

The parenting of infants: a time-use study

Data from the American Time Use Survey show that parents of infants spend far more time on childcare relative to parents of older children; women spend more time engaging in childcare than men, parents obtain time for childcare from various sources, and time use diverges across lines of socioeconomic status

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Do parents of infants spend their time differently than parents of older children? Although an extensive body of research concerns time use among parents, no previous study has directly answered this question. Data from the initial 5 years of the American Time Use Survey (ATUS) allow for an investigation of the topic. The analysis in this article provides answers to a series of questions regarding the quantity of time that “coupled” women, coupled men, and single women allocate to childcare; the trade-offs that are made in order to generate time for childcare; and variations among groups of differing socioeconomic status (SES) in time spent on childcare, on housework, and at work.

The first question is whether parents devote more time to infants relative to older children. In general, one would expect the answer to be yes. Initially, infants generally require more from their caregivers. Few newborns sleep through the night, and they need frequent feeding, changing of diapers, rocking, and so forth. Further, infant care is often viewed as more important or valuable to parents and to society than care for older children. This is evident in the paid maternity leave systems that allow mothers to devote themselves to infant care in most nations.¹

The scarcity of paid maternity leave may help explain why coupled mothers of newborns in the United States are often pressured to leave the labor force, or “opt out,” to spend more time on childcare.² However, fathers do not appear to fit this pattern. Overall, fathers have increased the amount of time they allocate to childcare in recent decades,³ but earlier studies provide mixed results in answering the question of whether fathers devote more or less time to younger children than to older children.⁴

The second question concerns the “time financing” of childcare, that is, the reallocation of time spent on other activities to generate additional time for children. Implicit in debates regarding opting out is the possibility that the reduction of time spent working for pay is a major source of childcare time—that is, time during which one is engaged in childcare—for new mothers with husbands or partners. An analysis of time financing can discern whether mothers of infants commonly pull their time from other sources—such as leisure or sleep. For coupled men especially, the sources of childcare time are pertinent given the historical pattern of new fathers increasing the amount of time they devote to employment.⁵ If fathers of infants are found to spend more time on both employment and childcare, where does that time come from? For single mothers, the task of raising an infant alone

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may involve difficult choices, particularly when the mother is employed; this article may help to shed light on how those choices are made.

The third (and last) question is the following: how are childcare time, time allocated to housework, and working time—that is, time spent working for pay—related to SES? Socioeconomic status is linked to financial and social resources, as well as to expectations regarding behavior; as a result, there are reasons to expect that allocation of time will differ by SES. For example, families of high SES have greater financial resources to purchase services ranging from housework to precooked meals and childcare. These purchases may free up time for work or leisure, and they can function to ameliorate the compromise between paid work and childcare time that usually must be made. It is also possible that norms have developed among high-SES people regarding work and parenting. Some research suggests that an “ideal worker” norm leads men and women of high SES to work long hours, regardless of parental status, and other research suggests that a norm of “intensive mothering” has emerged among these same families.⁶ If high levels of primary childcare time are accepted as an indicator of intensive parenting, then an analysis of the relationships among primary childcare time, working time, and SES can reveal whether high-SES mothers (and fathers) tend to engage in intensive parenting, work long hours, or do both. The other end of the SES spectrum is characterized by poverty. The welfare-to-work legislation of 1996 makes an analysis of poor families more relevant because the legislation provides incentives for low-income single mothers of infants to gain and maintain employment. Indeed, by 2003, when ATUS data collection began, a total of 20 States had imposed work requirements on the mothers of infants who applied for welfare.⁷ These requirements may have generated reductions in the quantity of time parents have allocated to childcare as single mothers have striven to expand paid working time.

Data

The ATUS was first administered in 2003; survey data spanning 5 years are available and have been pooled for this article.⁸ The ATUS sample is drawn from Current Population Survey (CPS) respondents, and data from the two surveys can be matched. The ATUS is administered approximately 2 to 4 months after the CPS, and data are collected every day of the year except for

a few holidays. Because of the delay between the administration of the CPS and that of the ATUS, for this article variables are constructed from the ATUS whenever possible. The ATUS response rate hovers around 53 percent, a rate similar to that of other single-day time-diary studies administered over the telephone.⁹ The main survey instrument is a 24-hour “diary.” Individuals provide information, beginning at 4 a.m. “yesterday,” on “what [they] were doing” during the following 24 hours. They document the activities they did, where they were at the time, and whom they were with. For cases in which people were doing more than one activity at the same time, they generally are asked to document the activity that could be considered the primary activity.

In the 2003–07 ATUS data, there are 2,612 households with parents of infants under the age of 1 year at the time of survey administration and 20,428 households with parents of dependent children aged 1 or older but below the age of 13. Thirteen years old is the cutoff because data on childcare as a secondary activity are not available for children at or above that age. Children may be biological offspring of the parent, may be stepchildren, may have been adopted, or may have a foster relationship with the parent, and they must live in the household at least 50 percent of the time for the parent to be included in the sample. Any household with one or more parents of both an infant and an older child is counted as a household with infants and not as a household with older children. There is no way to distinguish between the quantity of time that a parent with both an infant and child aged 1–12 spent with the infant and the quantity of time the parent spent with the older child.

