Parental and Student Time Use Around the Academic Year

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Abstract

We demonstrate how mothers, fathers, and 15–17-year-old students alter their schedules around the K-12 academic year. Using regression discontinuity methods, combined with school start and end dates, we show that mothers are more affected by the school year than are fathers. During the school year, mothers sleep less, spend more time caring for family, and have less time for eating, free time, and exercise. Fathers experience fewer and mostly smaller changes. Teenagers reduce education time by 5.5 hours per day on weekdays during the summer, substituting that time with 2+ hours of free time and 1+ hours of sleep.

1. Introduction

How does the school calendar affect the time use of parents and children? School dates are perfectly foreseeable, and individuals have ample opportunity to plan around them. Even so, when school is out, behaviors might change in ways that affect the health and well-being of families with school-age children. In this paper, we seek to understand such changes in behavior and focus especially on differences between mothers, fathers, and older teenage children.

In the United States, roughly 96% of public K-12 schools have a traditional summer break of around 12 weeks.[1] Research into how student and parent outcomes change when school is on summer hiatus includes losses in academic achievement ("summer learning loss"; see Quinn and Polikoff, 2017); decreases in maternal labor supply (Price and Wasserman, 2022); and changes in youth mental health, suicidality, and criminal activity (Hansen and Lang, 2011; Hansen, Sabia, and Schaller, 2022; Jones and Karger, 2022). Another set of studies has examined how parent and student time use differs over traditional summer break months relative to other parts of the year (e.g., Handwerker and Mason, 2017; Gershenson, 2013). To our knowledge, aside from Jones and Karger (2022), none of these previous studies use variation stemming from exact school start and end dates combined with regression discontinuity (RD) methods to identify changes in outcomes.

In this paper, we make three main contributions to the literature on how families' schedules are affected by the school calendar. First, we exploit information on school start and end dates around the summer break from across the United States combined with American Time Use Survey (ATUS) data, which contain 24-hour time diaries with exact dates, to measure how

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[1] https://nces.ed.gov/programs/digest/d13/tables/dt13_234.12.asp. Among the school districts in our school calendar data, the average (mean) break is 11.7 weeks. The 5th percentile is 9.9 weeks, the 25th percentile is 10.9 weeks, the 75th percentile is 12.6 weeks, and the 95th percentile is 13.7 weeks.

behavior changes when school starts and ends for the year. Our approach allows us to avoid confounding effects due to the school year with other factors that change seasonally such as weather, daylight, and economic conditions (Connolly, 2008; Barksy and Miron, 1989; Geremew and Gourio, 2018; Coglianese and Price, 2020).

Second, we examine a comprehensive set of 10 time-use categories—including sleep, self-care, household tasks, caring for others, work, education, free time, eating, physical exercise, and traveling—as well as subsets of these categories such as time devoted to specific childcare activities. Most other studies in this literature focus on a narrow subset of activities related to a specific outcome, as highlighted in the next section. Our approach should allow for a more holistic picture of time-use changes around the school year, which we later argue is important for understanding overall changes in health and well-being.

Our third contribution is to look at the time use patterns of both parents (mothers and fathers of school-age children) as well as older teenage (15–17-year-old) students.[2] [3] Concerns about time use and its implications for health vary across these groups. For example, most teenagers report getting less than the nationally recommended amount of sleep on school nights (Bandyopadhyay and Ninotchka, 2019); and sleep deprivation among teenagers has been linked to poorer academic performance and worse mental health (Seton and Fitzgerald, 2021). Lack of sufficient sleep is also a problem for adults (Liu et al., 2016), as is insufficient exercise—less than a quarter of U.S. adults exercise enough to meet federal guidelines (Blackwell and Clarke, 2018). Finally, studies show that mothers engage in more educational childcare such as helping

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[2] 15-year-olds are the youngest participants in ATUS, so we cannot examine the time use of younger students in our analysis. A previous study of teenagers' time use examines how activities correlate with family characteristics (such as mother's employment and education) but does not examine how such activities vary with school year dates (Wight, Price, Bianchi, and Hunt, 2009).
[3] We refer to 15-17 year old individuals as students, though it is possible that not all are.

with homework (e.g., Ronning, 2011) and household tasks (e.g., Parker, Horowitz, and Rohal, 2015) than fathers do. We ask whether the summer school break affects time spent in these and other activities that have implications for the overall well-being of individuals in the household.

In our analysis, we find that many behaviors exhibit sharp changes across the start or end of the academic year. The top panel of Figure 1 shows how 15-17 year-olds' weekday time spent in educational activities varies around the school start/end week, and the bottom panel shows the same thing for weekday time mothers of school-age children spend with their children in educational activities (such as helping with homework). "Week zero" is the week that school starts or ends for the year, and positive values indicate weeks during the school year while negative values represent weeks during the summer break. Not surprisingly, in both cases, there is a stark, discrete jump in these activities when school is in session.

Do school start/end dates have broader implications for the way children and parents use their time? We find that they do. First, while both mothers and fathers are in the presence of their children less during the school year, they spend more time actively engaged with their children when school is in session. In total, this change is three times larger for mothers than it is for fathers, which has the effect of widening the gender gap in active time with children compared with the summer break. Second, when school is in-session, mothers of 6–17-year-old children give up 26 minutes each of sleep and free time and 5 minutes of physical exercise per weekday. They spend an additional 35 minutes caring for others with smaller increases in household activities, paid work, and travel time (e.g., driving).[4] Once again, effects for fathers are

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[4] As a placebo test, we examine women with no children in the household between ages 3 and 18, whose time use patterns should generally be unaffected by school dates (because it is our sense that pre-schools often follow the same academic calendar as K-12 schools in the area, we exclude those with 3-5-year-olds as well). Across the 10 categories of time use, we find only one statistically significant effect (at the 10% level); furthermore, all coefficients are small in magnitude.

qualitatively similar to those for mothers but smaller in magnitude (with the exception of work time).[5] In the cases of sleep and caring for others, the gender differences in effects are relatively large and statistically distinguishable (at the 10% and 1% level, respectively). When comparing our RD estimates to regression estimates of (adjusted) means, we find that the latter are qualitatively similar but generally modestly understate the effects of the school year on time use for mothers of school-age children.

Which mothers are most affected by the school year? The changes in time use we observe are driven primarily by mothers of younger school-aged children (6-11 years old), among whom both sleep and free time losses are both more pronounced (~35 minutes each). Mothers of these younger children also increase the amount of time spent caring for these children by 52 minutes during the school year. Corresponding effects for mothers of children ages 12-17 are much smaller and generally statistically insignificant at conventional levels.

We also distinguish between mothers who were employed 2-5 months prior to their ATUS interview (i.e., as of the time of their last CPS interview) and those who were not employed. Previously employed and not-employed mothers both see reductions in sleep and free time and increases in care for others when school is in-session, but magnitudes are somewhat larger for those who were not employed. Dividing our sample of mothers by household income, we find that the results are similar across low- and high-income households with a few exceptions discussed below.

Overall, our results on time-use patterns of parents around the school calendar suggest that mothers, particularly those of younger school-aged children, are substantially affected by whether school is in session. Because activities like sleep, free time, and exercise have been

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[5] Because we define fathers and mothers based on having children in the household, we do not consider fathers and mothers who are, for example, divorced or separated, and not living with their children.

linked to mental health and because they are markedly different during the school year, the well-being of mothers may also suffer in some ways during that time and contribute to the gender gap in mental health (Churchill et al., 2020; Golin, 2022). Analyzing how the school year affects mothers' downstream health outcomes is beyond the scope of this paper, but we believe it is an important area for future research.

We now turn attention to how 15-17 year-old children's time use varies around the school year. These individuals report spending more than 5 and a half fewer hours in educational activities on weekdays when school is on summer hiatus.[6] This time is used in a variety of ways when school is out: notably, free time increases by a little over 2 hours, sleep time increases by 1.3 hours, work time and time spent doing household tasks increase by 0.8 and 0.7 hours, respectively, and physical exercise increases by 0.6 hours. Thus, (older) students themselves are even more affected by whether school is in-session than parents when it comes to sleep, free time, and exercise.

We show that despite somewhat later summer bedtimes, teenage students more than compensate with later wake times, on average. This is consistent with research showing that children sleep more when school start times are pushed back even though they could (in principle) undo the benefits with later bedtimes (Dunster et al., 2018). Regarding exercise, just over half of U.S. high-school students attend physical education classes in an average week (and only 30% attend daily), so even though we do not observe time spent in P.E. classes during the school day (such time is counted as taking classes in our data), it is very likely that physical exercise rises during the summer break months for the average youth.[7]

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[6] For a reference point, the length of the average American school day was about 6.6 hours in 2008: https://nces.ed.gov/surveys/sass/tables/sass0708_035_s1s.asp.
[7] https://www.cdc.gov/healthyschools/physicalactivity/facts.htm.

On the other hand, we find that the majority of the increase in summer free time for teens is spent on video gaming, television, and computer use: in total, they increase by nearly an hour and a half over the summer (roughly 70% of the total increase in free time). The health consequences of these activities are not fully understood (Dubicka, Martin, and Firth, 2019; Odgers, Schueller, and Ito, 2020). In the case of video games, for example, recent study findings indicate certain video games may have therapeutic potential for improving outcomes (see Zayeni et al., 2020, for a review); however, 41% of teenage boys and 11% of girls themselves report that they spend "too much time" playing video games.[8] Meanwhile, some recent papers suggest that social media use, which now represents a large share of screen time among teens, negatively affects mental health (Allcott et al., 2020; Braghieri, Levy, and Makarin, 2022). 41% of girls and 31% of boys say they spend too much time on social media.[9]

Teenage mental health outcomes vary by whether school is in session, with suicides and mental health visits increasing during the school year (Zhang et al., 2021; Hansen and Lang, 2011; Hansen, Sabia, and Schaller, 2022). Though there are many potential explanations for this phenomenon, our results suggest that time use, and particularly how much sleep students get, may play an important role. This is another topic for future research. At the same time, the implications of teenagers devoting such a large share of their extra summer free time to screens, as well as policies that encourage teens to use their time differently, warrant future study.

2. Related Literature

There is long-standing interest in how school attendance affects parents' and children's behaviors. Many papers in this literature focus on policies that affect the availability of school in children's pre-K or kindergarten years (see, for example, studies on maternal labor supply in

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[8] https://www.pewresearch.org/fact-tank/2018/09/17/5-facts-about-americans-and-video-games/
[9] https://www.pewresearch.org/internet/2022/08/10/teens-social-media-and-technology-2022/

Gelbach, 2002; Cascio, 2009; Fitzpatrick, 2012; and studies on children's academic achievement and long-run outcomes in Heckman et al., 2010; Bailey, Sun, and Timpe, 2021). Another set of studies focus on policies that affect how much time students are in high school, such as those on academic achievement (Liu, Lee, and Gershenson, 2021) and short- and long-term criminal outcomes (e.g., Anderson, 2014 and Bacher-Hicks, Billings, and Deming, 2019). Lastly, there are studies on the effects of the timing of breaks during the school year (Graves, 2013a,b) and the length of the school week (Ward, 2019; Duchini and Van Effenterre, 2022) on maternal labor supply.

Another strand of this literature compares changes in student behaviors and outcomes between the school year and the summer break (see, for example, those studies cited in the Introduction on academic performance, mental health, and crime). Some papers in the children's sleep literature (see, for example, Hansen et al., 2005; Crowley et al., 2006; and Stewart, 2014) make this comparison to gauge how much sleep is lost when kids are in school.[10] In the childhood obesity literature, von Hippel and Workman (2016) show that for young children, obesity prevalence only rises over the summer break (as opposed to during the school year).

Regarding time use, Handwerker and Mason (2017) analyze several categories of parental behavior (with overlap to ours), focusing on mean differences between July (summer break) and October-April (school year). Notably, they find that parents are more likely to spend time with children during the school year, with generally larger effects for mothers. Though some changes are similar across parent gender, they also find statistically significant declines in sleep (15 minutes per day) and leisure (20 minutes) and an increase in work (33 minutes) for mothers but not fathers. Gershenson (2013) analyzes child activities and parent-child interactions

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[10] Hansen et al. (2005) compares average sleep for 37 high school students in August and September across the school start date. It is possible that other teenage sleep studies also make use of exact start and end dates.

in a regression framework and finds that some gaps between low- and high-income households grow over the summer (June-August): low-income children watch relatively more television, and their parents engage in relatively less facilitation of their activities, during the summer.

We contribute to this literature by using exact school year start/end dates and introducing a regression discontinuity (RD) design to separate school-year effects from other seasonal factors that may conflate comparisons of summer and non-summer outcomes. We also provide a more comprehensive analysis of time-use changes by examining all reported activities grouped into ten main categories (which we detail below) as well as specific activities related to childcare. Lastly, we perform our analysis on not only mothers and fathers but also on older (ages 15-17) children; in the latter case, this allows us to analyze outcomes such as paid work time, total leisure, and screen time that appear to be novel to the school-year effects literature.

3. Data

Our primary data source is the American Time Use Survey (ATUS). We use Multi-Year Microdata Files, obtained from The U.S. Bureau of Labor Statistics (U.S. Bureau of Labor Statistics, 2021). The ATUS is a 24-hour time diary, where the respondent reports the activities they were doing between 4:00am of the first day and 4:00am of the following day. Respondents are randomly sampled from individuals who completed the Current Population Survey (CPS), and they take the ATUS between two and five months after their final CPS interview. We make use of variables from both the ATUS and the final CPS interview. The ATUS contains information on where the respondent lives (where their household is). The state of residence is included for all respondents. County and/or CBSA are only observed for some individuals.

In general, we restrict the sample to use data from 2003-2019.[11] When we split by household income, we use data from 2010-2019 because the income variable is often missing (and not imputed) in prior years.[12] The ATUS contains over 400 activity codes. We collapse these codes into ten main categories: 1) sleep; 2) self-care; 3) household tasks; 4) caring for others; 5) work; 6) education; 7) free time; 8) eating; 9) exercise; and 10) travel. These categories are mutually exclusive and exclude a small amount of time with coding errors, etc. See the Data Appendix for which activities make up each category.

Our analysis relies on school start dates. We use school calendar information from publicholidays.com, which was used in Jones and Karger (2022). These data contain school calendar information—school start date, summer start date, and various holidays—for over 11,000 US school districts. We focus on school start date and school end date for the 2019-2020 school year, which we use to proxy for such dates during the 2010-2019 school years as we discuss below.[13] Throughout the paper, we also refer to the school end date as the summer start date.

We first add geographic information to the school calendar data. The only identifiers for the school calendar data are state and school district. After a small amount of data cleaning, we use these to match to NCES school district data that contain more detailed geographic information (including county and MCSA, which we use). Specifically, we first remove a number of generic terms such as "school," "district," and "public." We do this so that the fuzzy

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[11] While we use the "2003-2020 Multi-Year Microdata Files" version of this data, we do not consider 2020 to avoid complications from the Covid-19 pandemic. The overall ATUS response rate declined from about 58% in 2003 to 42% in 2019 (see Table 3.3 in https://www.bls.gov/tus/atususersguide.pdf). In Appendix Table A1, we show our results are robust to weighting our regressions using ATUS final sample weights, which ensure the data is nationally representative in a given year.
[12] See https://www.bls.gov/tus/atususersguide.pdf.
[13] It appears that 2020 summer start dates in our data correspond to the scheduled dates before Covid-19 affected school schedules.

matching can rely more on unique information. This results in 76% of the 11,245 school districts

with a perfect match to a school district in the NCES data. We drop the less than 1% that are not

matched at all. Among the matches, there is some degree of mismatching, but this appears to be

relatively uncommon.[14]

After the matching, we aggregate school and summer dates to 1) the county level for the

counties that appear in the ATUS data; 2) the CBSA level for the CBSAs that appear in the

ATUS data, excluding the counties from step 1; and 3) the state level, excluding the counties and

CBSAs in steps 1 and 2.[15] With each aggregation, we determine both the most commonly

occurring school start week and summer start week, weighting by Common Core of Data district

enrollment, obtained from Urban Institute (2023).[16] For instance, perhaps a county's most

commonly occurring school start week is week 32, and 90% of (enrollment-weighted) districts in

that county started during this week. We do this because we do not observe an individual's

school district in the ATUS data, so we must assign school dates based on their county, CBSA,

or state, as described next.

We add the school calendar information to each observation in the ATUS as follows. In

general, it is best if we can use the dates which were aggregated to the county level because

counties tend to be smaller than CBSAs (and thus the school calendar dates are better measured)

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[14] After removing the generic terms before matching, there are some cases of duplicate districts. For these, we revert to the district's original name. At this point, we drop districts that do not match with any district in NCES. If a single district matches to multiple NCES districts, we keep only one observation and only if the county is constant across observations for that district. If there are multiple NCES districts with the same name in different counties, we drop matches to these districts. If a single NCES district matches to multiple school calendar districts, we drop these observations. Each of these cases are rare, though we certainly commit type I errors in a few cases (i.e., delete valid matches). Finally, we allow the NYC School District to take five observations, one for each of five counties.
[15] In uncommon cases in which there are no districts within a CBSA or state on which to match (after excluding districts at lower levels of geography), we use school calendar information after aggregating to the CBSA level without excluding any counties or after aggregating to the state level without excluding any CBSA's or counties.
[16] Fewer than 1% of districts are coded as having 0 enrollment or are missing enrollment; for these cases, we replace enrollment with a value of "1." It is also possible to weight by school (rather than district) enrollment. One reason to do this is that a school can be in a different county than its district. However, because this happens less than 4% of the time, this is unlikely to make much of a difference.

and are never larger than the state they are in. As mentioned above, we only observe county for some individuals (from the most densely populated counties) in the ATUS. For these individuals, we use the most-commonly occurring school (and summer) start date for the county (accounting for school district enrollment); these make up 39% of the data (before sample restrictions).[17] We then match the CBSA-level dates for individuals for whom we observe CBSA but not county; these make up 30% of the data.[18] For remaining individuals, we use dates aggregated to the state level; these make up 31% of the data. Appendix Figure A1 shows what percentage of the school districts we observe share the same school and summer start dates within each county, CBSA, and state. As expected, a greater percentage of counties have districts that all share the same start dates than is true of CBSA's (and of CBSA's compared with states). Even still, the average percentage of districts that share the same school start date within a state is 69% (62% for summer start date). Corresponding percentages at the CBSA level are 76% (71%) and at the county level are 81% (81%).

