and still watch about three more hours of TV per week. In any event, even granted that working wives work only about two-thirds of the workweek of their husbands, the combined burden of employment and household and child care responsibilities seems very onerous.

Resources

Finally we investigate the relationship between resources and time-use expenditures. One of the most straightforward of these relationships is the effect of ownership of the means of transportation on time expenditures for transportation. Table 7.9 shows mean times for trips to work and school (one-way), distances (also one-way) and distances per unit of time by mode of transportation used. The results are striking. Those who use an automobile or motorcycle to get either to work or school make the trip in substantially less time than those who use any other mode except walking. Moreover, the efficiency of private transportation by auto or motorcycle as judged by the average miles per hour criterion seems clear; this mode is substantially and significantly more efficient than practically any other mode.

Riding a school bus is also a relatively time efficient mode of transportation for high schoolers. A trip to school by bus takes somewhat more time than a trip by private auto, but the average one-way distance is over a mile longer. Walking or riding a bicycle may be relatively quick for some people, but this advantage seems to be entirely due to the fact that the destination for the users of this mode is on average quite short. Aside from walking, the mode of transportation shown to be consistently least efficient is public transportation. Users of this mode can expect to average no more than 13 (for trips to school) or 18.4 (for trips to work) miles per hour. Policy efforts aimed at encouraging use of mass

Table 7.9
Time-Use in Hours for Transportation: Results by Mode of Transportation

	Mode of transportation				
	Auto/ motorcycle	Public transpt./taxi	School bus	Walk/ bicycle	Mixed mode
Trip to high school					
Mean time one-way	2.9	.45*	.42*	.40*	.57
Mean distance in miles	4.34	4.82	6.42*	1.65*	7.08
Miles/time	24.12	12.59*	17.07*	8.21*	22.44
N	981	295	813	420	41
Trip to college					
Mean time one-way	.38	.66*	a	.30*	a
Mean distance in miles	9.70	8.19*	a	1.62*	a
Miles/time	28.68	12.93*	a	10.78*	a
N	645	166	13	322	24
Trip to work					
Mean time one-way	.27	.59*	-	.24*	.43*
Mean distance in miles	8.80	9.68	-	2.80*	18.58*
Miles/time	30.31	18.39*	-	19.62*	65.79
N	4642	511	-	1014	344

UNIVERSE: Youth age 16-24 (excluding respondents living on campus or school grounds) who spent any time at work or at school within last 7 days of interview date. Estimates for trip to high school and college are based on reports from full-time students only. A number of respondents, most of whom used the "walk/bicycle" mode, reported that their trip to school (work) took no time and that their distance from school (work) was zero miles. These respondents were deleted from all calculations. (N=23,989,056)

a. Indicates fewer than 25 respondents used this method. Figures are considered unreliable and are not reported.

*T-tests for significant difference by mode treat "auto/motorcycle" as the reference group. An asterisk indicates that the starred value is different at the .05 level from the corresponding value for those using the "auto/motorcycle" mode.

transportation might do well to consider ways of improving the efficiency of this mode.

IV. Conclusion

The tables described in this paper have provided an interesting sketch of the time-use behavior of young adults. Additionally, we have shown a number of interesting concomitants of time expenditures. Time allocations have been shown to bear systematic relationship to race, family background status, role obligations and ecological arrangements, in addition to some of the more predictable time-use variants by sex. A descriptive and tabular presentation of this sort cannot, of course, claim to pinpoint causal relationships. As with any exploratory and descriptive undertaking, the effort is nonetheless deemed well-served if it succeeds in drawing attention to provocative relationships that merit more careful analytic scrutiny.

REFERENCES

- Baker, Paula, Ronald D'Amico, and Gilbert Nestel. 1983. "Measuring Time-Use: A Comparison of Alternate Measurement Strategies." Columbus: Center for Human Resource Research, Ohio State University.
- Becker, Gary. 1965. "A Theory of the Allocation of Time." *The Economic Journal* 75 (September): 493-517.
- Berk, Sara Fenstermaker. 1979. "Husbands at Home: Organization of the Husband's Household Day." In Feinstein, ed., *Working Women and Families*. Beverly Hills: Sage.
- Biddle, Bruce, Barbara Bank, D. Anderson, John Keats and Daphne Keats. 1981. "The Structure of Idleness: In-School and Dropout Adolescent Activities in the United States and Australia." *Sociology of Education* 54 (April): 106-119.

- Blau, Peter and Otis Dudley Duncan. 1967. *The American Occupational Structure*. New York: Wiley.
- Fleisher, Belton. 1977. "Mother's Home Time and the Production of Child Quality." *Demography* 14 (May): 197-212.
- Gronau, Reuben. 1973. "The Intrafamily Allocation of Time: The Value of the Housewives' Time." *American Economic Review* 63 (September): 634-651.
- Juster, F. Thomas and Frank Stafford. 1983. *Time, Goods, and Well Being*. Ann Arbor: Institute for Social Research.
- Kohn, Melvin. 1969. *Class and Conformity*. Homewood, IL: Dorsey Press.
- Linder, Staffan. 1970. *The Harried Leisure Class*. New York: Columbia University Press.
- Melbin, Murray. 1978. "Night as Frontier." *American Sociological Review* 43 (February): 3-22.
- Robinson, John. 1977. *How Americans Use Time*. New York: Praeger.
- Rosenfeld, Rachel. 1980. "Race and Sex Differences in Career Dynamics." *American Sociological Review* 45 (August): 583-609.
- Wielgosz, John. 1983. "The Effectiveness of Job Search and Job Finding Methods of Young Americans." In Borus, ed., *Pathways to the Future*, Vol. IV. Columbus: Center for Human Resource Research, Ohio State University.