In 80 cases, an infant was residing in the household but the respondent was not the infant’s parent and was instead the parent of one or more other children in the household; these cases are retained in the sample but reclassified as involving parents of older children since these parents may not have been responsible for infant care. Also, only 29 single fathers of infants are found in the sample. Because of the small size of that group, they are ignored in the analysis that follows.

There are reasons to be concerned about days when the parent has no contact with the child. For coupled parents, such days might occur relatively frequently when the other parent takes responsibility for the child. But for single mothers who do not have another primary caregiver, the inclusion of days with no contact would not help researchers to understand how single parents make time for their children. Only four cases exist in which single mothers of infants had no contact with their infants on the diary day; in 277 cases, a single mother of one or more children aged 1–12 had no contact with any of her children. For consistency all 281 observations are excluded from the analysis. As seems reasonable for understanding childcare arrangements, unmarried

partners are classified as coupled, as are spouses living in the household.¹⁰

The sample of parents of infants comprises 1,007 partnered men, 1,227 partnered women, and 265 single women. In regard to parents of older children, data are available for 7,687 coupled fathers, 8,851 coupled mothers, and 3,097 single mothers. The data are weighted for all of the analyses that follow in this article.¹¹

Childcare time

Primary childcare time is the quantity of time that survey respondents spent primarily doing activities that involved care for their own dependent child or children. Time spent caring for adults or other children is excluded. Although the ATUS does not include a question concerning secondary activities in the main body of the survey, it does have a supplementary question regarding the times when and activities during which a child is “in [one’s] care,” which is intended to mean either that the child is physically present or that the adult is otherwise able to monitor the child and respond if necessary. The inclusion of this measure of secondary care allows for a broader indicator of childcare time and yields time estimates that are much higher than those obtained from the collection of general data on secondary activities.¹² Secondary childcare data are collected only for parents with children under the age of 13, and, as with primary childcare time, only time spent caring for one’s own children is counted. Figures exclude time during which the child was sleeping. Sometimes, of course, parents have an infant sleep in their bed in order that they can be available for emergencies or breastfeeding while the infant sleeps at night. If one views this type of sleeping arrangement as a form of childcare, then childcare time for parents of infants could be considered to be underesti-

mated.¹³ Secondary childcare time and primary childcare time are mutually exclusive over the course of the 24-hour reference day, so the estimates are summed to create a measure of total childcare time.

It is reasonable to interpret primary childcare time as involving more energy or greater concentration than secondary childcare time; thus, the amount of time during which a parent is engaged primarily in childcare can be taken as an indicator of the extent of “intensive parenting.” In addition, childcare time can be interpreted as requiring a greater expenditure of energy, a higher level of responsibility, or both if a partner or spouse is not present during the activity. For example, a mother may be feeding a child while the father helps with food preparation or cleanup; even if the father does not help in the kitchen, he may be available to answer the telephone or to call a doctor in the event of an emergency. In circumstances such as these, either the workload or level of responsibility involved in childcare is lessened by the presence of a partner or spouse. A measure of total solo childcare time is defined as total childcare time minus primary and secondary childcare time during which a partner or spouse is present.¹⁴ (Total solo childcare time is composed of primary solo childcare time and secondary solo childcare time.)

Total childcare, primary childcare, and total solo childcare figures are provided in table 1. These figures cover coupled fathers, coupled mothers, and single mothers. The data allow for comparisons between parents of infants and parents of older children, and between weekdays and weekends. Coupled fathers with infants spent about twice as much time on primary childcare and around an hour longer on total childcare as compared with coupled fathers with children aged 1–12. Not surprisingly, coupled fathers devoted more time to both primary and total childcare on weekends, with about 4 additional hours on the average

Table 1. Hours and minutes of childcare, parents of infants and of older children, 2003–07

Type of childcare and day	Coupled fathers		Coupled mothers		Single mothers	
	With youngest child under age 1	With youngest child aged 1–12	With youngest child under age 1	With youngest child aged 1–12	With youngest child under age 1	With youngest child aged 1–12
Total childcare, weekdays	5:01	4:13	11:05	7:53	8:56	6:51
Total childcare, weekend days	9:31	8:23	11:58	10:31	11:12	9:50
Primary childcare, weekdays	1:25	0:53	3:53	1:58	3:13	1:42
Primary childcare, weekend days	1:52	1:02	3:19	1:26	2:46	1:18
Total solo childcare, weekdays	2:06	2:08	8:08	5:47	8:56	6:51
Total solo childcare, weekend days	3:11	3:19	5:50	5:29	11:12	9:50
Sample size, weekdays	489	3,748	617	4,352	116	1,563
Sample size, weekend days	518	3,939	610	4,499	149	1,534

SOURCE: Weighted ATUS data.

weekend day for total childcare in comparison with the average weekday. The total solo childcare figures, however, reveal that most fathers' childcare occurred with a spouse or partner present. Indeed, on weekend days, over 6 hours out of a total of 9.5 hours of total childcare time were spent with a spouse or partner present.