There are several potential sources of measurement error corresponding to the school calendar information. First, the school calendar information corresponds to the 2019-2020 school year, but we use time use data going back to 2003. School districts might change their start week over time. Second, to calculate week of the year, we code week 1 as January 1-7, week 2 as January 8-14, and so on; because years start on different days of the week, a given week means something slightly different across years. Third, because we do not observe school district in the ATUS (or whether respondents or their children attend public schools), we cannot match precisely to the school district the respondent lives in, so we rely on the method described above. Finally, while we do observe a large percentage of school districts, we do not observe them all.

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[17] This is assuming the school district file also has data for that county.
[18] Because CBSAs can overlap states, when working with CBSA data, we do so at the state-CBSA level.

For these reasons, we expect some amount of classical measurement error (leading to attenuation bias) in our estimates. We implement a donut-hole RD design where we leave out some days or even weeks just before and after school start/end dates. This should purge measurement error within several days of measured school start/end dates, though of course it could also change the results by changing the regression sample. To gauge how much measurement error might be affecting our results, we increase the size of the donut hole by 1-2 weeks on either side of the school start/end week. In general, we find similar results to our baseline results.

Across all samples, we exclude holidays and individuals employed in elementary and secondary schools (as of the last CPS interview), since their schedules are mechanically affected by school and summer start dates (Price and Wasserman, 2022).[19] This yields 197,145 observations. We consider two age groups: 25-55 year olds (many of whom are parents) and 15-17 year olds (many of whom are students). After restricting on age, there are 108,560 25-55 year old respondents and 8,561 15-17 year old respondents. Depending on the sample, we also limit based on one or more of the following criteria: by weekday/weekend; by gender; by whether there is at least one own child of school age in the household; by family income (as of the last CPS interview); and by employment status (as of the last CPS interview). These restrictions tend to greatly reduce sample sizes. For instance, there are 14,107 (10,148) weekday observations for mothers (fathers) with at least one household child age 6 though 17; some of these observations will not enter our regression discontinuity sample due to being too far away from a cutoff.

4. Empirical Strategy

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[19] We also drop the very small number of observations (less than 0.1%) that are coded as being in the summer control group but are actually in the very beginning of the school year or in the very end of the school year. This can happen if the summer break is very short.

We use a regression discontinuity design (RDD) to explore the effects of being in school versus out of school on our constructed time categories for adults and 15-17 year-olds. This strategy follows Benson, Fitzpatrick, and Bondurant (2022) and Jones and Karger (2022). We present results both in regression form and graphically. For the regressions, we estimate the following equation around the school start date:

$$y_i = \alpha + \beta \cdot f(days_i) + \gamma \cdot \mathbf{1}(days_i > cutoff) + X_i\beta + \epsilon_i, with\ |days_i| \le k \qquad (1)$$

where, for individual i, y is hours spent in a particular time category (such as exercise or sleep); the running variable $days$ is days relative to the Wednesday of the first week of school (which is the $cutoff$ date); $f(days)$ is a linear function of the running variable, which we allow to vary on either side of the cutoff; $\mathbf{1}(days > cutoff)$ is an indicator for being over the cutoff; and X is a vector of day of week fixed effects and control variables (metropolitan status, highest level of education attained, Hispanic, race, age, and, where applicable, sex).[20] Because schools start (end) on different days of the week, we estimate a donut hole regression in that we exclude all days in the school start (end) week (in a later robustness check, we expand the size of the donut hole; see Appendix Tables A12-A15). Instead of clustering at the level of the running variable, we use robust standard errors, which Kolesár and Rothe (2018) argue is more appropriate for a situation with relatively few discrete values of the running variable.[21]

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[20] Metropolitan status, education, Hispanic, and race are from the CPS, while age and sex are from the roster file.
[21] We compared the standard errors (which we compute with OLS and robust standard errors) for Panel A of Table 2 to alternative choices. The standard errors we compute are nearly identical to the standard errors associated with conventional point estimates obtained using nearest neighbor clustering in the "rdrobust" Stata package (Calonico et al., 2017) (with the "vce(nn)" option and uniform kernel; the "vce(hc0)" option also produces very similar results). Our standard errors are sometimes smaller and sometimes larger than those obtain using rdrobust when clustering at the level of the running variable. Our standard errors are about 5-10% smaller than rdrobust with a triangular kernel, which also produces different point estimates. Our standard errors are also smaller than (about 55-60% as large as) rdrobust using the "robust" method, which reports bias-corrected point estimates (which differ from the conventional estimates), with standard errors computed using a robust variance estimator. Finally, Kolesár and Rothe (2018) recommend an approach implemented in the "rdhonest" package (see also Armstrong and Kolesár, 2020); they recommend this over the robust standard errors that we use. The rdhonest approach yields standard errors approximately 2.5 to 5 times larger than ours (in this rdhonest comparison, all is not equal, e.g., no covariates are included); using these would lead us to detect few effects given the very large confidence intervals they produce.

We focus on a "stacked" version of our data in which we analyze both school year start (summer end) and school year end (summer start) dates simultaneously.[22] In order for the coefficients to have similar interpretations across cutoffs, we code the $days$ variable such that negative values correspond to summer days and positive values correspond to school days. For the end of summer/start of school cutoff, $days$ is negative for the end of the summer and positive for the start of the school year. In contrast, for the end of the school year/start of summer cutoff, $days$ is positive for the end of the school year and negative for the start of the summer. Thus, a positive value of our coefficient of interest, γ, corresponds to an increase in time usage in the school year relative to the summer.

An example may help illustrate this procedure. Suppose that the first day of school falls during the week of August 19-25, 2019. All days during that week are excluded from the analysis. Then $days$ would take a value of "0" on the Wednesday of this week, or August 21st, a value of "1" on August 22nd, and a value of "2" on August 23rd, etc. while it would take a value of "-1" on August 20th, "-2" on August 19th, etc. Days -2 though 4 would be excluded from the regression. Similarly, if June 3-7, 2019, is the last week of school, $days$ would take a value of "0" on Wednesday, a value of "1" on June 5th, and a value of "2" on June 3rd, etc., while it would take a value of "-1" on June 2nd, "-2" on June 1st, etc.

We estimate Equation (1) on a pre-defined subset of our data surrounding school year start and end dates (the "bandwidth" in our RD design). One shortcoming of our paper is our limited sample size, leading us to use of a bandwidth of 9 weeks (65-67 days) on either side of school cutoff dates to increase statistical power. In general, if we were to use an "optimal"

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[22] We include the separate school-year start and school-year end results in Web Appendix Tables W1-W12. In the stacked version, an observation can enter the sample as a control (summer) observation twice if it is within the bandwidth for both cutoffs.

bandwidth as selected by recently developed diagnostic procedures, we would be left with standard errors too large to detect effects.[23] However, for our baseline table we test sensitivity to using smaller bandwidths and generally find similar results until the bandwidth is reduced to about 2-4 weeks (see Appendix Tables A8-A11).

In Appendix Figure A2, we present density plots (binned at the weekly level) for our four main samples. Statistical tests of manipulation around the school start/end date cutoffs do not yield evidence that it is an issue, with p-values ranging from 0.31 to 0.77.[24]

5. Results

5.1 Effects on specific categories related to parent time with children

We first consider outcomes that are directly related to time spent with children for mothers and fathers of 6–17-year-old household children in Table 1 (with corresponding plots in Figure 2). This is to verify that our estimation routine picks up changes in behavior that are most obviously related to the school year for parents. In this table, we focus on weekdays, as we expect differences between the school year and summer break to be largest on such days. We present results for mothers in Panel A and fathers in Panel B. Means of the dependent variables on summer days ("Y means") are given below the regression coefficient and standard error estimates. The first column is a measure of all time spent in the presence of one's own household children; this category includes both activities directly involving the children as well as other activities in which the children were simply present. For women, we find a decrease of 0.55 hours, or 33 minutes, in this variable on school days compared to the summer. For fathers, there

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[23] Using the "rdbwselect" command from the "rdrobust" package in Stata, coupled with the "mserd" optimal bandwidth (and vce(hc0) option with a uniform kernel; as Footnote 18 states, this yields slightly smaller standard errors than in the OLS regression we use), for the baseline mother weekday sample (Panel A of Table 3), we would be left with a bandwidth between 9 and 18 days.

[24] We obtain these p-values using the "rddensity" Stata package (Cattaneo, Jansson, and Ma, 2018).

is a 43-minute decrease in time spent with children on days during the school year. Given that the mean amount of time in the presence of own children is over two hours less for fathers than mothers in general, this represents a substantial relative decrease in time fathers spend with their children—i.e. father-child time drops by about 20% versus a more modest drop of about 10% in mother-child time. The second column measures time spent in secondary childcare, which is taking care of children while engaged in another (primary) activity. For both mothers and fathers, there is much less secondary childcare during the school year (by an hour or more per day), presumably because most children are in school during weekdays of the school year.

The first two columns in Table 1 show that parents are present with their children less often during the school year, which is very likely a mechanical result of children attending school for a large part of the day. The remaining columns consider time parents spend in primary activities that are focused on children. For the most part, we see that participation in these activities *rises* for parents during the school year. As seen in column 3, when school is in session, total time in primary activities (which is the sum of the variables in the final three columns) with children increases by 36 minutes per weekday for mothers; the corresponding effect for fathers is 11 minutes; this effect is statistically different (at the 1% level) for fathers compared to mothers.

Not surprisingly, as part of the increase in total primary activities with children, there is a large (as a percentage of the mean) increase in helping children with educational pursuits (i.e., homework) in column 4 and a smaller increase in driving children around (column 5) when school is in session. In both cases, the effects are at least twice as large for mothers as they are for fathers, which is consistent with previous work (e.g., Del Boca, Flinn, and Wiswall, 2014) showing women spend more time helping their children with school-related tasks. In the last column (6) of the table, we see that other primary activities with children that are neither 1)

helping with homework, nor 2) driving children around, also increase during the school year for mothers but not for fathers.[25]

5.2 Effects on general time use categories (adults)

We now turn our attention to analyzing a broad set of time categories to gain insight into how different individuals in the household change their time allocations around the school calendar. Table 2 presents the baseline RDD results for the ten main time use categories we consider (see Figures 3 through 6 for plots).[26] Panel A focuses on mothers with at least one school-age (6-17 years old) child in the household. We find that relative to the summer, this group spends 0.43 hours less on sleep and 0.41 hours less on free time during the school year. On the other hand, they spend 0.59 hours more on caring for others, with no statistically significant increase in time spent on work.[27] We also find smaller decreases in eating time and exercise, with only suggestive evidence for any increase in travel time.

As a kind of placebo test, Panel B limits the sample to women who do not have school-age children in the household or children who are most likely to go to daycare or pre-kindergarten; in other words, they do not have children ages 3-18 in the household. Noting slightly larger standard errors compared to the first panel, we find only one statistically significant effect at the 10% level (caring for others); furthermore, effects on all ten categories are smaller in magnitude than they are for the treatment group (usually substantially so). In the cases of sleep, caring for others, and free time, the effects are statistically distinguishable (at the

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[25] When we examine how time spent doing homework changes for 15-17 year-olds around school year cutoff dates, we find that they spend more than three-quarters of an hour more (0.81, s.e.=0.09) per weekday on these tasks when school is in. Time spent doing homework during the summer break is nearly zero (0.12 hours), on average.

[26] As a robustness check to Table 2, we (probability) weight using the "ATUS final weight" variable and report results in Appendix Table A1. Results are generally very similar to those in Table 2.

[27] The ATUS diaries are coded between 4am of the main day and 4am of the following day. For example, sleep on Friday includes Friday morning 4a.m. and on and Friday night/early Saturday morning until 4a.m. If people go to bed later on Friday night than they would on, say, Thursday night, this will affect the value of the sleep variable on Friday.

5%, 1%, and 5% level, respectively) from those for women with school-age children (if we run a difference-in-RDD regression—see Web Appendix Table W13—we also find that effects for eating, exercise, and travel time are statistically different for the two groups).[28]

Panel C of Table 2 considers fathers with at least one school-age child in the household. Effects on free time and exercise are roughly similar in magnitude to those for mothers, though only the former is statistically significant. Effects on sleep and caring for others are much smaller than the corresponding effects for mothers (these effects are also statistically different across gender at the 10% and 1% level, respectively). Notably, the effect of the school year on work time is positive for fathers (at 35 minutes per day) and larger than it is for mothers—this is the only case in which the magnitude of the school year effect is larger for fathers (though the difference in the coefficients across gender falls short of statistical significance).

One possible interpretation of the results is that when school is in, mothers increase the time they spend caring for others by about the same amount that fathers increase their work time. This means that gender gaps in these variables are larger during the school year than they are during the summer.[29] The contrast in the results between mothers and fathers suggests that the effects on the mothers are not merely a result of a discontinuity in the likelihood families take vacations together around school year and summer start dates (later, we also show that our results are generally robust to increasing the "donut hole," or removing more weeks closest to school cutoff dates, in our RD regressions).

5.3 Effects on general time use categories (teenage children)

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[28] In this difference-in-RDD regression, we allow the slope to vary on either side of the cutoff, but not separately by group (mothers with school-age children vs. mothers with no children 3-18).
[29] This is true because the baseline mean for caring for others (work) in the summer is higher for women (men).

We consider students (children ages 15-17) in Panel D of Table 2 and find strong effects on all but two of the outcomes. Not surprisingly, there is a large increase—of around five and a half hours—in education activities in the school year compared to the summer. There is also a small increase in self-care of about 10 minutes. Which activities offset these education hours? Students spend 2 fewer hours on free time, 1.3 fewer hours sleeping, 0.8 fewer hours working, and 0.7 fewer hours on household tasks. In addition, they report 0.6 fewer hours on exercise, though this is likely an overestimate given that time spent in gym class is counted as education time, not as exercise, in ATUS (after-school activities during the school year such as sports are not coded as education time, however).[30] In Appendix Table A2, we recreate this panel, but split by gender. Self-care and caring for others are statistically significant for girls, but not for boys; self-care is statistically different across genders at the 10% level. Exercise is also statistically different across genders, with boys seeing a decrease of 0.5 hours more than girls during the school year versus summer (note, however, that the effects are much more similar as a percentage of their respective summer means, since boys report roughly twice as much summer exercise as girls do).

Motivated by the importance of sleep to teenage health, we present additional results for 15-17 year olds. In Figure 7, we show the percentage of children ages 15-17 who are asleep at every minute of the day (between 4am and 3:59am the following day, which is how the time diary is constructed).[31] We consider weekdays excluding Friday as it is the beginning of the weekend. The summer is shown as the solid red line and the school year is shown as the dashed black line. Compared to the school year, 15-17 year wake up much later in the summer. They

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[30] This point – that all time in school is coded as education—could also affect other activities that might occur during the school day, such as eating or some of the subcategories that are part of free time.
[31] We follow Handwerker and Mason (2017) in making this style of graph.

also go to bed later, but later bedtimes do not fully offset later wake times. As a result, teenagers get less sleep in total during the school year, which is consistent with the RD result in Table 2. The finding that teenagers sleep more during the summer has been used to motivate pushing back high-school start times since sleep has been linked to better performance in school (see, for example, Heissel and Norris, 2018 and Groen and Pabilonia, 2019).

5.4 Comparison with mean differences from standard OLS regressions

Appendix Tables A3 and A4 mirror Tables 1 and 2, respectively, but they contain estimates from OLS regressions in which time use during months of the year in which we believe most public schools are in session—September 16-30, October, November 1-15, January 16-31, February, March, and April— is compared to time use in July, when most schools are out for summer break.[32] In other words, these seasonal estimates do not make use of changes in time use on either side of estimated school start/end dates (as our RD design does) but rather simply compare means during the school year to the summer mean. The set of the control variables used in these regressions is the same as in Equation (1).

For the most part, the results in Appendix Tables A3 and A4 are broadly similar to their counterparts in Tables 1 and 2, though there are exceptions, some of which we detail. For mothers, OLS coefficients in Tables A3 and A4 modestly understate the magnitude of school-year effects on total and other activities with kids, sleep, caring for others, and free time while overstating the effect on the time in the presence of kids and work time. For fathers, the OLS coefficients overstate the effect on exercise and caring for others while understating effects on time in the presence of kids, secondary childcare, sleep, work, and free time; in addition, the differences are more severe than those for mothers in several cases.

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[32] We erred on the side of being conservative with our school vs. summer month selections.

Despite these differences, the two types of analysis—our RD design and simple OLS regression—yield largely similar results. How can this be explained? One possibility is that because our baseline bandwidth in our RD regressions is fairly large, we are picking up differences that are not in fact due to the discontinuous change from school being in session to school being out. However, when we examine how our results change when shrinking the bandwidth (Appendix Tables A8-A11), we see the estimated coefficients are largely similar—especially for those effects that are largest and most precisely estimated in Table 2—down to a bandwidth of 2-3 weeks, though there is a loss of power in some cases (this is especially true for men), and magnitudes tend to shrink for the 15-17 year old sample.

We believe a more plausible reason for the similarity in RD and OLS results stems from the pattern in time use changes at the start or end of the school year. Indeed, an examination of Figures 3 through 6 suggests that for time-use variables that are most affected by the school year in our RD regression analysis (Tables 1 and 2), effects of the school year (or, equivalently, the summer break) are fairly immediate and do not vary a great deal after that point. This is consistent with a difference in (regression-adjusted) means mimicking the RD estimates, though of course that need not have been true *a priori*.

5.5 Extensive margin and weekend effects

We also examine each of the 10 time-use categories from Table 2 at the extensive margin (i.e., whether the activity occurs at all in a given diary day). The results are contained in Appendix Table A5. Because many activities take place for at least one minute on a given day for nearly everyone, it is unsurprising that effects of the school calendar on those activities is zero or very small (e.g., with respect to sleep). A few findings are notable: both mothers and fathers of school-age children see a significant increase in the probability of caring for others on

school days (of 16 and 14 percentage points, respectively) and a smaller increase in the probability of working a positive amount (of 5 percentage points for men). Men see a significant decline in the likelihood of exercise (4 percentage points). Women and men have a higher likelihood of traveling (by 3 and 2 percentage points, respectively). For teenage children, a larger number of extensive margin effects are significant, with, for example, a 9-percentage point decline in the probability of exercise during the school year, a 13-percentage point increase in engaging in self-care, a 17-percentage point decrease in the probability of doing household tasks, and a 10-percentage point decline in the probability of working.

In Appendix Table A6, we recreate Table 2 but consider weekends instead of weekdays. One of the main insights we glean from this is that for most behaviors for which we find school calendar effects on weekdays, there are no offsetting effects on weekends. In the cases of caring for others and exercise, we actually find that those activities follow the same pattern with respect to the school calendar on weekends as they do on weekdays, and this is true for both men and women. On the other hand, there is offsetting behavior for time spent traveling: on weekends during the school year, mothers (fathers) with school-age children travel 0.15 (0.17) hours less than on weekends during the summer break. We additionally find that women decrease their amount of work on weekends in the school year. Teenage children see almost no school-year effects on weekends except that they spend 35 minutes more on educational activities on weekends when school is in session (perhaps due to homework). Importantly, we do not see evidence that teenagers "catch up" on their sleep on weekends when school is in session (relative to when school is out) to offset the effects of sleeping significantly less on weekdays during the school year compared to summer-break weekdays.

5.6 Heterogeneity (mothers of school-aged children)

Table 3 provides a comparative analysis of the effects of the school calendar on maternal weekday time use by age group of children in the home. We present changes in time use among mothers of younger children, who have at least one child between the ages of 6 and 11 and no older children between the ages of 12 and 17, in Panel A. In panel B, we report changes in time use for mothers of older school aged children (12-17 years old, with no children 6-11 years old). We find strong evidence that the differences we observe in Table 2 Panel A are being driven primarily by those in households with younger children. Across each of sleep, caring, free time, and exercise, the changes in time use that attend school being in session are much more pronounced among mothers with younger children, as might be expected.[33] For example, mothers of 6-11 year-olds get 37 fewer minutes of sleep when school is in session, while we do not find evidence that mothers of older children aged 12-17 lose any sleep at all. Likewise, the increase in the amount of time spent in caring activities is four times larger among mothers of younger kids than it is for mothers of older kids (52 minutes versus 13 minutes, respectively). It also appears that effects of the school calendar on exercise and travel time use are driven by those with younger school-aged kids.

In Table 4, we split the sample by employment status and household income, focusing only on women with school-age children, the adult group for which we see the largest and most consistent effects across outcomes. Panel A considers weekday time use among women who were not employed as of their last CPS interview, while Panel B considers those who were employed at that time.[34] Both groups see decreases in sleep and free time and increases in caring

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[33] The differences in sleep and caring for others are statistically different across the two groups.
[34] We consider "Employed - at work" and "Employed – absent" as of the last CPS interview to be "employed". We consider the other categories—"Unemployed - on layoff", "Unemployed – looking", "Not in labor force – retired", "Not in labor force – disabled", and "Not in labor force – other"—to be unemployed. We note that the month of the year that we observe employment depends on when individuals were in the CPS rotation, which means that our

for others during the school year, though the effects are larger for non-working mothers. One notable difference is that women who are employed increase their working time during the school year by 0.29 hours compared to a decrease of 0.33 hours for those who were not employed as of the last CPS interview, though only the latter coefficient is statistically significant. Women who were employed are also the only ones to see a significant decrease in exercise (of 7 minutes). In contrast, women who were employed increase their travel time more than not-employed women, while not-employed women increase their time on household tasks by over half an hour but employed women do not exhibit a change.

Panels C and D of Table 4 consider women below and above $50,000 household income (as of the last CPS interview). Strikingly, for most outcomes, school-year effects are broadly similar in magnitude across our income threshold;[35] however, higher-income women are the only ones to change time spent exercising around school start/end dates (this is the only difference that is statistically significant across income groups).[36]

5.7 Robustness

In Appendix Tables A8-A11, we consider how changing the bandwidth associated with our RD estimation procedure affects the results (for weekdays). In Appendix Table A8, we again study women with school-age children, finding that school-year effects for sleep, caring for others, and free time are robust to shrinking the bandwidth all the way down to 2-3 weeks before and after school/summer start dates. Effects on eating and exercise remain statistically significant

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measure of employment is subject to seasonality concerns. However, given that we do not find an effect of the school year on the extensive margin of work (employment) among the full sample of mothers in our sample (Appendix Table A5), we do not think this will greatly affect the results.

[35] Sleep and eating time are statistically significant for higher-income women only.

[36] In Appendix Table A7, we show results for Table 1 split by employment status and income. Women who were not employed as of the last CPS interview have larger (in magnitude) changes for all outcomes besides time in the presence of household children (column 1). There are smaller differences across the income gradient. All coefficients but the first are statistically different between Panels A and B. None are statistically different between Panels C and D, though we again note the smaller sample size due to missing income information before 2010.

at conventional levels down through 5 weeks. For most variables, we find qualitatively similar results up to about 4-5 weeks, and sometimes beyond that. With some exceptions, point estimates are also generally stable to about 3-4 weeks.

In Appendix Table A9, we see that the vast majority of estimates remain small and statistically insignificant for women with no children aged 3-18 in the household. Results for men with school-age children are shown in Appendix Table A10, where effects on sleep and free time, for which we find statistically significant effects at our baseline bandwidth of 9 weeks, are less robust to a shrinking bandwidth than they are for women. This further underscores our conclusion that women's behavior is more affected by the school calendar than is men's. Lastly, in Appendix Table A11, we see that effects for teenage children are also generally robust down to bandwidths of 3-5 weeks, though the magnitudes of the coefficients usually shrink somewhat as the bandwidth becomes tighter. Overall, we view the results in these tables as lending credibility to our (baseline) identification strategy.

We also consider how varying the choice of the donut hole affects results. This is for two main reasons: first, due to the issues discussed in Section 3, i.e., because we are only able to measure school year start/end dates at the end of our sample, there is likely to be some measurement error in exact dates going back in time. To the extent that dates vary within a few calendar weeks over time, increasing the donut hole eliminates this source of measurement error. Second, the few weeks immediately preceding the summer break or start of the school year may be somewhat atypical for families (relative to other school weeks and summer weeks, respectively), and increasing the donut hole leaves these weeks out of the analysis. In Appendix Tables A12-A15, we present results for the sample similar to Table 2 but allow the size of the donut hole to vary. We first show the baseline results, then allow the donut hole to exclude one

week on either side of the first week of school/first week of summer. We then exclude two weeks on either side of the relevant cutoff. For the most part, results are robust to this test. One notable exception is that women's work becomes marginally statistically significant if we exclude the two weeks on either side of the relevant cutoff.

5.8 Effects on teenagers' free time behaviors

Other than educational activities, the largest change in teenagers' time use when school lets out or resumes is in the amount of free time they have. This leads us to ask how teenagers are spending such time. We focus specifically on time in front of screens: video games, television, and computer use for leisure (not schoolwork or work).[37] [38] This focus is due to the attention these activities have received in the literature. Video games and screen time have been linked to both negative and positive effects where, on the one hand, video games can improve cognitive function, and, on the other, some papers raise concerns that they are associated with increased mental and physical health risks for youths and young adults (see Granic et al., 2014, for a review).

The results for these "screen time" behaviors are contained in Table 5. We find that all three activities decrease during the school year relative to the summer break, with the effect on television being strongest in terms of raw time. In total, the time spent on these activities falls by almost 1.5 hours when school is in session, which is about 70% of the total decline in free time seen in Table 2. Thus, after sleep, the next biggest change in student summertime use is on (leisure) time in front of screens. There is rising concern over increasing media use among

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[37] The activities coded under this category include use of internet and social media. Though it is not specified, it would thus appear that time spent in these activities on smartphones would fall under the same category.
[38] The variable we use to measure video game time is technically time spent in games (not just video games); in doing so, we follow Kimbrough (2020), who argues that most of this time is indeed video gaming.

teenagers that was accelerated by the COVID-19 pandemic.[39] To the extent that such consumption is habit-forming or addictive (see Seema et al., 2022), our results suggest summer may be a particularly vulnerable time for teens.

6. Conclusion

This paper provides a comprehensive look at how parents and children adjust their time use around the academic calendar. By exploiting location-specific information on school year start and end dates and using regression discontinuity methods, we show that mothers of school-age children and 15-17 year-olds (the vast majority of which are high-school students) make substantial changes to their schedules depending on whether school is in session or not. Some of these changes are natural and even obvious: for example, mothers spend less time helping their children with schoolwork during the summer, and 15-17 year-olds spend much less time on educational activities during that time. Other results, however, are more subtle and have important implications for mothers' and teenagers' health: for example, both groups sleep and exercise less when school is in session (with larger effects for mothers of younger children and teens).

Mothers spend more time caring for others during the school year. Fathers also do, but the change is smaller, which is another indication that the burden of childcare tasks falls disproportionately on women. This burden appears to rise during the school year even though parents generally spend less time with their kids (due to their being in school). This may have implications for mothers' health in the short and long run. There is a well-known gender gap in mental health measures including depression and anxiety (Churchill et al., 2020; Golin, 2022), but little is known about how this gap varies seasonally or, more particularly, with whether an

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[39] For example, see https://www.commonsensemedia.org/press-releases/two-years-into-the-pandemic-media-use-has-increased-17-among-tweens-and-teens.

individual has children in school. Our results suggest that women with school-age children change their behavior more during the school year than similarly situated men, with larger (in magnitude) losses in sleep, free time, and exercise and increases in time spent caring for and driving with children (but a smaller change in work time). Some of these factors may contribute to relatively poorer mental health of mothers when school is in session.[40] Because our data cannot directly address this possibility, it is an important topic for future research.

Regarding teenagers, we also find reasons why their mental health may suffer during the school year relative to summer break. Chief among these is our estimate that they sleep over an additional hour per day when school is out. There is strong seasonality in teenage mental healthcare visits with visits falling in the summer (Zhang et al., 2021), and previous studies have linked school breaks with a reduction in youth suicides (Hansen and Lang, 2011; Hansen, Sabia, and Schaller, 2022). Though many factors change when school is out (such as the incidence of bullying), our results suggest that the way teens use their time may contribute to these trends.

Though teens spend the time they save while not in school in many different ways, the single largest change during summer is in their free time, largely spent in front of screens, with an effect that is twice the increase in time spent working. The implications of this for teens' health and wellbeing is unclear, given that a large increase in time spent in front of screens may be deleterious to their mental health and long-term development.

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[40] As it happens, women are four times more likely to experience Seasonal Affective Disorder (SAD) than men are: see https://www.womenshealth.gov/blog/seasonal-affective-disorder-spotlight#:~:text=According%20to%20the%20National%20Institute,often%20in%20women%20than%20men.

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Table 1: Time with Children, Weekdays

Panel A: Women with At Least One Child Age 6-17

	In Presence of Kids	Secondary Childcare	Total Kids Activities	Help Kids Ed	Drive Kids	Other Activities w/ Kids
School	-0.55***	-1.33***	0.60***	0.25***	0.06***	0.30***
	(0.17)	(0.19)	(0.07)	(0.02)	(0.01)	(0.07)
Summer Mean	5.64	5.21	1.19	0.04	0.07	1.08
Observations	9,346	8,378	9,346	9,346	9,346	9,346

Panel B: Men with At Least One Child Age 6-17

	In Presence of Kids	Secondary Childcare	Total Kids Activities	Help Kids Ed	Drive Kids	Other Activities w/ Kids
School	-0.71***	-1.07***	0.18***	0.10***	0.02***	0.05
	(0.16)	(0.19)	(0.06)	(0.02)	(0.01)	(0.06)
Summer Mean	3.41	3.15	0.62	0.02	0.03	0.57
Observations	6,853	6,139	6,853	6,853	6,853	6,853

Notes: This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Panel A (B) is for women (men) age 25-55 with at least one child age 6-17 in the household. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table 2: Baseline: Weekdays

Panel A: Women with At Least One Child Age 6-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.43***	-0.05	0.15	0.59***	0.17	0.05	-0.41***	-0.06*	-0.09***	0.08
	(0.08)	(0.04)	(0.11)	(0.08)	(0.18)	(0.04)	(0.11)	(0.03)	(0.03)	(0.05)
Summer Mean	8.34	0.82	3.06	1.32	4.12	0.12	3.41	0.98	0.27	1.34
Observations	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346

Panel B: Women with No Children Age 3-18

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.14	-0.01	0.06	0.16*	-0.04	-0.01	0.03	-0.02	-0.04	0.05
	(0.11)	(0.05)	(0.11)	(0.09)	(0.21)	(0.05)	(0.15)	(0.04)	(0.03)	(0.06)
Summer Mean	8.37	0.93	2.27	0.67	5.12	0.17	3.84	1.00	0.25	1.24
Observations	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961

Panel C: Men with At Least One Child Age 6-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.21**	-0.05	-0.02	0.13*	0.58**	0.00	-0.36***	-0.03	-0.08	0.05
	(0.10)	(0.04)	(0.10)	(0.07)	(0.21)	(0.03)	(0.13)	(0.04)	(0.05)	(0.07)
Summer Mean	7.79	0.67	1.45	0.71	7.13	0.05	3.13	1.09	0.36	1.47
Observations	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853

Panel D: Children Age 15-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-1.30***	0.17***	-0.68***	-0.14**	-0.77***	5.55***	-2.03***	-0.08	-0.56***	-0.08
	(0.19)	(0.05)	(0.11)	(0.06)	(0.19)	(0.24)	(0.26)	(0.05)	(0.13)	(0.09)
Summer Mean	10.09	0.74	1.23	0.25	1.39	0.65	6.10	0.93	1.20	1.22
Observations	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694

Notes: This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Panel A (C) is for women (men) age 25-55 with at least one child age 6-17 in the household, Panel B is for women age 25-55 with no children age 3-18 in the household, and Panel D is for children age 15-17. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table 3: Women with At Least One Child Age 6-17, by Age of Children

Panel A: Child Age 6-11 (and No Child Age 12-17)

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.62***	-0.03	0.25	0.87***	0.13	0.00	-0.60***	-0.06	-0.09**	0.12*
	(0.12)	(0.05)	(0.16)	(0.13)	(0.27)	(0.06)	(0.16)	(0.04)	(0.04)	(0.07)
Summer Mean	8.47	0.76	2.92	1.74	3.92	0.16	3.32	0.98	0.25	1.28
Observations	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291	4,291

Panel B: Child Age 12-17 (and No Child Age 6-11)

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.10	-0.04	0.04	0.21*	0.14	0.10	-0.28	-0.08	-0.04	0.01
	(0.16)	(0.08)	(0.21)	(0.11)	(0.33)	(0.06)	(0.21)	(0.06)	(0.06)	(0.08)
Summer Mean	8.18	0.90	3.05	0.76	4.61	0.04	3.60	0.99	0.27	1.36
Observations	2,932	2,932	2,932	2,932	2,932	2,932	2,932	2,932	2,932	2,932

Notes: This table considers women age 25-55 with at least one child age 6-17 in the household. It considers only weekdays. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Panel A is for women with at least one household child age 6-11 in the household (and no household child age 12-17). Panel B is for women with at least one household child age 12-17 (and no household child age 6-11). The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table 4: Women with At Least One Child Age 6-17, by Employment and HH Income

Panel A: Not Employed

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.62***	-0.06	0.54**	1.03***	-0.33*	0.15	-0.56**	-0.07	-0.05	-0.03
	(0.15)	(0.08)	(0.21)	(0.17)	(0.17)	(0.10)	(0.22)	(0.05)	(0.06)	(0.09)
Summer Mean	8.91	0.70	4.32	1.96	0.78	0.15	4.35	1.01	0.31	1.21
Observations	3,006	3,006	3,006	3,006	3,006	3,006	3,006	3,006	3,006	3,006

Panel B: Employed

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.32***	-0.05	0.01	0.41***	0.29	0.01	-0.32**	-0.05	-0.11***	0.11*
	(0.10)	(0.04)	(0.12)	(0.08)	(0.21)	(0.03)	(0.12)	(0.04)	(0.03)	(0.06)
Summer Mean	8.06	0.88	2.46	1.02	5.73	0.10	2.95	0.97	0.25	1.40
Observations	6,340	6,340	6,340	6,340	6,340	6,340	6,340	6,340	6,340	6,340

Panel C: HH Income Below $50,000

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.32	-0.11	-0.20	0.39**	0.53	0.12	-0.60**	-0.04	0.03	0.15
	(0.21)	(0.09)	(0.23)	(0.19)	(0.39)	(0.10)	(0.27)	(0.06)	(0.06)	(0.10)
Summer Mean	8.77	0.82	3.19	1.44	3.50	0.20	3.58	0.92	0.17	1.16
Observations	2,021	2,021	2,021	2,021	2,021	2,021	2,021	2,021	2,021	2,021