On both weekdays and weekends, coupled mothers with infants were engaged in primary childcare for almost twice as long as coupled mothers with children aged 1–12. Also in comparison with coupled mothers with older children, coupled mothers of infants spent over 3 more hours on weekdays in total childcare time and around an hour and a half longer on weekend days. Their total solo childcare time was over 2 hours longer on weekdays but was only slightly longer on weekend days.¹⁵

Reviewing the figures for coupled mothers of infants and coupled fathers of infants reveals an obvious difference in trend between the sexes. Taking coupled fathers' childcare time as a percentage of the sum of coupled fathers' and coupled mothers' childcare time yields a high of 44.3 percent for total childcare time on weekends and a low of 20.5 percent for total solo childcare time on weekdays. There is no evidence of reciprocal agreements between coupled parents. Because more fathers than mothers work outside the home and it is more common to work on weekdays than on weekends, reciprocity would require that, in general, fathers take the lead on weekend childcare and mothers shoulder more of the burden during the week. However, none of the evidence fits; on the basis of any of the three measures—primary childcare time, total childcare time, or total solo childcare time—coupled mothers perform at least 1 additional hour of childcare on weekend days.

As is the case with coupled mothers, single mothers' parenting of infants is associated with more childcare than their parenting of older children. This is true for all of the three aforementioned measures of childcare time and for both weekdays and weekend days. Compared with coupled mothers of infants, single mothers allocate less time to primary childcare and total childcare. Differences range from a low of 33 minutes for primary childcare time on weekends to over 2 hours for total childcare time on weekends. The fact that coupled mothers allocate more time to childcare than single mothers could imply that the spouses and partners of coupled mothers serve as a resource—whether by working and earning money or by helping around the house or with errands—freeing up additional time for the mothers to engage in childcare; it also could mean that single mothers are more reliant on childcare provided by a babysitter, a nanny, a relative, or a friend. By contrast, the pattern is reversed in regard to

solo childcare: the amount of time spent by single mothers is greater than that spent by coupled mothers of infants. Concerning total solo childcare, there is a 48-minute difference between single mothers and coupled mothers on weekdays and a difference of over 5 hours on weekend days. If one chooses to consider the quantity of total solo childcare time that a person spends to be the best indicator of effort or responsibility, then single mothers' larger amount of total solo childcare time suggests that they bear a heavier burden than coupled mothers.

Regarding statistical testing for differences across parents of infants and of older children, note that parents of infants are considered to be those whose youngest child is younger than 1 year old. This means that many parents of infants also have older children present in the household. Table 2 displays results of regressions of the three childcare time measures against variables for both the presence of an infant and the presence of two or more children (one, both, or none of whom may be infants). As reported in the table, in all but 2 of the 18 relevant regressions the estimated effect of an infant is positive and the *t*-statistic is significant at the 1-percent level; the *t*-statistic is not significant for two groups only: coupled fathers engaging in solo childcare on weekdays and those doing so on weekends. In 11 of the regressions, the presence of two or more children also is associated with significantly elevated levels of childcare time. For every group of parents with infants except for coupled fathers engaging in solo childcare time on weekdays and those doing so on weekends, the estimated addition to childcare time for an infant is at least twice as large as the effect of having two or more children.¹⁶

Allocating time to primary childcare

The allocation of time to primary childcare is studied by comparing broad categories of time use across coupled mothers, coupled fathers, and single mothers of infants and of older children. Although parents of infants could be compared with nonparents, doing so would not facilitate an understanding of whether parenting patterns diverge when an infant is involved. The ATUS has 17 time-use categories, with sleep and primary childcare serving as subcategories. To simplify table 3, care for one or more children from outside the household is combined with care for any adult. In addition, professional and personal care services, household services, and government services and civic obligations are combined into one category and labeled as "use of services"; socializing, relaxing, and leisure are combined with sports, exercise, and recreation

Table 2. Results from regressions of childcare measures against variables for presence of infant and for presence of two or more children, 2003–07

Type of childcare and day	Coupled fathers		Coupled mothers		Single mothers	
	Infant effect	Two or more children effect	Infant effect	Two or more children effect	Infant effect	Two or more children effect
Total childcare, weekdays.....	¹ 47.7	-4.5	¹ 199.4	¹ 65.4	¹ 123.1	¹ 45.2
Total childcare, weekend days.....	¹ 71.9	² 28.4	¹ 88.8	² 26.0	¹ 80.6	12.3
Primary childcare, weekdays.....	¹ 31.6	4.1	¹ 117.5	¹ 4.3	¹ 89.3	² 25.4
Primary childcare, weekend days ...	¹ 50.7	3.9	¹ 112.9	6.2	¹ 85.6	² 15.6
Total solo childcare, weekdays.....	-2.4	0.4	¹ 147.5	¹ 66.1	¹ 123.1	¹ 45.2
Total solo childcare, weekend days.	-4.0	² 29.4	² 24.8	¹ 38.7	¹ 80.6	12.3
Sample size, weekdays.....	4,235		4,967		1,677	
Sample size, weekend days.....	4,455		5,107		1,681	

¹ Statistically significant at $p < .01$.
² Statistically significant at $p < .05$.
NOTE: The results are from linear regressions with minutes of childcare as the dependent variable, and with dummy variables for the presence of an infant and the presence of at least two dependent children in the household.
SOURCE: Weighted ATUS data.

to make the “sports and leisure” category; and volunteer activities are combined with religious and spiritual activities. In total, there are 14 types of primary activities that appear in the table.

The table reports time-use statistics for parents of infants as compared with parents of older children, with significant differences taken from the results of linear regressions for the effect of an infant on the relevant time category for each gender-family group. The regressions also control for the presence of two or more dependent children in the household. Coupled fathers with infants devoted 36 more minutes to primary childcare than did fathers with older children, additional time which appears to have come primarily from spending around 13 fewer minutes per day on housework and 14 fewer minutes on sports and leisure activities. Fathers of infants also spent less time—not as much less, but still significantly less—on personal care and on spiritual activities and volunteer work. An examination of the ATUS time-use categories behind these results reveals that, in comparison with coupled fathers of older children, coupled fathers of infants spent significantly less time engaging in socializing, relaxing, and leisure activities as well as significantly less time volunteering, without allocating a significantly different amount of time to sports, exercise, and recreation or to spiritual and religious activities. It appears that fathers with infants spent 18 fewer minutes per day working for

pay—but that difference is not significant.

Coupled mothers with infants spent around 2 more hours per day on primary childcare than did coupled mothers with children aged 1–12. Coupled mothers with infants spent almost 1 fewer hour per day working for pay, 16 fewer minutes engaging in sports and leisure time, and also less time—but not as much less—on personal care, travel, spiritual and volunteer activities, and education. In contrast to coupled fathers, an examination of the official ATUS time-use categories reveals that the sports and leisure result is due to significantly less time devoted to sports, exercise, and recreation, and not to spending less time with socializing, relaxing and leisure activities. Like the coupled fathers of infants, coupled mothers of infants—in comparison with their counterparts with older children—spent significantly less time doing volunteer activities but not significantly less time engaged in religious or spiritual activities.

The time-financing analysis suggests that around half of the additional childcare time that coupled mothers with infants spent in comparison with coupled mothers of older children was generated by spending less time working for pay. To look more closely at the effects of opting out *per se*, primary childcare time is regressed against usual weekly working hours for the subsamples of parents of infants. The advantage of using figures for usual weekly hours is that they yield working time estimates for employed respondents across both working and nonworking days, whereas time-diary figures on working hours are only available for working days. The coefficients can be used to simulate the number of additional weekly minutes of primary childcare time produced by a 1-hour reduction in weekly working time. The 1-hour reduction is estimated to add 8 additional minutes of primary childcare for coupled fathers, with an identical figure of 8 minutes for coupled mothers. These figures are almost certainly subject to selection biases to the extent that mothers and fathers choose work and childcare hours simultaneously, with those holding a relative preference for childcare performing more childcare and less paid work and, by the same token, those with a relative preference for employment performing less childcare and more paid work. The results nonetheless echo the conclusion from historical data that the entry of mothers into the labor force had only small effects on primary childcare time.¹⁷

These data also, however, leave a puzzle regarding why

Table 3. Hours and minutes of primary activities, parents of infants and of older children, 2003–07

Type of activity	Coupled fathers		Coupled mothers		Single mothers	
	With youngest child under age 1	With youngest child aged 1–12	With youngest child under age 1	With youngest child aged 1–12	With youngest child under age 1	With youngest child aged 1–12
Primary childcare	¹ 1:32	0:56	¹ 3:44	1:49	¹ 3:04	1:35
Sleep.....	8:10	8:08	8:29	8:29	¹ 9:34	8:50
Personal care	² 0:32	0:35	¹ 0:38	0:44	² 0:43	0:50
Housework	¹ 1:07	1:20	2:35	2:44	² 1:40	1:59
Care for others	0:07	0:07	0:08	0:07	¹ 0:02	0:08
Work	5:22	5:40	¹ 1:55	2:51	¹ 2:19	3:22
Education	0:08	0:05	² 0:05	0:10	0:21	0:17
Consumer purchases.....	0:22	0:19	0:32	0:35	0:30	0:28
Use of services.....	0:05	0:04	0:07	0:06	0:08	0:08
Eating and drinking.....	1:09	1:08	1:01	1:03	² 0:44	0:52
Sports and leisure.....	² 3:37	3:51	¹ 3:13	3:29	3:38	3:43
Spiritual and volunteer	¹ 0:11	0:16	¹ 0:11	0:19	¹ 0:05	0:12
Telephone calls.....	0:01	0:02	0:05	0:05	0:06	0:08
Traveling	1:25	1:25	¹ 1:08	1:19	¹ 0:58	1:18
Sample size.....	1,007	7,687	1,227	8,851	265	3,097

¹ Statistically significant at $p < .01$.
² Statistically significant at $p < .05$.
 NOTE: Significance tests are conducted by use of linear regressions with an infant dummy variable, and they control for having at least two children.
 SOURCE: Weighted ATUS data.

there would be any pressure on mothers of infants to opt out. An answer is provided by regressing total childcare time and total solo childcare time against usual weekly working hours among parents of infants. Relevant regressions suggest that for coupled fathers, a 1-hour reduction in weekly work hours results in 11 additional minutes of total solo childcare and 22 additional minutes of total childcare. For coupled mothers, the analyses imply that the same reduction in weekly work hours results in 35 additional minutes of total solo childcare and 42 additional minutes of total childcare. By implication, the motivation for new mothers to opt out might be attributed to how much value they ascribe to secondary childcare time.