Panel D: HH Income At Least $50,000

|	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.44***	0.03	0.24	0.63***	0.09	0.03	-0.45**	-0.11*	-0.17**	0.08
	(0.14)	(0.07)	(0.21)	(0.14)	(0.36)	(0.06)	(0.19)	(0.06)	(0.07)	(0.10)
Summer Mean	8.19	0.81	2.81	1.30	4.51	0.08	3.08	1.06	0.38	1.52
Observations	2,580	2,580	2,580	2,580	2,580	2,580	2,580	2,580	2,580	2,580

Notes: This table considers women age 25-55 with at least one child age 6-17 in the household. It considers only weekdays. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Panel A (B) is for women not employed (employed) as of the last CPS interview, and Panel C (D) is for women with a household income below (at least) $50,000 as of the last CPS interview. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table 5: Screen Time, Children Age 15-17

	Total	Games	TV	Computer
School	-1.41***	-0.38***	-0.85***	-0.17**
	(0.23)	(0.12)	(0.19)	(0.08)
Summer Mean	3.76	0.68	2.61	0.47
Observations	2,694	2,694	2,694	2,694

Notes: This table considers children age 15-17. The Total Screen Time variable is the sum of the final three columns. The Games column is "Playing games"; the TV column is "Television and movies (not religious)"; and the Computer column is "Computer use for leisure (exc. Games)." It considers only weekdays. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Figure 1: Age 15-17 Weekday Educational Time and Weekday Time Women with At Least One Child Age 6-17 Spent with Children on Educational Activities
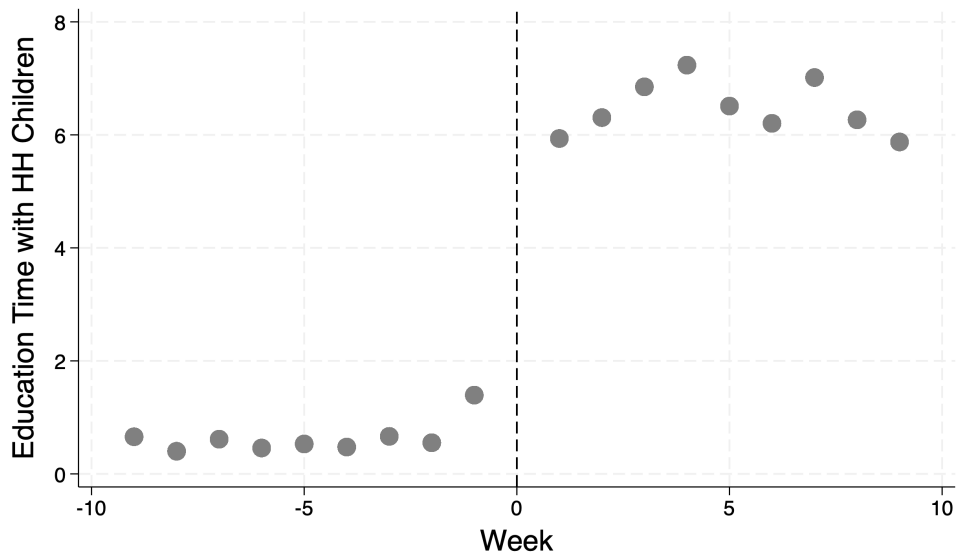
(a) 15-17 Year Old, Own Educational Time
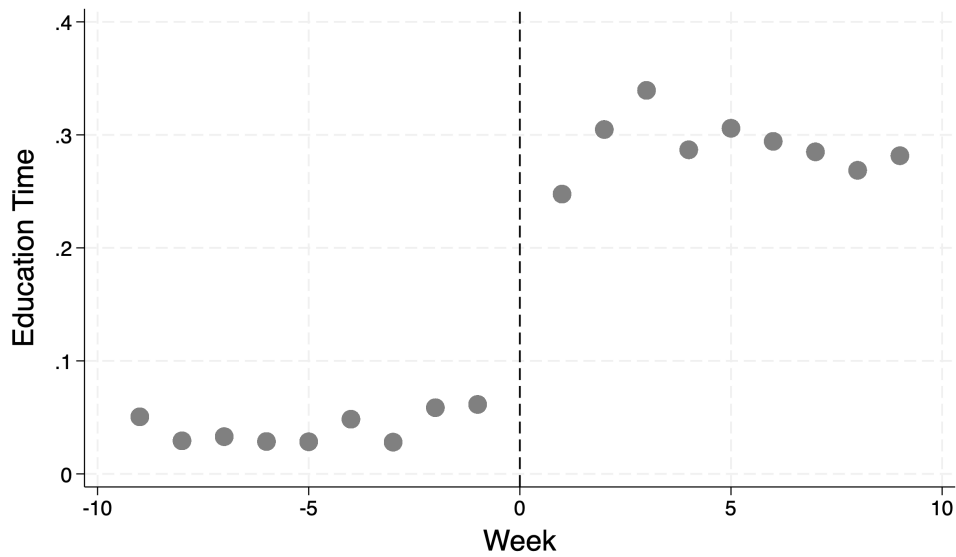
(b) Women with At Least One Child Age 6-17, Time Helping Children on Educational Activities

Notes: Panel A shows the amount of education time for 15-17 year olds. Panel B shows the amount of time mothers help household children with educational activities. Daily observations are binned at the weekly level. The week of school start/summer start is omitted and is indicated with the dashed vertical line.

Figure 2: Women and Men, Time with Children, Weekdays
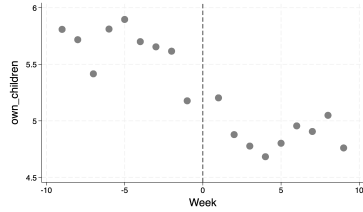
(a) Women, Time in Presence of Own Children
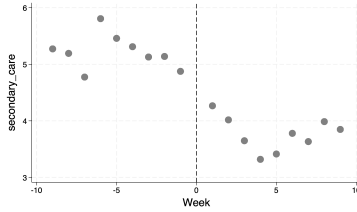
(b) Women, Secondary Childcare
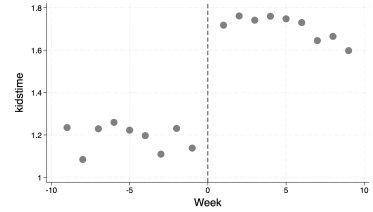
(c) Women, Total Active Time w/ HH Children
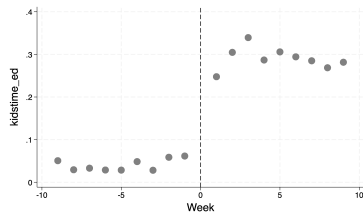
(d) Women, Education w/ HH Children
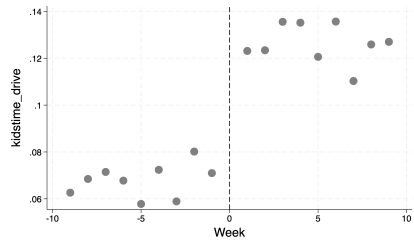
(e) Women, Driving Children
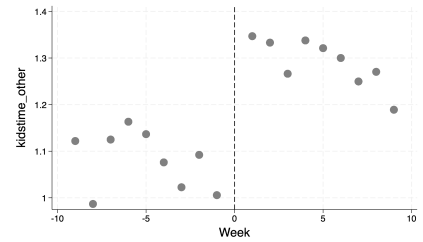
(f) Women, Other Time w/ Children
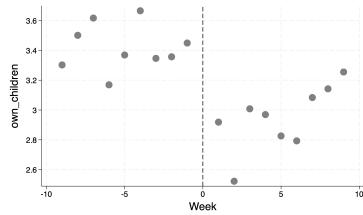
(g) Men, Time in Presence of Own Children
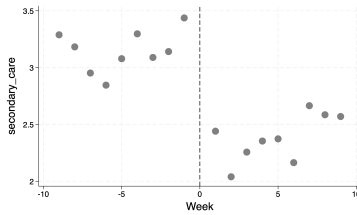
(h) Men, Secondary Childcare
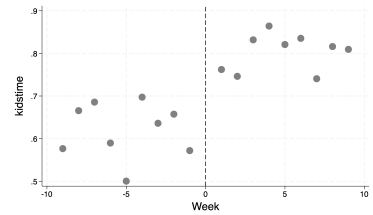
(i) Men, Total Active Time w/ HH Children
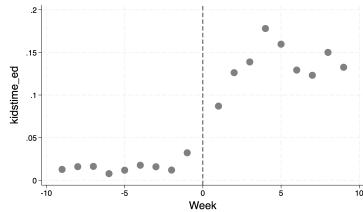
(j) Men, Education w/ HH Children
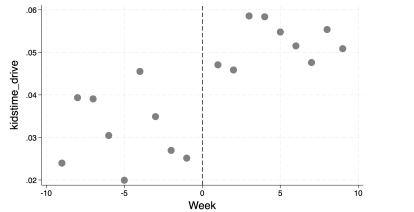
(k) Men, Driving Children
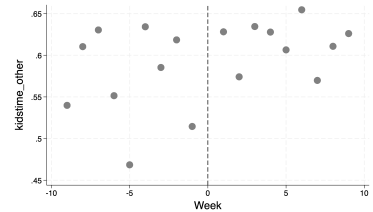
(l) Men, Other Time w/ Children

Notes: These graphs are for weekdays for the Women with At Least One Child Age 6-17 sample (panels a-e) and or the Men with At Least One Child Age 6-17 sample (panels f-j). Each graph is a different outcome. The data is the stacked version. Daily observations are binned at the weekly level. The week of school start/summer start is omitted and is indicated with the dashed vertical line.

Figure 3: Women with At Least One Child Age 6-17, Weekdays
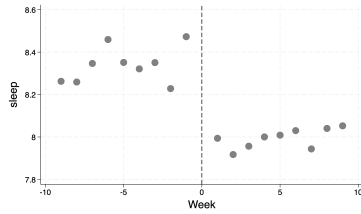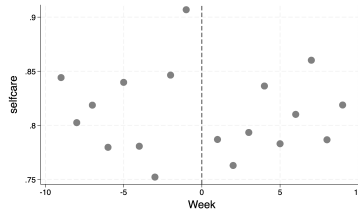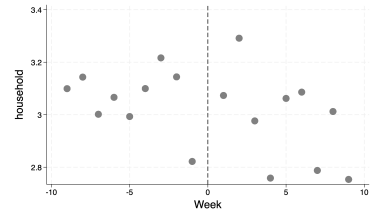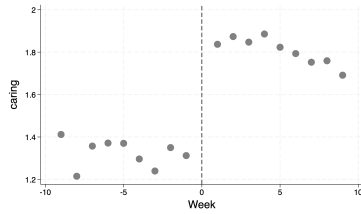
(a) Sleep

(b) Self-care

(c) Household

(d) Caring for Others
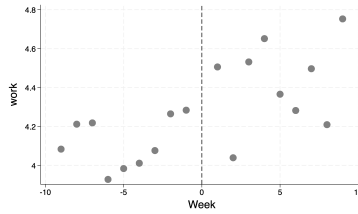
(e) Work
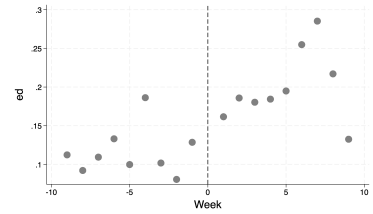
(f) Education
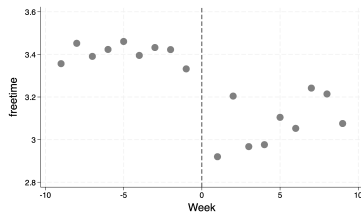
(g) Free Time
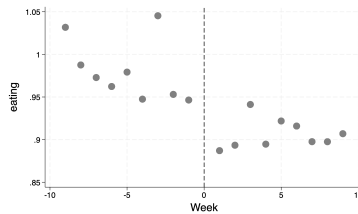
(h) Eating
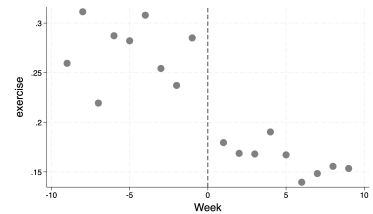
(i) Exercise
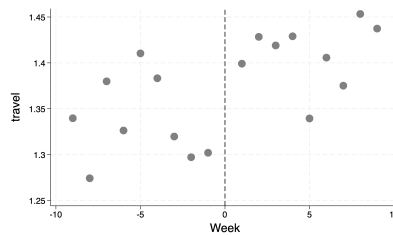
(j) Travel

Notes: These graphs are for weekdays for the Women with At Least One Child Age 6-17 sample. Each graph is a different outcome. The data is the stacked version. Daily observations are binned at the weekly level. The week of school start/summer start is omitted and is indicated with the dashed vertical line.

Figure 4: Women with No Children Age 3-18, Weekdays

(a) Sleep

(b) Self-care

(c) Household

(d) Caring for Others

(e) Work

(f) Education

(g) Free Time

(h) Eating

(i) Exercise

(j) Travel
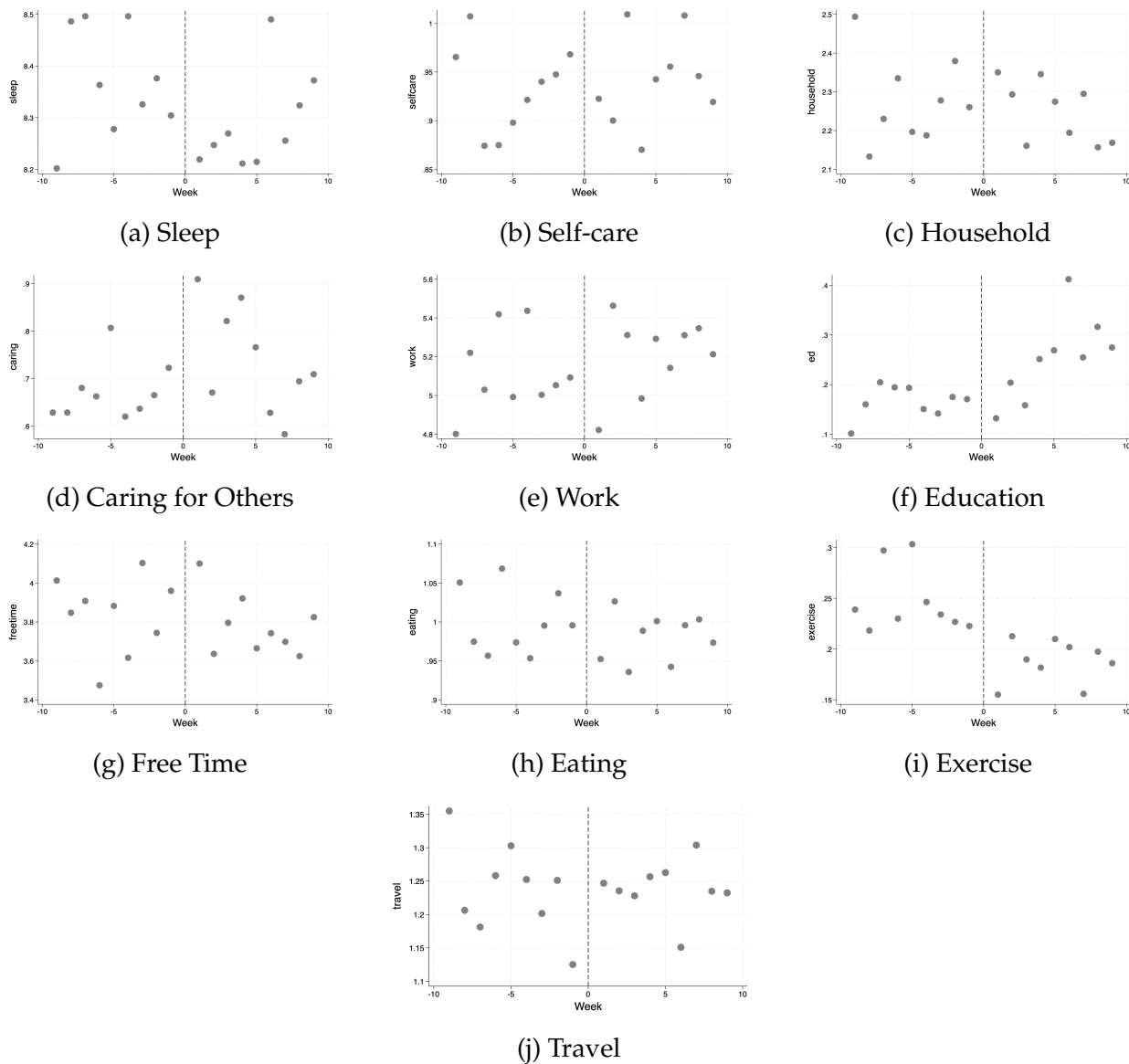
Notes: These graphs are for weekdays for the Women with No Child Age 3-18 sample. Each graph is a different outcome. The data is the stacked version. Daily observations are binned at the weekly level. The week of school start/summer start is omitted and is indicated with the dashed vertical line.

Figure 5: Men with At Least One Child Age 6-17, Weekdays
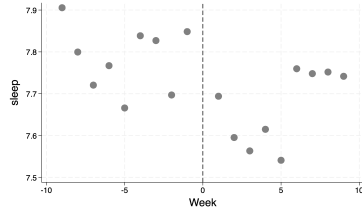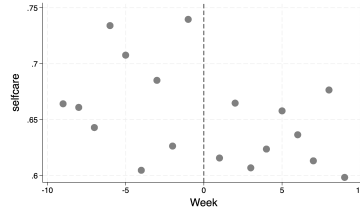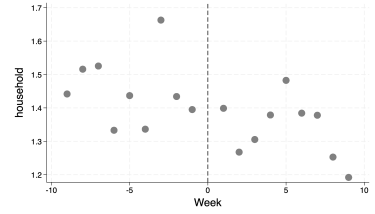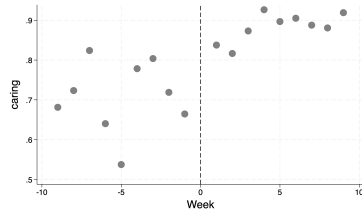
(a) Sleep

(b) Self-care

(c) Household

(d) Caring for Others
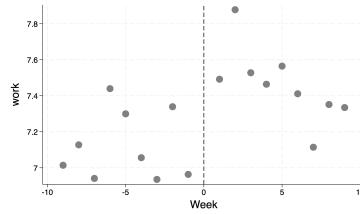
(e) Work
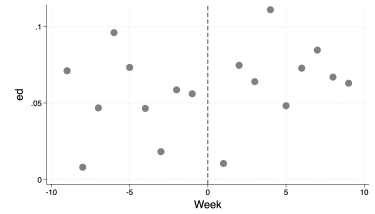
(f) Education
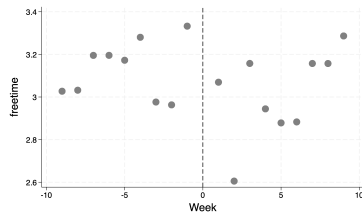
(g) Free Time
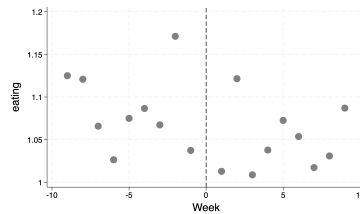
(h) Eating
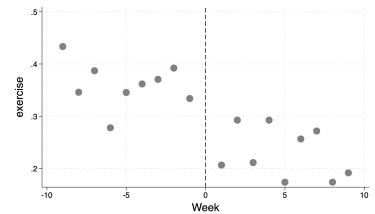
(i) Exercise
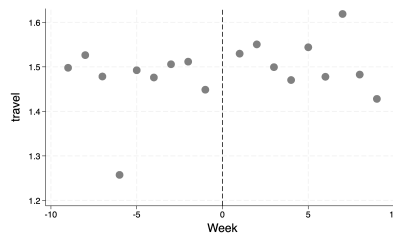
(j) Travel

Notes: These graphs are for weekdays for the Men with At Least One Child Age 6-17 sample. Each graph is a different outcome. The data is the stacked version. Daily observations are binned at the weekly level. The week of school start/summer start is omitted and is indicated with the dashed vertical line.

Figure 6: Children Age 15-17, Weekdays
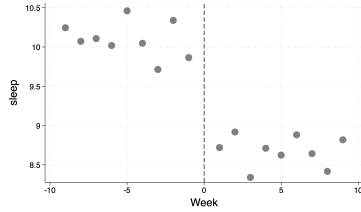
(a) Sleep
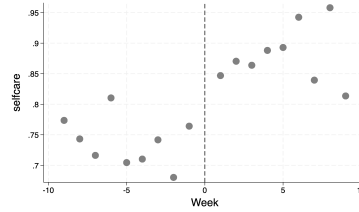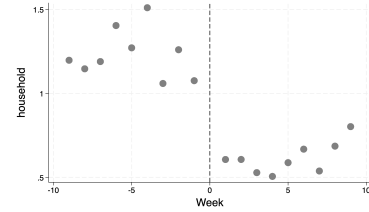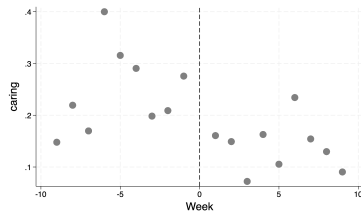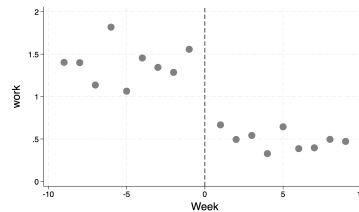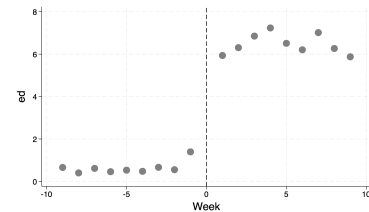
(b) Self-care

(c) Household

(d) Caring for Others

(e) Work

(f) Education
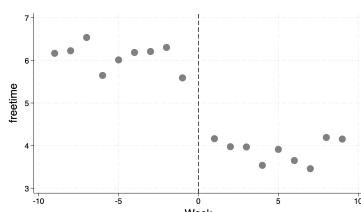
(g) Free Time
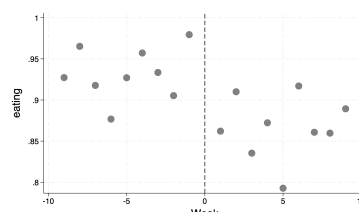
(h) Eating
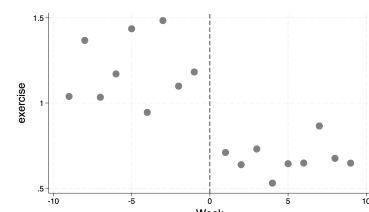
(i) Exercise
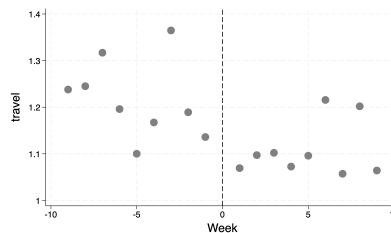
(j) Travel

Notes: These graphs are for weekdays for the Children Age 15-17 sample. Each graph is a different outcome. The data is the stacked version. Daily observations are binned at the weekly level. The week of school start/summer start is omitted and is indicated with the dashed vertical line.

Figure 7: Children Age 15-17, Sleep, Summer vs. School Year
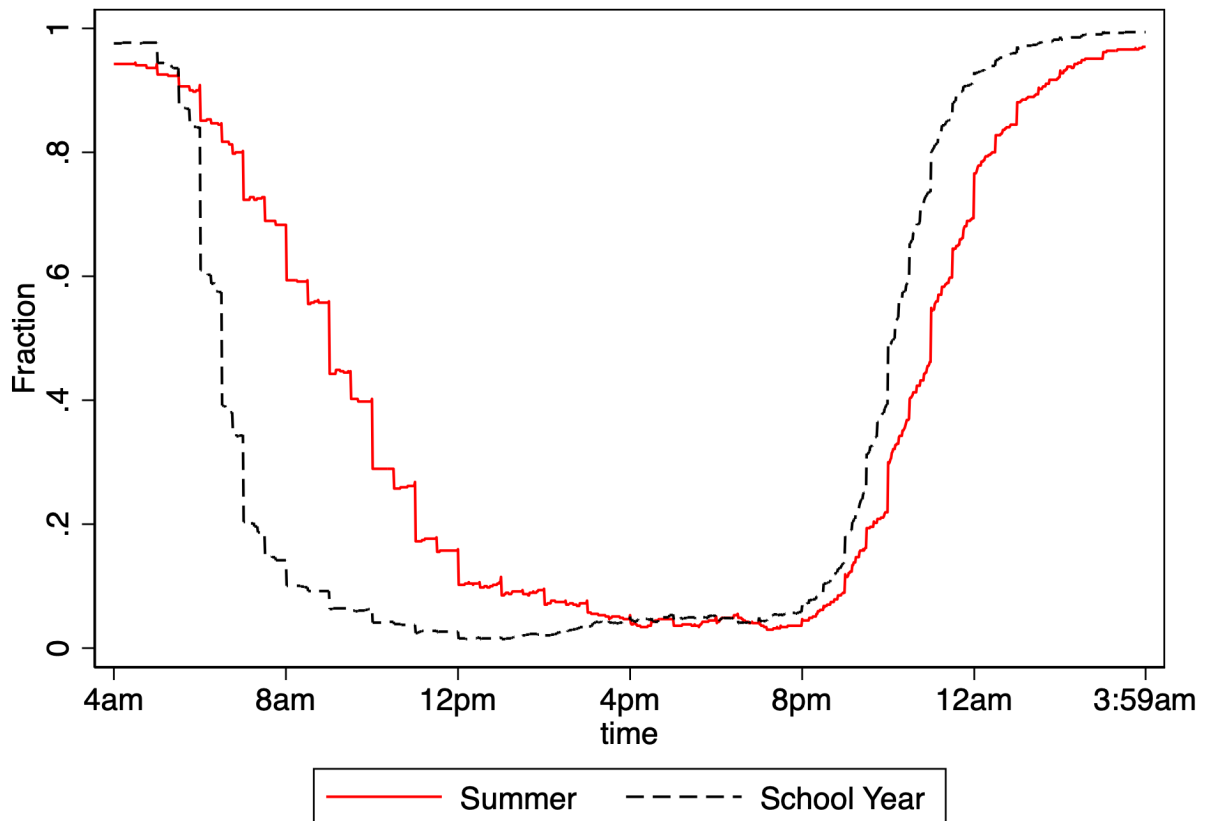
Notes: This graph shows the percentage of children age 15-17 who are asleep for every minute between 4am and 3:59pm the following day. The dashed black line restricts to the nine weeks at the beginning of the school year and the last nine weeks at the end of the school year. The solid red line restricts to the first nine weeks after school ends and the last nine weeks before school begins. The week of school is excluded. We consider only diary days Monday through Thursday.

A   Appendix Tables

Table A1: Weekdays, Weighted Regression

Panel A: Women with At Least One Child Age 6-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.45***	-0.06	0.12	0.53***	0.12	0.03	-0.31**	-0.03	-0.07**	0.09*
	(0.10)	(0.05)	(0.14)	(0.09)	(0.22)	(0.04)	(0.13)	(0.03)	(0.03)	(0.06)
Summer Mean	8.34	0.82	3.06	1.32	4.12	0.12	3.41	0.98	0.27	1.34
Observations	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346

Panel B: Women with No Children Age 3-18

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.19	0.01	0.14	0.11	-0.05	-0.05	0.11	-0.02	-0.05	0.02
	(0.13)	(0.05)	(0.14)	(0.09)	(0.25)	(0.06)	(0.18)	(0.05)	(0.04)	(0.07)
Summer Mean	8.37	0.93	2.27	0.67	5.12	0.17	3.84	1.00	0.25	1.24
Observations	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961

Panel C: Men with At Least One Child Age 6-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.19	-0.06	-0.06	0.13*	0.62**	0.00	-0.40**	-0.04	-0.09*	0.08
	(0.11)	(0.06)	(0.11)	(0.07)	(0.24)	(0.04)	(0.17)	(0.04)	(0.05)	(0.08)
Summer Mean	7.79	0.67	1.45	0.71	7.13	0.05	3.13	1.09	0.36	1.47
Observations	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853

Panel D: Children Age 15-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-1.44***	0.22***	-0.69***	-0.08	-0.82***	5.69***	-2.26***	-0.04	-0.47***	-0.05
	(0.22)	(0.06)	(0.12)	(0.06)	(0.22)	(0.28)	(0.29)	(0.06)	(0.15)	(0.10)
Summer Mean	10.09	0.74	1.23	0.25	1.39	0.65	6.10	0.93	1.20	1.22
Observations	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694

Notes: This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Panel A (C) is for women (men) age 25-55 with at least one child age 6-17 in the household, Panel B is for women age 25-55 with no children age 3-18 in the household, and Panel D is for children age 15-17. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A2: Baseline: Weekdays, 15-17 Year Old, by Gender

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
Panel A: Children Age 15-17, Female										
School	-1.15***	0.26**	-0.85***	-0.22**	-0.76***	5.28***	-1.99***	-0.07	-0.32**	0.05
	(0.27)	(0.10)	(0.19)	(0.08)	(0.24)	(0.37)	(0.36)	(0.08)	(0.14)	(0.13)
Summer Mean	10.21	0.93	1.46	0.30	1.26	0.67	5.92	0.90	0.76	1.29
Observations	1,317	1,317	1,317	1,317	1,317	1,317	1,317	1,317	1,317	1,317
Panel A: Children Age 15-17, Male										
School	-1.44***	0.08	-0.54***	-0.07	-0.79**	5.91***	-2.12***	-0.07	-0.82***	-0.16
	(0.26)	(0.05)	(0.14)	(0.07)	(0.28)	(0.31)	(0.37)	(0.07)	(0.20)	(0.12)
Summer Mean	9.99	0.55	1.00	0.19	1.51	0.62	6.27	0.96	1.63	1.15
Observations	1,377	1,377	1,377	1,377	1,377	1,377	1,377	1,377	1,377	1,377

Notes: This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Panel A (B) is for male (female) children age 15-17. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A3: Time with Children, Weekdays, Seasonal Comparison

	In Presence of Kids	Secondary Childcare	Total Kids Activities	Help Kids Ed	Drive Kids	Other Activities w/ Kids
Panel A: Women with At Least One Child Age 6-17						
School	-0.75***	-1.42***	0.45***	0.25***	0.06***	0.14**
	(0.13)	(0.15)	(0.06)	(0.01)	(0.01)	(0.05)
Summer Mean	5.73	5.23	1.23	0.04	0.07	1.13
Observations	7,738	6,972	7,738	7,738	7,738	7,738
Panel B: Men with At Least One Child Age 6-17						
School	-0.51***	-0.72***	0.22***	0.15***	0.02***	0.05
	(0.13)	(0.15)	(0.04)	(0.01)	(0.00)	(0.04)
Summer Mean	3.48	3.12	0.59	0.01	0.03	0.55
Observations	5,473	4,907	5,473	5,473	5,473	5,473

Notes: This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being in a school year month (defined as September 16-30, October, November 1-15, January 16-31, February, March, and April; the excluded summer month is defined as July). The regression also includes a number of controls. Panel A (C) is for women (men) age 25-55 with at least one child age 6-17 in the household, Panel B is for women age 25-55 with no children age 3-17 in the household, and Panel D is for children age 15-17. Each coefficient corresponds to a different regression. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A4: Baseline: Weekdays, Seasonal Comparison

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
Panel A: Women with At Least One Child Age 6-17										
School	-0.34***	0.00	-0.16*	0.45***	0.33**	0.09***	-0.25***	-0.07***	-0.11***	0.05
	(0.07)	(0.03)	(0.08)	(0.06)	(0.14)	(0.03)	(0.09)	(0.02)	(0.02)	(0.04)
Summer Mean	8.38	0.82	3.07	1.35	4.01	0.10	3.45	0.97	0.26	1.36
Observations	7,738	7,738	7,738	7,738	7,738	7,738	7,738	7,738	7,738	7,738
Panel B: Women with No Children Age 3-18										
School	0.02	0.01	-0.17**	-0.00	0.20	0.06	-0.07	-0.01	-0.09***	0.01
	(0.07)	(0.04)	(0.08)	(0.06)	(0.15)	(0.04)	(0.10)	(0.03)	(0.02)	(0.04)
Summer Mean	8.35	0.94	2.34	0.71	5.05	0.21	3.80	0.99	0.27	1.22
Observations	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566
Panel C: Men with At Least One Child Age 6-17										
School	-0.04	-0.07**	-0.12	0.22***	0.27*	0.03	-0.07	-0.04	-0.14***	0.00
	(0.07)	(0.03)	(0.07)	(0.05)	(0.16)	(0.02)	(0.10)	(0.03)	(0.04)	(0.05)
Summer Mean	7.81	0.70	1.46	0.67	7.03	0.05	3.16	1.09	0.36	1.48
Observations	5,473	5,473	5,473	5,473	5,473	5,473	5,473	5,473	5,473	5,473
Panel D: Children Age 15-17										
School	-1.33***	0.13**	-0.58***	-0.14***	-0.92***	5.79***	-2.11***	-0.10**	-0.50***	-0.15*
	(0.15)	(0.05)	(0.10)	(0.05)	(0.17)	(0.13)	(0.21)	(0.05)	(0.10)	(0.09)
Summer Mean	10.03	0.78	1.22	0.26	1.35	0.49	6.22	0.98	1.14	1.23
Observations	2,273	2,273	2,273	2,273	2,273	2,273	2,273	2,273	2,273	2,273

Notes: This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being in a school year month (defined as September 16-30, October, November 1-15, January 16-31, February, March, and April; the excluded summer month is defined as July). The regression also includes a number of controls. Panel A (C) is for women (men) age 25-55 with at least one child age 6-17 in the household, Panel B is for women age 25-55 with no children age 3-18 in the household, and Panel D is for children age 15-17. Each coefficient corresponds to a different regression. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A5: Baseline: Weekdays, Extensive Margin

Panel A: Women with At Least One Child Age 6-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.00	0.01	0.01	0.16***	0.02	0.01	-0.01	-0.01	-0.02	0.03**
	(0.00)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
Summer Mean	1.00	0.85	0.95	0.72	0.57	0.03	0.94	0.95	0.20	0.92
Observations	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346

Panel B: Women with No Children Age 3-18

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.00	-0.01	-0.02	0.03	0.00	0.00	-0.01	-0.01	-0.03	0.00
	(0.00)	(0.02)	(0.01)	(0.02)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.02)
Summer Mean	1.00	0.88	0.90	0.30	0.65	0.04	0.94	0.94	0.20	0.89
Observations	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961

Panel C: Men with At Least One Child Age 6-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.00	0.01	0.03	0.14***	0.05**	0.00	-0.01	0.00	-0.04*	0.02*
	(0.00)	(0.02)	(0.02)	(0.03)	(0.02)	(0.01)	(0.01)	(0.01)	(0.02)	(0.01)
Summer Mean	1.00	0.85	0.75	0.51	0.83	0.01	0.93	0.95	0.22	0.93
Observations	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853

Panel D: Children Age 15-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.00	0.13***	-0.17***	-0.03	-0.10***	0.65***	-0.02	-0.01	-0.09**	0.09***
	(0.00)	(0.03)	(0.04)	(0.04)	(0.03)	(0.03)	(0.02)	(0.02)	(0.04)	(0.02)
Summer Mean	1.00	0.81	0.72	0.29	0.26	0.18	0.98	0.94	0.44	0.88
Observations	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694