Single mothers of infants spent 90 more minutes on primary childcare than did single mothers of older children. That time came primarily from spending significantly less time doing paid work. Single mothers of infants spent approximately 1 fewer hour working, and they also spent less time on travel, spiritual and volunteer activities, eating and drinking, personal care, and care for adults and other children. As with the coupled mothers, note that the amount by which the working time of single mothers with infants is less than the working time of single mothers with older children is smaller than the amount by which the primary childcare time of single mothers is greater than the primary childcare time of single mothers with older children. As was the case for both coupled fathers and mothers, the lesser quantity of time that single women with infants

spent doing spiritual and volunteer activities can be traced primarily to spending less time volunteering. The greater quantity of time spent caring for others among single mothers of older children might, at least in some cases, flow from networks of care constructed by single mothers such that they receive childcare from other family members at some times and reciprocate by providing childcare to them at other times.¹⁸

As with the coupled mothers, single mothers' childcare time is regressed against usual weekly working time to simulate the additional weekly minutes of childcare generated by a 1-hour reduction in weekly work hours, again with a restriction of the sample to parents of infants. The 1-hour reduction in working time is associated with only a 5-minute increase in primary childcare time, but with a 35-minute expansion of total and total solo childcare. Again, the results suggest that trade-offs between work and childcare concern secondary childcare more than primary childcare.

Perhaps surprisingly, single mothers of infants devoted 44 more minutes to sleep than single mothers of children aged 1–12. It is possible that the additional sleep is related to the exhaustion associated with being the lone care provider for an infant. But it is also possible that at least some of this additional sleep occurs with the single mothers in the same beds as their infants; it is possible that, on some days, some of the mothers remain in bed longer in order to avoid waking the infant, go to sleep earlier, or nap at other

times during the day with the infant. “Cosleeping” makes particular sense for single mothers because usually there is no one else already present in bed at night. The ATUS provides no information on with whom respondents sleep or on childcare time while the child is asleep, so no direct information is available. However, a proxy for exhaustion can be constructed.

An indicator of exhaustion is calculated as the number of times that parents end a sleep episode between midnight and 4 a.m. and begin a new sleep episode prior to 4 a.m., after excluding respondents performing shiftwork.¹⁹ Among the parents of infants, coupled fathers averaged 0.12 interruption from 12 a.m. to 4 a.m., coupled mothers 0.33, and single mothers 0.22. By way of comparison, coupled fathers with older children reported an average of 0.07 sleep interruption, with comparable figures of 0.09 for coupled mothers and 0.08 for single mothers. For the parents of infants experiencing sleep interruptions, the mean time spent awake is 36.3 minutes for coupled fathers, 35.1 minutes for coupled mothers, and 36.8 minutes for single mothers. Mothers devoted well over half of this time to childcare: coupled mothers spent 73.2 percent (25.7 minutes) and single mothers spent 81.8 percent (30.1 minutes) of the time awake on childcare, compared with coupled fathers, who spent 54.0 percent (19.6 minutes) of the time on childcare.

These figures provide some reason to believe that parents of infants are often exhausted. Further, the interruptions affected coupled and single mothers far more often than coupled fathers. However, the figures do not provide a complete explanation for the elevated amount of sleeping time reported by single mothers of infants: relative to coupled mothers of infants; the single mothers indeed spent more time on childcare when awakened in the middle of the night, but they woke less frequently.

SES and childcare, paid work, and housework

The final analysis of this article divides the parents of infants into three subgroups—high, middle, and low SES—and compares these subgroups’ levels of childcare, housework, and working time. Typically, SES is measured using a variable or combination of variables related to education, income or wealth, and occupation. For example, an individual with a college or university degree, with high income, and with a managerial or professional occupation would be classified as high SES, whereas an individual living in poverty would be considered to be of low SES.²⁰ Occupation is ignored in the present analysis because the resources associated with high SES arguably allow some

mothers to opt out of employment, in which case they may not report an occupation and would be misclassified as a result. Instead, the combination of family income of at least \$60,000 per year and the respondent holding a bachelor’s degree serves as a proxy for high SES. In this article, the low-SES group is defined by family income of less than \$15,000 for coupled parents and of less than \$12,500 for single mothers.²¹ Because the income data are categorical, there is no obvious way to correct for inflation across survey years.

SES is related to many aspects of an individual’s life, and the parents of infants are no exception. For example, SES is closely connected to marital status. The unweighted sample size for this analysis includes only six single mothers reporting high SES, so this group is necessarily ignored for the analysis. Further, only 6.4 percent of coupled fathers and 8.6 percent of coupled mothers were living in poverty, whereas over 50 percent of single mothers were living in poverty. Because so few coupled fathers were living in poverty, that group also is ignored below. Given that high-SES parents tend to delay childbearing, it is also not surprising that among coupled parents of infants,

Table 4. Selected characteristics of parents of high, [middle], and (low) socioeconomic status, 2003–07

Characteristic	Coupled fathers	Coupled mothers	Single mothers
Mean number of children	1.95 [2.05] –	¹ 1.00 [2.21] (2.18)	– [2.22] (2.59)
Percent employed.....	¹ 98.1 [94.4] –	¹ 68.9 [46.0] (37.8)	– [66.4] ¹ (38.4)
Mean age (in years).....	¹ 34.7 [31.5] –	¹ 32.5 [28.5] ¹ (25.6)	– [24.3] [24.4]
Manager/professional, percent.....	¹ 80.9 [24.6] –	¹ 56.4 [16.4] ¹ (4.6)	– [6.4] ² (2.3)
Sample size.....	314 [548] (59)	363 [661] (96)	6 [107] (121)

¹ Statistically significant at $p < .01$.

² Statistically significant at $p < .05$.

NOTE: Significance tests for robust t -statistics in linear regressions with dummy variables for high- and low-SES groups. Dash indicates datum not reported because of small sample size.