Notes: This table considers only the extensive margin. This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Panel A (C) is for women (men) age 25-55 with at least one child age 6-17 in the household, Panel B is for women age 25-55 with no children age 3-18 in the household, and Panel D is for children age 15-17. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A6: Weekends

Panel A: Women with At Least One Child Age 6-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.10	0.04	0.06	0.26***	-0.23*	0.05	0.09	-0.06	-0.13***	-0.15**
	(0.09)	(0.04)	(0.11)	(0.08)	(0.12)	(0.03)	(0.13)	(0.04)	(0.04)	(0.06)
Summer Mean	9.19	0.79	3.59	1.11	1.14	0.08	4.97	1.17	0.40	1.34
Observations	9,822	9,822	9,822	9,822	9,822	9,822	9,822	9,822	9,822	9,822

Panel B: Women with No Children Age 3-18

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.02	-0.02	-0.02	0.00	0.01	0.03	0.01	0.06	-0.04	-0.00
	(0.11)	(0.05)	(0.13)	(0.08)	(0.14)	(0.04)	(0.16)	(0.05)	(0.05)	(0.07)
Summer Mean	9.34	0.88	3.13	0.66	1.35	0.07	5.59	1.14	0.34	1.33
Observations	8,116	8,116	8,116	8,116	8,116	8,116	8,116	8,116	8,116	8,116

Panel C: Men with At Least One Child Age 6-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.04	0.02	0.00	0.29***	-0.04	-0.00	0.06	0.01	-0.21**	-0.17*
	(0.10)	(0.04)	(0.14)	(0.08)	(0.18)	(0.02)	(0.17)	(0.05)	(0.08)	(0.09)
Summer Mean	8.89	0.54	2.85	0.83	1.76	0.04	5.33	1.29	0.73	1.55
Observations	6,936	6,936	6,936	6,936	6,936	6,936	6,936	6,936	6,936	6,936

Panel D: Children Age 15-17

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.02	0.06	-0.14	0.00	-0.17	0.59***	-0.26	0.00	-0.06	-0.03
	(0.20)	(0.06)	(0.15)	(0.07)	(0.18)	(0.11)	(0.27)	(0.06)	(0.16)	(0.11)
Summer Mean	10.48	0.71	1.25	0.23	1.04	0.24	6.47	0.97	1.12	1.31
Observations	2,874	2,874	2,874	2,874	2,874	2,874	2,874	2,874	2,874	2,874

Notes: This table considers Saturdays and Sundays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The school start and summer start periods are stacked together. Panel A (C) is for women (men) age 25-55 with at least one child age 6-17 in the household, Panel B is for women age 25-55 with no children age 3-18 in the household, and Panel D is for children age 15-17. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A7: Women with At Least One Child Age 6-17, Time with Children, by Employment and HH Income

Panel A: Not Employed

	In Presence of Kids	Secondary Childcare	Total Kids Activities	Help Kids Ed	Drive Kids	Other Activities w/ Kids
School	-0.46	-1.93***	1.03***	0.33***	0.08***	0.62***
	(0.30)	(0.35)	(0.16)	(0.04)	(0.02)	(0.15)
Summer Mean	7.97	7.37	1.77	0.08	0.06	1.63
Observations	3,006	2,719	3,006	3,006	3,006	3,006

Panel B: Employed

	In Presence of Kids	Secondary Childcare	Total Kids Activities	Help Kids Ed	Drive Kids	Other Activities w/ Kids
School	-0.51***	-1.04***	0.43***	0.21***	0.04***	0.18**
	(0.18)	(0.21)	(0.07)	(0.02)	(0.01)	(0.06)
Summer Mean	4.52	4.17	0.91	0.02	0.07	0.82
Observations	6,340	5,659	6,340	6,340	6,340	6,340

Panel C: HH Income Below $50,000

	In Presence of Kids	Secondary Childcare	Total Kids Activities	Help Kids Ed	Drive Kids	Other Activities w/ Kids
School	-0.81**	-1.34***	0.46**	0.24***	0.08***	0.15
	(0.37)	(0.40)	(0.18)	(0.05)	(0.02)	(0.17)
Summer Mean	5.96	5.43	1.29	0.06	0.06	1.17
Observations	2,021	2,021	2,021	2,021	2,021	2,021

Panel D: HH Income At Least $50,000

	In Presence of Kids	Secondary Childcare	Total Kids Activities	Help Kids Ed	Drive Kids	Other Activities w/ Kids
School	-0.49	-1.76***	0.64***	0.22***	0.06***	0.36***
	(0.31)	(0.34)	(0.14)	(0.04)	(0.01)	(0.13)
Summer Mean	5.40	5.01	1.20	0.04	0.07	1.09
Observations	2,580	2,580	2,580	2,580	2,580	2,580

Notes: This table considers women age 25-55 with at least one child age 6-17 in the household. It considers only weekdays. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Panel A (B) is for women not employed (employed) as of the last CPS interview, and Panel C (D) is for women with a household income below (at least) $50,000 as of the last CPS interview. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A8: Baseline: Weekdays, RDD Bandwidth Sensitivity, Women

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
Panel A: Women with At Least One Child Age 6-17										
9 Weeks	-0.43***	-0.05	0.15	0.59***	0.17	0.05	-0.41***	-0.06*	-0.09***	0.08
	(0.08)	(0.04)	(0.11)	(0.08)	(0.18)	(0.04)	(0.11)	(0.03)	(0.03)	(0.05)
Observations	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346
8 Weeks	-0.41***	-0.07	0.13	0.54***	0.24	0.02	-0.42***	-0.07**	-0.08**	0.09*
	(0.09)	(0.04)	(0.12)	(0.08)	(0.20)	(0.04)	(0.12)	(0.03)	(0.03)	(0.05)
Observations	8,240	8,240	8,240	8,240	8,240	8,240	8,240	8,240	8,240	8,240
7 Weeks	-0.37***	-0.09*	0.19	0.57***	0.11	0.00	-0.42***	-0.07**	-0.09**	0.14**
	(0.10)	(0.05)	(0.13)	(0.09)	(0.21)	(0.05)	(0.13)	(0.03)	(0.03)	(0.06)
Observations	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200	7,200
6 Weeks	-0.35***	-0.10*	0.16	0.55***	0.03	0.03	-0.37**	-0.08**	-0.06*	0.14**
	(0.11)	(0.05)	(0.14)	(0.10)	(0.24)	(0.05)	(0.14)	(0.04)	(0.04)	(0.06)
Observations	6,120	6,120	6,120	6,120	6,120	6,120	6,120	6,120	6,120	6,120
5 Weeks	-0.38***	-0.12*	0.29*	0.53***	-0.10	0.04	-0.36**	-0.08*	-0.08*	0.18**
	(0.12)	(0.06)	(0.16)	(0.12)	(0.27)	(0.06)	(0.16)	(0.04)	(0.04)	(0.07)
Observations	5,140	5,140	5,140	5,140	5,140	5,140	5,140	5,140	5,140	5,140
4 Weeks	-0.35**	-0.17**	0.51**	0.45***	-0.21	0.07	-0.34*	-0.08	-0.08	0.12
	(0.14)	(0.07)	(0.19)	(0.13)	(0.31)	(0.07)	(0.19)	(0.05)	(0.05)	(0.08)
Observations	4,138	4,138	4,138	4,138	4,138	4,138	4,138	4,138	4,138	4,138
3 Weeks	-0.35**	-0.19**	0.45*	0.41**	0.08	0.01	-0.39*	-0.06	-0.10	0.09
	(0.17)	(0.09)	(0.23)	(0.16)	(0.38)	(0.08)	(0.23)	(0.06)	(0.06)	(0.10)
Observations	3,126	3,126	3,126	3,126	3,126	3,126	3,126	3,126	3,126	3,126
2 Weeks	-0.50**	-0.15	0.31	0.56**	0.38	-0.07	-0.43	-0.11	-0.08	0.03
	(0.24)	(0.14)	(0.32)	(0.21)	(0.53)	(0.10)	(0.32)	(0.08)	(0.08)	(0.14)
Observations	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072	2,072

Notes: Each row uses a different bandwidth, measured in weeks. The sample is limited to women age 25-55 with at least one child age 6-17 in the household. This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A9: Baseline: Weekdays, RDD Bandwidth Sensitivity, Women Control

Panel B: Women with No Children Age 3-18

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
9 Weeks	-0.14	-0.01	0.06	0.16*	-0.04	-0.01	0.03	-0.02	-0.04	0.05
	(0.11)	(0.05)	(0.11)	(0.09)	(0.21)	(0.05)	(0.15)	(0.04)	(0.03)	(0.06)
Observations	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961
8 Weeks	-0.10	-0.03	-0.02	0.17*	0.05	-0.02	0.03	-0.04	-0.04	0.02
	(0.11)	(0.05)	(0.12)	(0.09)	(0.23)	(0.05)	(0.16)	(0.04)	(0.03)	(0.07)
Observations	7,092	7,092	7,092	7,092	7,092	7,092	7,092	7,092	7,092	7,092
7 Weeks	-0.11	-0.07	-0.03	0.21**	0.09	-0.03	-0.03	-0.03	-0.01	0.03
	(0.12)	(0.06)	(0.13)	(0.10)	(0.25)	(0.06)	(0.17)	(0.04)	(0.03)	(0.07)
Observations	6,171	6,171	6,171	6,171	6,171	6,171	6,171	6,171	6,171	6,171
6 Weeks	-0.19	-0.05	0.02	0.21*	0.19	-0.09	-0.14	-0.00	-0.03	0.10
	(0.14)	(0.06)	(0.15)	(0.11)	(0.27)	(0.06)	(0.19)	(0.05)	(0.04)	(0.08)
Observations	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232	5,232
5 Weeks	-0.11	-0.05	-0.05	0.19	0.10	-0.06	-0.07	-0.05	-0.01	0.09
	(0.15)	(0.07)	(0.17)	(0.13)	(0.31)	(0.07)	(0.21)	(0.06)	(0.04)	(0.09)
Observations	4,323	4,323	4,323	4,323	4,323	4,323	4,323	4,323	4,323	4,323
4 Weeks	-0.01	-0.02	-0.01	0.11	0.26	-0.09	-0.25	-0.06	-0.02	0.09
	(0.18)	(0.09)	(0.19)	(0.15)	(0.36)	(0.08)	(0.25)	(0.06)	(0.05)	(0.11)
Observations	3,452	3,452	3,452	3,452	3,452	3,452	3,452	3,452	3,452	3,452
3 Weeks	-0.10	-0.07	0.13	0.16	-0.15	-0.06	0.05	-0.01	-0.06	0.11
	(0.23)	(0.11)	(0.24)	(0.19)	(0.44)	(0.09)	(0.31)	(0.08)	(0.06)	(0.13)
Observations	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565	2,565
2 Weeks	-0.13	-0.00	0.30	0.30	-0.52	-0.09	0.07	-0.05	-0.09	0.19
	(0.32)	(0.16)	(0.34)	(0.28)	(0.64)	(0.13)	(0.44)	(0.11)	(0.08)	(0.20)
Observations	1,686	1,686	1,686	1,686	1,686	1,686	1,686	1,686	1,686	1,686

Notes: Each row uses a different bandwidth, measured in weeks. The sample is limited to women age 25-55 with no children age 3-18 in the household. This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A10: Baseline: Weekdays, RDD Bandwidth Sensitivity, Men

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
Panel C: Men with At Least One Child Age 6-17										
9 Weeks	-0.21**	-0.05	-0.02	0.13*	0.58**	0.00	-0.36***	-0.03	-0.08	0.05
	(0.10)	(0.04)	(0.10)	(0.07)	(0.21)	(0.03)	(0.13)	(0.04)	(0.05)	(0.07)
Observations	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853
8 Weeks	-0.25**	-0.06	-0.05	0.14*	0.66***	-0.01	-0.30**	-0.03	-0.11**	0.01
	(0.10)	(0.05)	(0.11)	(0.07)	(0.22)	(0.03)	(0.14)	(0.04)	(0.05)	(0.08)
Observations	6,052	6,052	6,052	6,052	6,052	6,052	6,052	6,052	6,052	6,052
7 Weeks	-0.27**	-0.05	-0.10	0.12	0.72***	-0.00	-0.22	-0.06	-0.13**	-0.05
	(0.11)	(0.05)	(0.12)	(0.08)	(0.24)	(0.04)	(0.15)	(0.05)	(0.06)	(0.09)
Observations	5,305	5,305	5,305	5,305	5,305	5,305	5,305	5,305	5,305	5,305
6 Weeks	-0.26**	-0.05	-0.16	0.06	0.77***	0.00	-0.13	-0.07	-0.14**	-0.04
	(0.13)	(0.06)	(0.13)	(0.08)	(0.27)	(0.04)	(0.17)	(0.05)	(0.06)	(0.09)
Observations	4,516	4,516	4,516	4,516	4,516	4,516	4,516	4,516	4,516	4,516
5 Weeks	-0.22	-0.08	-0.14	0.04	0.72**	-0.01	-0.18	-0.05	-0.11	0.02
	(0.14)	(0.07)	(0.14)	(0.09)	(0.30)	(0.05)	(0.19)	(0.06)	(0.07)	(0.11)
Observations	3,776	3,776	3,776	3,776	3,776	3,776	3,776	3,776	3,776	3,776
4 Weeks	-0.16	-0.12	-0.07	0.18	0.69*	-0.07	-0.26	-0.03	-0.16*	0.04
	(0.17)	(0.08)	(0.16)	(0.11)	(0.35)	(0.06)	(0.22)	(0.07)	(0.09)	(0.13)
Observations	3,017	3,017	3,017	3,017	3,017	3,017	3,017	3,017	3,017	3,017
3 Weeks	-0.18	-0.10	0.18	0.26**	0.58	-0.07	-0.45	-0.04	-0.14	0.03
	(0.20)	(0.10)	(0.21)	(0.13)	(0.43)	(0.06)	(0.27)	(0.08)	(0.10)	(0.16)
Observations	2,269	2,269	2,269	2,269	2,269	2,269	2,269	2,269	2,269	2,269
2 Weeks	-0.38	-0.18	0.11	0.34*	0.71	-0.08	-0.11	-0.02	-0.23	0.04
	(0.30)	(0.13)	(0.29)	(0.20)	(0.61)	(0.07)	(0.38)	(0.12)	(0.17)	(0.23)
Observations	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494	1,494

Notes: Each row uses a different bandwidth, measured in weeks. The sample is limited to men age 25-55 with at least one child age 6-17 in the household. This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A11: Baseline: Weekdays, RDD Bandwidth Sensitivity, Kids

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
Panel D: Children Age 15-17										
9 Weeks	-1.30***	0.17***	-0.68***	-0.14**	-0.77***	5.55***	-2.03***	-0.08	-0.56***	-0.08
	(0.19)	(0.05)	(0.11)	(0.06)	(0.19)	(0.24)	(0.26)	(0.05)	(0.13)	(0.09)
Observations	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694
8 Weeks	-1.25***	0.14**	-0.63***	-0.14**	-0.75***	5.31***	-1.91***	-0.07	-0.55***	-0.10
	(0.20)	(0.06)	(0.12)	(0.06)	(0.20)	(0.25)	(0.27)	(0.06)	(0.14)	(0.10)
Observations	2,378	2,378	2,378	2,378	2,378	2,378	2,378	2,378	2,378	2,378
7 Weeks	-1.25***	0.14**	-0.54***	-0.14**	-0.76***	5.12***	-1.71***	-0.09	-0.64***	-0.08
	(0.22)	(0.06)	(0.13)	(0.07)	(0.22)	(0.28)	(0.30)	(0.06)	(0.15)	(0.10)
Observations	2,063	2,063	2,063	2,063	2,063	2,063	2,063	2,063	2,063	2,063
6 Weeks	-1.25***	0.12*	-0.50***	-0.10	-0.66**	5.07***	-1.84***	-0.10	-0.51***	-0.15
	(0.25)	(0.07)	(0.15)	(0.08)	(0.24)	(0.31)	(0.33)	(0.07)	(0.16)	(0.11)
Observations	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764	1,764
5 Weeks	-0.98***	0.08	-0.47***	-0.07	-0.92***	4.69***	-1.66***	-0.06	-0.45**	-0.13
	(0.28)	(0.07)	(0.16)	(0.09)	(0.27)	(0.36)	(0.37)	(0.07)	(0.18)	(0.12)
Observations	1,488	1,488	1,488	1,488	1,488	1,488	1,488	1,488	1,488	1,488
4 Weeks	-1.09***	0.10	-0.34*	-0.11	-0.74**	4.15***	-1.30***	-0.06	-0.60***	-0.03
	(0.32)	(0.09)	(0.19)	(0.11)	(0.32)	(0.43)	(0.43)	(0.09)	(0.20)	(0.14)
Observations	1,208	1,208	1,208	1,208	1,208	1,208	1,208	1,208	1,208	1,208
3 Weeks	-0.98**	0.09	-0.50**	-0.11	-0.93**	3.90***	-1.10**	-0.09	-0.46*	0.03
	(0.40)	(0.11)	(0.23)	(0.14)	(0.41)	(0.54)	(0.54)	(0.11)	(0.27)	(0.18)
Observations	928	928	928	928	928	928	928	928	928	928
2 Weeks	-0.74	0.00	-0.28	-0.21	-1.33**	3.50***	-0.14	-0.23	-0.68*	-0.23
	(0.55)	(0.15)	(0.32)	(0.21)	(0.58)	(0.77)	(0.73)	(0.15)	(0.39)	(0.24)
Observations	640	640	640	640	640	640	640	640	640	640

Notes: Each row uses a different bandwidth, measured in weeks. The sample is limited to children age 15-17. This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A12: Baseline: Weekdays, RDD Donut Hole Sensitivity, Women

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
Women with At Least One Child Age 6-17										
Exclude Week 0	-0.43***	-0.05	0.15	0.59***	0.17	0.05	-0.41***	-0.06*	-0.09***	0.08
	(0.08)	(0.04)	(0.11)	(0.08)	(0.18)	(0.04)	(0.11)	(0.03)	(0.03)	(0.05)
Observations	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346
Exclude Weeks [-1,1]	-0.42***	-0.00	0.05	0.64***	0.15	0.08	-0.41***	-0.05	-0.08**	0.06
	(0.11)	(0.05)	(0.15)	(0.10)	(0.23)	(0.05)	(0.14)	(0.04)	(0.04)	(0.06)
Observations	8,300	8,300	8,300	8,300	8,300	8,300	8,300	8,300	8,300	8,300
Exclude Weeks [-2,2]	-0.51***	0.08	-0.15	0.72***	0.56*	0.05	-0.54***	-0.05	-0.11**	0.00
	(0.14)	(0.06)	(0.18)	(0.13)	(0.30)	(0.06)	(0.18)	(0.05)	(0.05)	(0.08)
Observations	7,274	7,274	7,274	7,274	7,274	7,274	7,274	7,274	7,274	7,274

Notes: Each row excludes a different bandwidth, measured in weeks. Week 0 refers to the day school begins (or ends); week -1 is the week before this week, and week 1 is the week after this week. The "Exclude Week 0" panel is what is used throughout the paper and replicates the results from the corresponding panel in Table 2. The sample is limited to women age 25-55 with at least one child age 6-17 in the household. This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A13: Baseline: Weekdays, RDD Donut Hole Sensitivity, Women Control

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
Women with No Children Age 3-18										
Exclude Week 0	-0.14	-0.01	0.06	0.16*	-0.04	-0.01	0.03	-0.02	-0.04	0.05
	(0.11)	(0.05)	(0.11)	(0.09)	(0.21)	(0.05)	(0.15)	(0.04)	(0.03)	(0.06)
Observations	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961
Exclude Weeks [-1,1]	-0.16	0.02	0.05	0.14	0.03	0.01	0.02	-0.02	-0.04	-0.01
	(0.13)	(0.06)	(0.14)	(0.10)	(0.26)	(0.06)	(0.18)	(0.05)	(0.04)	(0.08)
Observations	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127	7,127
Exclude Weeks [-2,2]	-0.17	0.08	0.13	0.20	-0.31	0.03	0.16	-0.03	-0.07	0.01
	(0.17)	(0.08)	(0.18)	(0.14)	(0.34)	(0.08)	(0.24)	(0.06)	(0.05)	(0.10)
Observations	6,275	6,275	6,275	6,275	6,275	6,275	6,275	6,275	6,275	6,275

Notes: Each row excludes a different bandwidth, measured in weeks. Week 0 refers to the day school begins (or ends); week -1 is the week before this week, and week 1 is the week after this week. The "Exclude Week 0" panel is what is used throughout the paper and replicates the results from the corresponding panel in Table 2. The sample is limited to women age 25-55 with no children age 3-18 in the household. This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A14: Baseline: Weekdays, RDD Donut Hole Sensitivity, Men

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
Men with At Least One Child Age 6-17										
Exclude Week 0	-0.21**	-0.05	-0.02	0.13*	0.58**	0.00	-0.36***	-0.03	-0.08	0.05
	(0.10)	(0.04)	(0.10)	(0.07)	(0.21)	(0.03)	(0.13)	(0.04)	(0.05)	(0.07)
Observations	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853
Exclude Weeks [-1,1]	-0.23*	-0.00	-0.07	0.12	0.59**	0.03	-0.43**	-0.03	-0.05	0.05
	(0.12)	(0.05)	(0.13)	(0.09)	(0.26)	(0.05)	(0.16)	(0.05)	(0.06)	(0.09)
Observations	6,117	6,117	6,117	6,117	6,117	6,117	6,117	6,117	6,117	6,117
Exclude Weeks [-2,2]	-0.29*	-0.05	0.01	0.15	0.50	0.04	-0.35	-0.02	-0.04	0.08
	(0.15)	(0.06)	(0.17)	(0.12)	(0.34)	(0.05)	(0.21)	(0.06)	(0.08)	(0.11)
Observations	5,359	5,359	5,359	5,359	5,359	5,359	5,359	5,359	5,359	5,359

Notes: Each row excludes a different bandwidth, measured in weeks. Week 0 refers to the day school begins (or ends); week -1 is the week before this week, and week 1 is the week after this week. The "Exclude Week 0" panel is what is used throughout the paper and replicates the results from the corresponding panel in Table 2. The sample is limited to men age 25-55 with at least one child age 6-17 in the household. This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table A15: Baseline: Weekdays, RDD Donut Hole Sensitivity, Kids

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
				Children Age 15-17						
Exclude Week 0	-1.30***	0.17***	-0.68***	-0.14**	-0.77***	5.55***	-2.03***	-0.08	-0.56***	-0.08
	(0.19)	(0.05)	(0.11)	(0.06)	(0.19)	(0.24)	(0.26)	(0.05)	(0.13)	(0.09)
Observations	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694
Exclude Weeks [-1,1]	-1.49***	0.20***	-0.84***	-0.14**	-0.65***	6.34***	-2.51***	-0.04	-0.56***	-0.09
	(0.24)	(0.07)	(0.14)	(0.06)	(0.23)	(0.27)	(0.32)	(0.07)	(0.16)	(0.12)
Observations	2,368	2,368	2,368	2,368	2,368	2,368	2,368	2,368	2,368	2,368
Exclude Weeks [-2,2]	-1.52***	0.22**	-0.93***	-0.19**	-0.71**	6.75***	-2.50***	-0.10	-0.74***	-0.08
	(0.31)	(0.10)	(0.20)	(0.09)	(0.30)	(0.35)	(0.43)	(0.10)	(0.22)	(0.17)
Observations	2,054	2,054	2,054	2,054	2,054	2,054	2,054	2,054	2,054	2,054

Notes: Each row excludes a different bandwidth, measured in weeks. Week 0 refers to the day school begins (or ends); week -1 is the week before this week, and week 1 is the week after this week. The "Exclude Week 0" panel is what is used throughout the paper and replicates the results from the corresponding panel in Table 2. The sample is limited to children age 15-17. This table considers weekdays only. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.
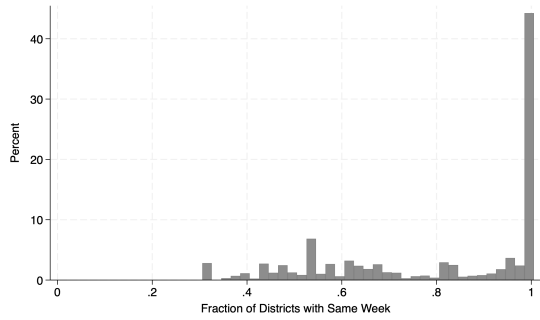
B Appendix Figures

Figure A1: Histogram of Percentage of Districts with Same School and Summer Start Weeks, by Geography

(a) County, School Start
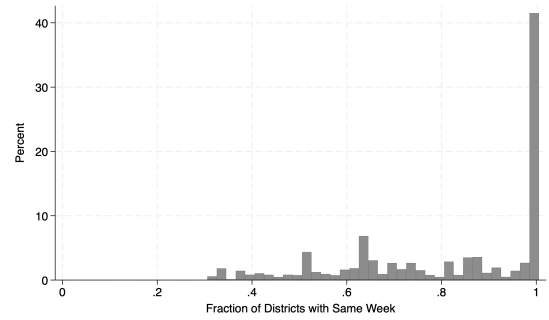
(b) County, Summer
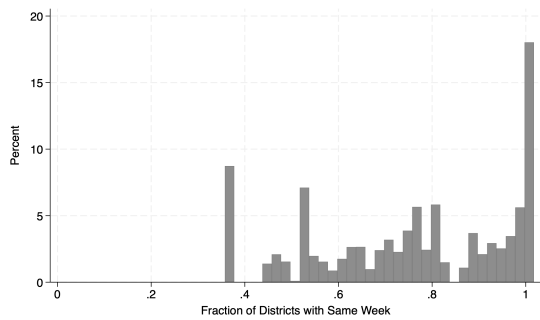
(c) CBSA, School Start
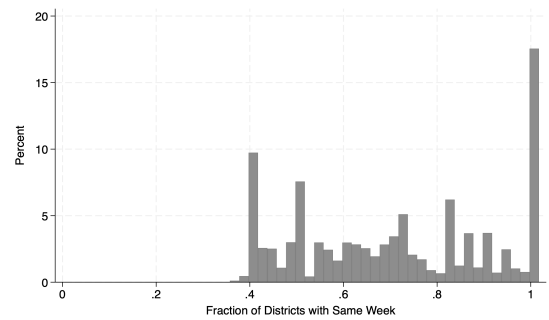
(d) CBSA, Summer
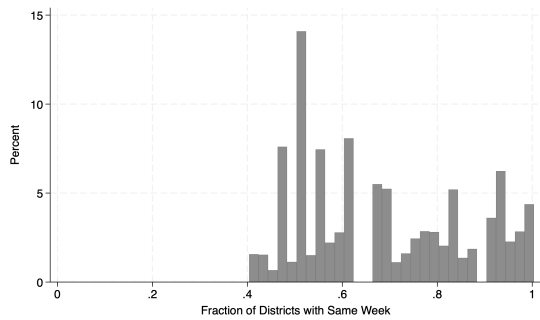
(e) State, School Start
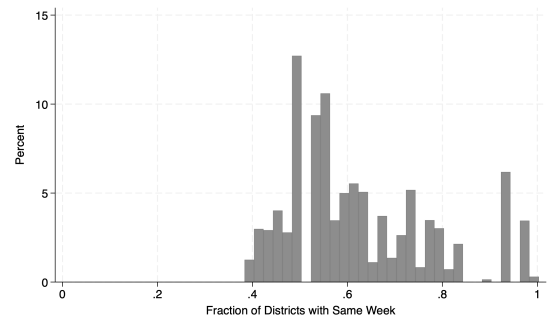
(f) State, Summer

Notes: These graphs show histograms of the percentage of school districts that share the same school start or summer start week (weighted by student population), where the school start or summer start week refers to the most-commonly occurring week. The left (right) columns are for school (summer) start. Panels A and B are for observations for which the school (summer) start week is determined by districts within county, with Panels C and D corresponding to the CBSA-level, and E and F corresponding to state-level. The sample (before restricting to county, CBSA, and state limits to individuals between the ages of 15-17 or 25-55. Each observation is an individual, and the sample is limited to those between the ages of 15–17 and 25–55, with holidays excluded as well as individuals working in elementary and secondary schools. However, we do not limit based on an individual's children. An individual contributes only to one geography. A value of 1 means that 100% of districts in one's geography share the same school (summer) start week.

Figure A2: Density Plots
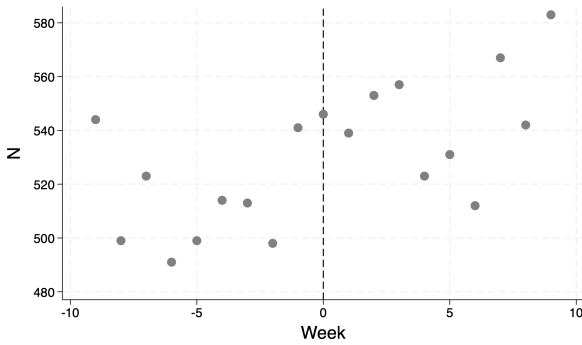
(a) Women with At Least One Child Age 6-17
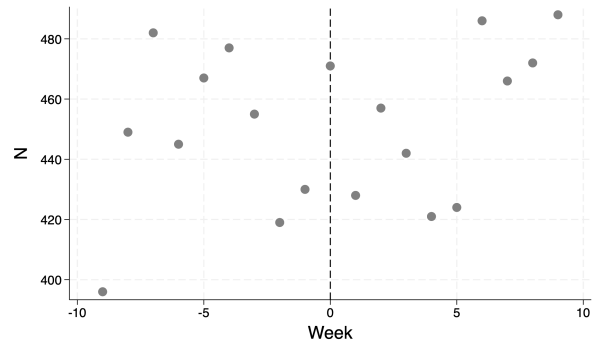
(b) Women with No Children Age 3-18
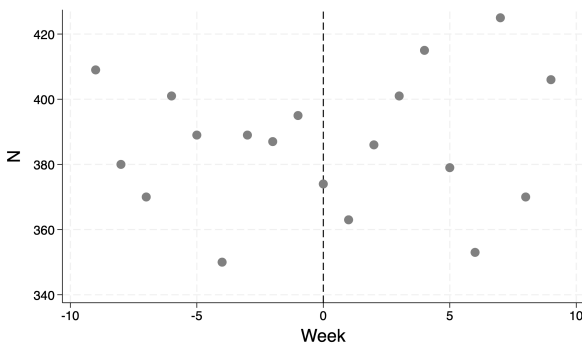
(c) Men with At Least One Child Age 6-17
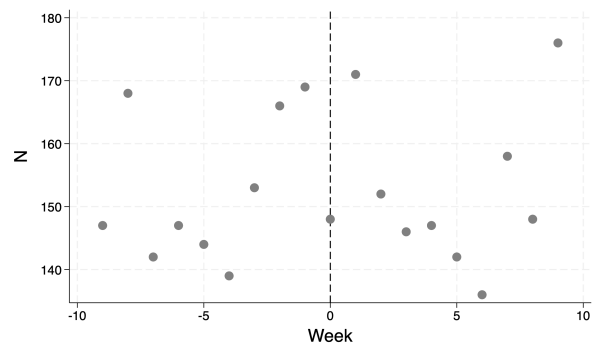
(d) Children Age 15-17

Notes: These graphs show the number of observations, binned at the weekly level. All observations are for weekdays. Panels a, b, c, and d are The Women with At Least One Child Age 6-17 sample, the Women with No Children Age 3-18 sample, the Men with At Least One Child Age 6-17 sample, and the Children Age 15-17 sample, respectively. We did not exclude holidays or the few observations that would be both treated and control in the stacked RDD analysis. that overlap, as we do elsewhere. The week of school start/summer start is indicated with the dashed vertical line.

Data Appendix: Time Use Categorization

Here we detail how we created the ten broad categories of time use. The ten categories are mutually exclusive and nearly comprehensive (meaning that they overall nearly add up to 24 hours). The exception is that there is an "other" category that includes situations such as coding errors. We do not include "other" in the paper. All of the below come from the "Summary" file, which totals the amount spent for each of the individual categories. We report both the variable name and label.

1) Sleep:
t010101 Sleeping
t010102 Sleeplessness
t010199 Sleeping, n.e.c.* [Here and elsewhere, "n.e.c." means not elsewhere classified.]

2) Self Care
t010201 Washing, dressing and grooming oneself
t010299 Grooming, n.e.c.*
t010301 Health-related self care
t010399 Self care, n.e.c.*
t010401 Personal/Private activities
t010499 Personal activities, n.e.c.*
t010501 Personal emergencies
t010599 Personal care emergencies, n.e.c.*
t019999 Personal care, n.e.c.*

3) Household Tasks, Shopping, and Civic
t020101 Interior cleaning
t020102 Laundry
t020103 Sewing, repairing, & maintaining textiles
t020104 Storing interior hh items, inc. food
t020199 Housework, n.e.c.*
t020201 Food and drink preparation
t020202 Food presentation
t020203 Kitchen and food clean-up
t020299 Food & drink prep, presentation, & clean-up, n.e.c.*
t020301 Interior arrangement, decoration, & repairs
t020302 Building and repairing furniture
t020303 Heating and cooling
t020399 Interior maintenance, repair, & decoration, n.e.c.*
t020401 Exterior cleaning
t020402 Exterior repair, improvements, & decoration
t020499 Exterior maintenance, repair & decoration, n.e.c.*
t020501 Lawn, garden, and houseplant care
t020502 Ponds, pools, and hot tubs
t020599 Lawn and garden, n.e.c.*
t020681 Care for animals and pets (not veterinary care)
t020699 Pet and animal care, n.e.c.*
t020701 Vehicle repair and maintenance (by self)

t020799 Vehicles, n.e.c.*
t020801 Appliance, tool, and toy set-up, repair, & maintenance (by self)
t020899 Appliances and tools, n.e.c.*
t020901 Financial management
t020902 Household & personal organization and planning
t020903 HH & personal mail & messages (except e-mail)
t020904 HH & personal e-mail and messages
t020905 Home security
t020999 Household management, n.e.c.*
t029999 Household activities, n.e.c.*
t070101 Grocery shopping
t070102 Purchasing gas
t070103 Purchasing food (not groceries)
t070104 Shopping, except groceries, food and gas
t070105 Waiting associated with shopping
t070199 Shopping, n.e.c.*
t070201 Comparison shopping
t070299 Researching purchases, n.e.c.*
t070301 Security procedures rel. to consumer purchases
t070399 Security procedures rel. to consumer purchases, n.e.c.*
t079999 Consumer purchases, n.e.c.*
t080101 Using paid childcare services
t080102 Waiting associated w/purchasing childcare svcs
t080199 Using paid childcare services, n.e.c.*
t080201 Banking
t080202 Using other financial services
t080203 Waiting associated w/banking/financial services
t080299 Using financial services and banking, n.e.c.*
t080301 Using legal services
t080302 Waiting associated with legal services
t080399 Using legal services, n.e.c.*
t080401 Using health and care services outside the home
t080402 Using in-home health and care services
t080403 Waiting associated with medical services
t080499 Using medical services, n.e.c.*
t080501 Using personal care services
t080502 Waiting associated w/personal care services
t080599 Using personal care services, n.e.c.*
t080601 Activities rel. to purchasing/selling real estate
t080602 Waiting associated w/purchasing/selling real estate
t080699 Using real estate services, n.e.c.*
t080701 Using veterinary services
t080702 Waiting associated with veterinary services
t080799 Using veterinary services, n.e.c.*
t080801 Security procedures rel. to professional/personal svcs.
t080899 Security procedures rel. to professional/personal svcs n.e.c.*
t089999 Professional and personal services, n.e.c.*
t090101 Using interior cleaning services
t090102 Using meal preparation services
t090103 Using clothing repair and cleaning services
t090104 Waiting associated with using household services
t090199 Using household services, n.e.c.*
t090201 Using home maint/repair/decor/construction svcs
t090202 Waiting associated w/ home main/repair/decor/constr
t090299 Using home maint/repair/decor/constr services, n.e.c.*
t090301 Using pet services

t090302 Waiting associated with pet services
t090399 Using pet services, n.e.c.*
t090401 Using lawn and garden services
t090402 Waiting associated with using lawn & garden services
t090499 Using lawn and garden services, n.e.c.*
t090501 Using vehicle maintenance or repair services
t090502 Waiting associated with vehicle main. or repair svcs
t090599 Using vehicle maint. & repair svcs, n.e.c.*
t099999 Using household services, n.e.c.*
t100101 Using police and fire services
t100102 Using social services
t100103 Obtaining licenses & paying fines, fees, taxes
t100199 Using government services, n.e.c.*
t100201 Civic obligations & participation
t100299 Civic obligations & participation, n.e.c.*
t100381 Waiting associated w/ using government services
t100383 Waiting associated w/civic obligations & participation
t100399 Waiting assoc. w/govt svcs or civic obligations, n.e.c.*
t100401 Security procedures rel. to govt svcs/civic obligations
t100499 Security procedures rel. to govt svcs/civic obligations, n.e.c.*
t109999 Government services, n.e.c.*