SOURCE: Weighted ATUS data.

people of high SES were almost 7 years older on average than their counterparts living in poverty. (See table 4.) Further, even though occupation was not used to indicate SES, high-SES parents disproportionately fill managerial and professional occupations: 80.9 percent of the coupled fathers and 56.4 percent of the coupled mothers were working in these occupations. Significantly less than 10 percent of poor coupled mothers and fathers or single mothers held such positions. Consistent with the “ideal worker” norm that appears to affect high-SES individuals, high-SES coupled fathers and coupled mothers were significantly more likely to be employed; for example, high-SES coupled mothers of infants were almost twice as likely to be employed as their low-SES counterparts (68.9 percent compared with 37.8 percent, respectively).

Table 5 provides information on the three indicators of childcare time, on housework, and on working time. There are data for working time on the reference day—including both people with jobs and those without—as well as data on usual weekly work hours. The sample is broken down by gender-family status and by SES, and is restricted to parents of infants. Tests for differences use ordinary least squares regressions, with various time measures serving as the dependent variables and dummy variables for high and low SES as the independent variables.

With regard to coupled parents and primary childcare, fathers of high SES recorded significantly more time for primary childcare, reporting an additional half-hour relative to the middle group. Coupled mothers exhibit the same pattern and significant differences: those of high SES reported 41 more minutes of primary childcare time than did those of middle SES, and those of middle SES reported over 69 more minutes than the low-SES group. These differences in primary childcare time between groups of fathers and among groups of mothers are consistent with the norm of intensive mothering among high-SES mothers and also consistent with the hypothesis of intensive parenting among high-SES fathers. Total childcare time figures yield a similar pattern for coupled fathers, although the differences are not significant. Total childcare time for coupled mothers was lower for the low- and high-SES groups than for the middle group, by around a half-hour. Most high-SES mothers do not have as much time to devote to their children as other mothers, but they tend to spend that time more intensively—as suggested by significantly higher levels of primary childcare time—than other mothers. The pattern of total solo childcare among mothers mirrors that of total childcare.

“Housework time” spent by coupled fathers was longer for those of high SES than for those of middle SES, but

the difference is not significant. High-SES coupled mothers recorded significantly lower levels of housework than other mothers. Less time spent doing housework can be expected to mean that someone was paid to do the work or that some of these tasks were done by a partner or spouse.

Time-diary figures for coupled fathers’ working time yield no statistically significant differences between fathers of high SES and fathers of middle SES, though the high-SES fathers reported a few additional minutes of working time. Reports of usual weekly work hours reveal statistically significant differences in the expected direction: high-SES fathers of infants worked over 3.5 hours per week longer than their counterparts of middle SES. Both the diary figures and the weekly reports suggest that high-SES coupled mothers of infants tend to work longer hours than other mothers of infants. In sum, the results for couples are consistent with pressures on high-SES parents both to be active parents and to work long hours. Mothers in this group generate at least part of their childcare time through reductions in housework. Nonetheless, the results

Table 5. Hours and minutes of childcare, housework, and paid work; means for high, [middle], and (low) SES, 2003–07

Activity	Coupled fathers	Coupled mothers	Single mothers
Primary childcare.....	1 ² :01 [1:31] –	1 ⁴ :19 [3:38] 1 ² (2:29)	– [2:59] (3:13)
Total childcare.....	6:59 [6:22]	11:05 [11:32] (11:00)	– [8:42] 2 ² (10:42)
Total solo childcare.....	2 ² :57 [2:22] –	7:29 [7:44] 2 ² (6:29)	– [8:42] 2 ² (10:42)
Housework.....	1:17 [1:12] –	2 ² :09 [2:47] (2:49)	[1:34] (1:55) –
Working time on diary day	5:19 [5:16] –	2 ² :23 [1:41] (1:48)	– [2:35] (1:50)
Usual weekly working time	1 ⁴ 5:48 [42:12] –	1 ² 3:12 [13:54] (11:12)	– [19:48] 1 ¹ (11:30)
Sample size	314 [548] (59)	363 [661] (96)	6 [107] (121)

¹ Statistically significant at $p < .01$.

² Statistically significant at $p < .05$.

NOTE: Significance tests are conducted by use of linear regressions with dummy variables for high- and low-SES groups. Dash indicates datum not reported because of small sample size.

SOURCE: Weighted ATUS data.

fit the hypothesis that high-SES mothers are often caught between extreme expectations regarding their careers on one hand and childrearing on the other.

For single mothers, living in poverty is associated with 2 more hours of total childcare time and 2 more hours of total solo childcare time in comparison with being of middle SES. That difference cannot be accounted for by a divergence in housework time, since single mothers living in poverty also reported elevated levels of housework (although the difference is not significant). Lower levels of working time seem to be a contributing factor. Daily working time was an insignificant 45 minutes shorter, but usual weekly work hours were a significant 8 hours shorter for those living in poverty.

This result (8 fewer hours of working time) fits the findings reported in the previous section regarding coupled mothers of infants spending less time doing paid work and more time caring for children than coupled mothers of older children and, similarly, single mothers of infants spending less time doing paid work and more time caring for children than single mothers of older children. The difference between coupled mothers and single mothers is that less working time is closely associated with poverty for single mothers but not for coupled mothers. Table 5 reveals significantly lower weekly work hours for poor single mothers of infants but not for poor coupled mothers of infants. Looked at differently, the simple correlation between poverty status and usual weekly hours is -0.105 for coupled mothers, but -0.312 (a figure with a larger absolute value) for single mothers.

THE ANALYSIS IN THIS ARTICLE SUPPORTS THE GENERAL CLAIM that parents of infants exhibit divergent patterns of time use compared with the parents of older children, confirming that infants are given distinct treatment. Relative to mothers of older children, both coupled and single mothers of infants devoted at least an additional hour per day to childcare, whether measured by primary childcare or total childcare time. In comparison with coupled mothers of older children, coupled mothers of infants recorded over 3 additional hours per day of total childcare on weekdays. In addition, coupled fathers with infants devoted more time to childcare than coupled fathers with children aged 1–12, although the differences in primary childcare and total childcare are smaller than they are for coupled mothers, ranging from a low of 33 additional minutes of primary childcare on weekdays to a high of 68 additional minutes of total childcare on weekends. These findings suggest that, on the whole, fathers have become more involved with infants in recent decades; however, childcare is still marked by substantial in-

equality between the amount of time spent by men and the amount spent by women.

Total solo childcare time spent by single mothers of infants is around an hour longer than that spent by coupled mothers on weekdays, and over 5 hours longer on weekend days. These differences highlight the difficulties involved in parenting an infant alone. However, it is important to note that the solo childcare figures exclude time that parents spent caring for children together, and that time also appears to be valuable to families and to society.

The parents of infants financed the additional time they need for childcare—that is, as compared with the parents of older children—using a variety of mechanisms. Coupled fathers and mothers of infants, as well as single mothers of infants, all tended to spend less time on personal care and volunteer activities. The coupled fathers spent less time with housework and sports and leisure as well to free up time for primary childcare. Employment played a more significant role for coupled and single mothers; each group significantly scaled back working time and, perhaps relatively, travel time.

Surprisingly, single mothers of infants not only provided more childcare relative to their counterparts with older children, but also reported an additional 44 minutes of sleep. Indirect indicators suggest that both coupled and single mothers may experience exhaustion that is, in part, due to frequent interruptions of sleep at night when infants are present. However, single mothers were interrupted less frequently than coupled mothers, so this hypothesis is inconclusive. It is also possible that the expanded sleeping time of single mothers is related to sleeping in the same bed as one's child as a form of childcare, although this practice cannot be identified with the ATUS data.

Among the parents of infants, spending one fewer hour at work is associated with only minor increases in primary childcare time, regardless of the sex of the parent or the presence of a partner. Working one fewer hour is associated with much larger increases in total childcare and total solo childcare time: an additional 22 minutes of total childcare for coupled fathers, 42 minutes for coupled mothers, and 35 minutes for single mothers. These findings suggest that pressures on coupled mothers of infants to opt out of employment are related to the value of time during which a child is “in [one’s] care” more so than to primary childcare time. Nonetheless, it is important to note that most of the high-SES coupled mothers were employed and that they worked longer hours in comparison with any other group of coupled or single mothers. Contrary to media depictions,²² coupled mothers of high SES do not appear to be leading an “opt-out revolution.”

Time-use patterns diverge across lines of socioeconomic status among the parents of infants. High-SES coupled fathers, who tend to have the greatest financial resources, spent roughly 30 percent more time on primary childcare relative to their counterparts of middle SES, while high-SES coupled mothers spent almost twice as much time engaging in primary childcare as their poor counterparts did. Again, these findings are consistent with the existence of a norm of intensive mothering among high-SES mothers that has partially evolved to a norm of intensive parenting, cutting across the gender line. A large part of the additional primary childcare time that high-SES parents spent appears to have been obtained by reducing “in [one’s] care” time. The high-SES fathers tended to spend more

time doing housework than middle-SES fathers, while the high-SES mothers engaged in less housework than other mothers. High-SES parents of infants exhibited long work hours, particularly in terms of usual weekly hours.

The same pressures to opt out that appear to confront many coupled mothers also appear to affect many single mothers. In both cases, reductions in work hours may provide the most direct route to an expansion of childcare time during the first year of a child’s life. There is, however, a crucial difference between single mothers and coupled mothers. Single mothers with reduced or zero work hours indeed devoted more time to childcare, but the price was a substantially greater risk of poverty for themselves and their children. □

Notes

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¹ See Jody Heymann, Alison Earle, and Jeffrey Hayes, *The Work, Family, and Equity Index: How Does the United States Measure Up?* (Montreal, QC, The Institute for Health and Social Policy, 2007), on the Internet at www.mcgill.ca/files/ihsp/WFEI2007.pdf (visited Nov. 14, 2008).

² See Michael Baker and Kevin Milligan, “How Does Job-Protected Maternity Leave Affect Mothers’ Employment?” *Journal of Labor Economics*, October 2008, pp. 655–91.

³ See Suzanne M. Bianchi, John P. Robinson, and Melissa A. Milkie, *Changing Rhythms of American Family Life* (New York, Russell Sage Foundation, 2006), p. 63.

⁴ For an example of an article which finds that levels of fathers’ involvement increase as children age, see Jeffrey J. Wood and Rena L. Repetti, “What gets dad involved? A longitudinal study of change in parental child caregiving involvement,” *Journal of Family Psychology*, March 2004, pp. 237–49. However, W.J. Yeung, J.F. Sandberg, P.E. Davis-Kean, and S.L. Hofferth, “Children’s Time with Fathers in Intact Families,” *Journal of Marriage and Family*, February 2001, pp. 136–54, find fathers devoting more time to children aged zero to two years.

⁵ For example, Daniel S. Hamermesh, *Workdays, Workhours, and Work Schedules* (Kalamazoo, Mich., Upjohn Institute, 1996), p. 29; finds men working 1.85 percent more days per week and 3.43 percent more hours per day when they have children under the age of 3 years, in comparison with when they do not have children younger than 3. Bianchi and others, *Changing Rhythms*, p. 47, find fathers with infants working around 0.8 more hour per week relative to fathers whose children are all over the age of 6 years.

⁶ For information on long hours and the ideal worker norm, see Joan Williams, *Unbending Gender* (New York, Oxford University Press, 2000); or Robert Drago, *Striking a Balance* (Boston, Dollars and Sense, 2007). For information on the norm of intensive mothering, see Sharon Hays, *The Cultural Contradictions of Motherhood* (New Haven, Conn., Yale University Press, 1996).

⁷ See Jane Waldfogel, *What Children Need* (Cambridge, Mass., Harvard University Press, 2006).

⁸ Much of the information in this section is drawn from the *American Time Use Survey User’s Guide* (U.S. Census Bureau and U.S. Bureau of Labor Statistics, 2008).

⁹ For example, see Bianchi and others, *Changing Rhythms*, pp. 27–30.

¹⁰ A check of the 2006 data for married and unmarried partners reveals only one male same-sex couple and no female same-sex couples who also were parents of infants, so the distinction between same-sex couples and opposite-sex couples is ignored in this article.

¹¹ The weights correct for demographic characteristics including race/ethnicity and income, and for the oversampling of weekend days in the survey. The relevant weights are TU06FWGT for the 2003–05 samples and TUFINLWGT for the 2006 and 2007 data.

¹² See Mary Dorinda Allard, Suzanne Bianchi, Jay Stewart, and Vanessa R. Wight, “Comparing childcare measures in the ATUS and earlier time-diary studies,” *Monthly Labor Review*, May 2007, pp. 27–36.

¹³ Respondents’ sleep time is excluded from ATUS estimates of “child in care” time because respondents themselves were inconsistent in reporting child-in-care time from when they were asleep. The exclusion remedies this inconsistency.

¹⁴ The total solo childcare measure does not exclude time when grandparents or other family or friends are present.

¹⁵ When contemplating the validity of the ATUS data, it is reassuring to discover that, across weekdays and weekends, most coupled mothers’ total childcare time minus their total solo childcare time was approximately equal to the quantity of time that the respective fathers reported engaging in childcare in conjunction with their partner. In a parallel, most coupled fathers’ total childcare time minus their total solo childcare time was approximately equal to the quantity of time that the respective mothers reported engaging in childcare in conjunction with their partner. This is particularly impressive given that the samples of coupled fathers and mothers are independently collected.

¹⁶ Surprisingly, there are no obvious efficiency gains in terms of childcare time for parenting both infants and other children simulta-

neously. If there were, then adding interaction terms for parents of one or more infants and parents of at least two children to the regressions would yield negative effects. Yet the addition of the interaction terms yields only one significant effect in the 18 regressions: coupled mothers of infants and of other children devote an *additional* 53 minutes to solo childcare on weekdays. (Results are available from the author.) Further analysis suggests this additional time may come from reductions in work hours; regressing usual work hours against the same independent variables for coupled mothers reveals significantly lower weekly work hours when both an infant and other children are present, with the divergence estimated to be 4.2 hours per week.

¹⁷ See Suzanne M. Bianchi, "Maternal Employment and Time with Children: Dramatic Change or Surprising Continuity?" *Demography*, November 2000, pp. 401–14.

¹⁸ For examples of such networks, see Anita I. Garey, *Weaving Work and Motherhood* (Temple University Press, Philadelphia, 1999), pp. 89–102.

¹⁹ As is standard, respondents classified as performing shiftwork are those who report a majority of working time on the diary day outside of the hours between 8 a.m. and 4 p.m.

²⁰ For more information see, for example, John Iceland and Rima Wilkes, "Does Socioeconomic Status Matter? Race, Class, and Residential Segregation," *Social Problems*, May 2006, pp. 248–73.

²¹ The ATUS-CPS family income data are placed into the following categories: less than \$10,000, \$10,000 to \$12,499, \$12,500 to \$14,999, and \$15,000 to \$19,999. For the year 2007, the U.S. Census Bureau defines poverty for a single parent with one child to be associated with household income of less than \$14,291, and poverty for a couple with one child to be associated with household income of less than \$16,689. Although one could use the \$15,000 cutoff for single mothers, the \$12,500 figure serves to make poverty groups more comparable across the single and couple samples, given that the income needs of couples should be greater. However, changing the single-mother poverty cutoff to \$15,000 or raising the middle-class income cutoff from \$60,000 to \$75,000 leaves the general pattern of results unchanged. See the U.S. Census Bureau, "Poverty Thresholds 2007," at www.census.gov/hhes/www/poverty/threshld/thresh07.html (visited Oct. 9, 2009).

²² See Pamela Stone, *Opting Out? Why Women Really Quit Careers and Head Home* (Berkeley, Calif., University of California Press, 2007), pp. 3–4.