4) Caring for others
t030101 Physical care for hh children
t030102 Reading to/with hh children
t030103 Playing with hh children, not sports
t030104 Arts and crafts with hh children
t030105 Playing sports with hh children
t030108 Organization & planning for hh children
t030109 Looking after hh children (as a primary activity)
t030110 Attending hh children's events
t030111 Waiting for/with hh children
t030112 Picking up/dropping off hh children
t030186 Talking with/listening to hh children
t030199 Caring for & helping hh children, n.e.c.*
t030201 Homework (hh children)
t030202 Meetings and school conferences (hh children)
t030203 Home schooling of hh children
t030204 Waiting associated with hh children's education
t030299 Activities related to hh child's education, n.e.c.*
t030301 Providing medical care to hh children
t030302 Obtaining medical care for hh children
t030303 Waiting associated with hh children's health
t030399 Activities related to hh child's health, n.e.c.*
t030401 Physical care for hh adults
t030402 Looking after hh adult (as a primary activity)
t030403 Providing medical care to hh adult
t030404 Obtaining medical and care services for hh adult
t030405 Waiting associated with caring for household adults
t030499 Caring for household adults, n.e.c.*
t030501 Helping hh adults
t030502 Organization & planning for hh adults
t030503 Picking up/dropping off hh adult
t030504 Waiting associated with helping hh adults
t030599 Helping household adults, n.e.c.*
t039999 Caring for & helping hh members, n.e.c.*

t040101 Physical care for nonhh children
t040102 Reading to/with nonhh children
t040103 Playing with nonhh children, not sports
t040104 Arts and crafts with nonhh children
t040105 Playing sports with nonhh children
t040108 Organization & planning for nonhh children
t040109 Looking after nonhh children (as primary activity)
t040110 Attending nonhh children's events
t040111 Waiting for/with nonhh children
t040112 Dropping off/picking up nonhh children
t040186 Talking with/listening to nonhh children
t040199 Caring for and helping nonhh children, n.e.c.*
t040201 Homework (nonhh children)
t040202 Meetings and school conferences (nonhh children)
t040203 Home schooling of nonhh children
t040204 Waiting associated with nonhh children's education
t040299 Activities related to nonhh child's educ., n.e.c.*
t040301 Providing medical care to nonhh children
t040302 Obtaining medical care for nonhh children
t040303 Waiting associated with nonhh children's health
t040399 Activities related to nonhh child's health, n.e.c.*
t040401 Physical care for nonhh adults
t040402 Looking after nonhh adult (as a primary activity)
t040403 Providing medical care to nonhh adult
t040404 Obtaining medical and care services for nonhh adult
t040405 Waiting associated with caring for nonhh adults
t040499 Caring for nonhh adults, n.e.c.*
t040501 Housework, cooking, & shopping assistance for nonhh adults
t040502 House & lawn maintenance & repair assistance for nonhh adults
t040503 Animal & pet care assistance for nonhh adults
t040504 Vehicle & appliance maintenance/repair assistance for nonhh adults
t040505 Financial management assistance for nonhh adults
t040506 Household management & paperwork assistance for nonhh adults
t040507 Picking up/dropping off nonhh adult
t040508 Waiting associated with helping nonhh adults
t040599 Helping nonhh adults, n.e.c.*
t049999 Caring for & helping nonhh members, n.e.c.*

5) Work
t050101 Work, main job
t050102 Work, other job(s)
t050103 Security procedures related to work
t050189 Working, n.e.c.*
t050201 Socializing, relaxing, and leisure as part of job
t050202 Eating and drinking as part of job
t050203 Sports and exercise as part of job
t050204 Security procedures as part of job
t050289 Work-related activities, n.e.c.*
t050301 Income-generating hobbies, crafts, and food
t050302 Income-generating performances
t050303 Income-generating services
t050304 Income-generating rental property activities
t050389 Other income-generating activities, n.e.c.*
t050403 Job interviewing
t050404 Waiting associated with job search or interview
t050405 Security procedures rel. to job search/interviewing

t050481 Job search activities
t050499 Job search and Interviewing, n.e.c.*
t059999 Work and work-related activities, n.e.c.*

6) Education
t060101 Taking class for degree, certification, or licensure
t060102 Taking class for personal interest
t060103 Waiting associated with taking classes
t060104 Security procedures rel. to taking classes
t060199 Taking class, n.e.c.*
t060201 Extracurricular club activities
t060202 Extracurricular music & performance activities
t060203 Extracurricular student government activities
t060289 Education-related extracurricular activities, n.e.c.*
t060301 Research/homework for class for degree, certification, or licensure
t060302 Research/homework for class for pers. interest
t060303 Waiting associated with research/homework
t060399 Research/homework n.e.c.*
t060401 Administrative activities: class for degree, certification, or licensure
t060402 Administrative activities: class for personal interest
t060403 Waiting associated w/admin. activities (education)
t060499 Administrative for education, n.e.c.*
t069999 Education, n.e.c.*

7) Free time
t120101 Socializing and communicating with others
t120199 Socializing and communicating, n.e.c.*
t120201 Attending or hosting parties/receptions/ceremonies
t120202 Attending meetings for personal interest (not volunteering)
t120299 Attending/hosting social events, n.e.c.*
t120301 Relaxing, thinking
t120302 Tobacco and drug use
t120303 Television and movies (not religious)
t120304 Television (religious)
t120305 Listening to the radio
t120306 Listening to/playing music (not radio)
t120307 Playing games
t120308 Computer use for leisure (exc. Games)
t120309 Arts and crafts as a hobby
t120310 Collecting as a hobby
t120311 Hobbies, except arts & crafts and collecting
t120312 Reading for personal interest
t120313 Writing for personal interest
t120399 Relaxing and leisure, n.e.c.*
t120401 Attending performing arts
t120402 Attending museums
t120403 Attending movies/film
t120404 Attending gambling establishments
t120405 Security procedures rel. to arts & entertainment
t120499 Arts and entertainment, n.e.c.*
t120501 Waiting assoc. w/socializing & communicating
t120502 Waiting assoc. w/attending/hosting social events
t120503 Waiting associated with relaxing/leisure
t120504 Waiting associated with arts & entertainment
t120599 Waiting associated with socializing, n.e.c.*
t129999 Socializing, relaxing, and leisure, n.e.c.*

t130201 Watching aerobics
t130202 Watching baseball
t130203 Watching basketball
t130204 Watching biking
t130205 Watching billiards
t130206 Watching boating
t130207 Watching bowling
t130208 Watching climbing, spelunking, caving
t130209 Watching dancing
t130210 Watching equestrian sports
t130211 Watching fencing
t130212 Watching fishing
t130213 Watching football
t130214 Watching golfing
t130215 Watching gymnastics
t130216 Watching hockey
t130217 Watching martial arts
t130218 Watching racquet sports
t130219 Watching rodeo competitions
t130220 Watching rollerblading
t130221 Watching rugby
t130222 Watching running
t130223 Watching skiing, ice skating, snowboarding
t130224 Watching soccer
t130225 Watching softball
t130226 Watching vehicle touring/racing
t130227 Watching volleyball
t130228 Watching walking
t130229 Watching water sports
t130230 Watching weightlifting/strength training
t130231 Watching people working out, unspecified
t130232 Watching wrestling
t130299 Attending sporting events, n.e.c.*
t130302 Waiting related to attending sporting events
t130402 Security related to attending sporting events
t140101 Attending religious services
t140102 Participation in religious practices
t140103 Waiting associated w/religious & spiritual activities
t140104 Security procedures rel. to religious & spiritual activities
t140105 Religious education activities
t149999 Religious and spiritual activities, n.e.c.*
t150101 Computer use
t150102 Organizing and preparing
t150103 Reading
t150104 Telephone calls (except hotline counseling)
t150105 Writing
t150106 Fundraising
t150199 Administrative & support activities, n.e.c.*
t150201 Food preparation, presentation, clean-up
t150202 Collecting & delivering clothing & other goods
t150203 Providing care
t150204 Teaching, leading, counseling, mentoring
t150299 Social service & care activities, n.e.c.*
t150301 Building houses, wildlife sites, & other structures
t150302 Indoor & outdoor maintenance, repair, & clean-up
t150399 Indoor & outdoor maintenance, building & clean-up activities, n.e.c.*

t150401 Performing
t150402 Serving at volunteer events & cultural activities
t150499 Participating in performance & cultural activities, n.e.c.*
t150501 Attending meetings, conferences, & training
t150599 Attending meetings, conferences, & training, n.e.c.*
t150601 Public health activities
t150602 Public safety activities
t150699 Public health & safety activities, n.e.c.*
t159989 Volunteer activities, n.e.c.*
t160101 Telephone calls to/from family members
t160102 Telephone calls to/from friends, neighbors, or acquaintances
t160103 Telephone calls to/from education services providers
t160104 Telephone calls to/from salespeople
t160105 Telephone calls to/from professional or personal care svcs providers
t160106 Telephone calls to/from household services providers
t160107 Telephone calls to/from paid child or adult care providers
t160108 Telephone calls to/from government officials
t169989 Telephone calls, n.e.c.*

8) Eating
t110101 Eating and drinking
t110199 Eating and drinking, n.e.c.*
t110281 Waiting associated w/eating & drinking
t110289 Waiting associated with eating & drinking, n.e.c.*
t119999 Eating and drinking, n.e.c.*

9) Exercise
t130101 Doing aerobics
t130102 Playing baseball
t130103 Playing basketball
t130104 Biking
t130105 Playing billiards
t130106 Boating
t130107 Bowling
t130108 Climbing, spelunking, caving
t130109 Dancing
t130110 Participating in equestrian sports
t130111 Fencing
t130112 Fishing
t130113 Playing football
t130114 Golfing
t130115 Doing gymnastics
t130116 Hiking
t130117 Playing hockey
t130118 Hunting
t130119 Participating in martial arts
t130120 Playing racquet sports
t130121 Participating in rodeo competitions
t130122 Rollerblading
t130123 Playing rugby
t130124 Running
t130125 Skiing, ice skating, snowboarding
t130126 Playing soccer
t130127 Softball
t130128 Using cardiovascular equipment
t130129 Vehicle touring/racing

t130130 Playing volleyball
t130131 Walking
t130132 Participating in water sports
t130133 Weightlifting/strength training
t130134 Working out, unspecified
t130135 Wrestling
t130136 Doing yoga
t130199 Playing sports n.e.c.*
t130301 Waiting related to playing sports or exercising
t130399 Waiting associated with sports, exercise, & recreation, n.e.c.*
t130401 Security related to playing sports or exercising
t130499 Security related to sports, exercise, & recreation, n.e.c.*
t139999 Sports, exercise, & recreation, n.e.c.*

10) Travel
t180101 Travel related to personal care
t180199 Travel related to personal care, n.e.c.*
t180280 Travel related to household activities
t180381 Travel related to caring for and helping hh children
t180382 Travel related to caring for and helping hh adults
t180399 Travel rel. to caring for & helping hh members, n.e.c.*
t180481 Travel related to caring for and helping nonhh children
t180482 Travel related to caring for and helping nonhh adults
t180499 Travel rel. to caring for & helping nonhh members, n.e.c.*
t180501 Travel related to working
t180502 Travel related to work-related activities
t180589 Travel related to work, n.e.c.*
t180601 Travel related to taking class
t180682 Travel related to education (except taking class)
t180699 Travel related to education, n.e.c.*
t180701 Travel related to grocery shopping
t180782 Travel related to shopping (except grocery shopping)
t180801 Travel related to using childcare services
t180802 Travel related to using financial services and banking
t180803 Travel related to using legal services
t180804 Travel related to using medical services
t180805 Travel related to using personal care services
t180806 Travel related to using real estate services
t180807 Travel related to using veterinary services
t180899 Travel rel. to using prof. & personal care services, n.e.c.*
t180901 Travel related to using household services
t180902 Travel related to using home main./repair/decor./construction svcs
t180903 Travel related to using pet services (not vet)
t180904 Travel related to using lawn and garden services
t180905 Travel related to using vehicle maintenance & repair services
t180999 Travel related to using household services, n.e.c.*
t181002 Travel related to civic obligations & participation
t181081 Travel related to using government services
t181099 Travel rel. to govt svcs & civic obligations, n.e.c.*
t181101 Travel related to eating and drinking
t181199 Travel related to eating and drinking, n.e.c.*
t181201 Travel related to socializing and communicating
t181202 Travel related to attending or hosting social events
t181204 Travel related to arts and entertainment
t181283 Travel related to relaxing and leisure
t181299 Travel rel. to socializing, relaxing, & leisure, n.e.c.*

t181301 Travel related to participating in sports/exercise/recreation
t181302 Travel related to attending sporting/recreational events
t181399 Travel related to sports, exercise, & recreation, n.e.c.*
t181401 Travel related to religious/spiritual practices
t181499 Travel rel. to religious/spiritual activities, n.e.c.*
t181501 Travel related to volunteering
t181599 Travel related to volunteer activities, n.e.c.*
t181601 Travel related to phone calls
t181699 Travel rel. to phone calls, n.e.c.*
t181801 Security procedures related to traveling
t181899 Security procedures related to traveling, n.e.c.*
t189999 Traveling, n.e.c.*

11) Other
t500101 Insufficient detail in verbatim
t500103 Missing travel or destination
t500104 Recorded simultaneous activities incorrectly
t500105 Respondent refused to provide information/none of your business
t500106 Gap/can't remember
t500107 Unable to code activity at 1st tier
t509989 Data codes, n.e.c.*

A Web Appendix Tables

Table W1: Women, 25-55, at least one child 6-17 in HH, weekdays

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.36***	-0.10*	0.11	0.65***	0.17	0.05	-0.42**	-0.04	-0.08**	0.02
	(0.12)	(0.06)	(0.16)	(0.11)	(0.26)	(0.05)	(0.16)	(0.04)	(0.04)	(0.07)
Summer Mean	8.33	0.82	3.06	1.35	4.13	0.11	3.38	0.98	0.27	1.35
Observations	4,586	4,586	4,586	4,586	4,586	4,586	4,586	4,586	4,586	4,586

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.52***	0.00	0.17	0.53***	0.22	0.07	-0.41**	-0.07*	-0.11**	0.13*
	(0.12)	(0.06)	(0.16)	(0.11)	(0.26)	(0.06)	(0.16)	(0.04)	(0.05)	(0.07)
Summer Mean	8.34	0.82	3.07	1.30	4.12	0.12	3.43	0.98	0.27	1.32
Observations	4,760	4,760	4,760	4,760	4,760	4,760	4,760	4,760	4,760	4,760

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.43***	-0.05	0.15	0.59***	0.17	0.05	-0.41***	-0.06*	-0.09***	0.08
	(0.08)	(0.04)	(0.11)	(0.08)	(0.18)	(0.04)	(0.11)	(0.03)	(0.03)	(0.05)
Summer Mean	8.34	0.82	3.06	1.32	4.12	0.12	3.41	0.98	0.27	1.34
Observations	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346	9,346

Notes: This table considers weekdays only and is for women age 25-55 with at least one child age 6-17 in the household. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W2: Women, 25-55, no child 3-18 in HH, weekdays

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
Panel A: School Start										
School	-0.02	-0.04	0.05	0.21*	-0.13	-0.10	-0.03	-0.07	-0.04	0.22**
	(0.15)	(0.08)	(0.17)	(0.12)	(0.30)	(0.06)	(0.21)	(0.05)	(0.04)	(0.10)
Summer Mean	8.36	0.93	2.27	0.68	5.08	0.16	3.88	1.00	0.25	1.23
Observations	3,918	3,918	3,918	3,918	3,918	3,918	3,918	3,918	3,918	3,918
Panel B: Summer Start										
School	-0.24	0.02	0.01	0.12	0.04	0.08	0.12	0.01	-0.06	-0.11
	(0.15)	(0.07)	(0.16)	(0.12)	(0.30)	(0.07)	(0.21)	(0.05)	(0.04)	(0.09)
Summer Mean	8.39	0.93	2.27	0.66	5.16	0.17	3.80	1.00	0.25	1.24
Observations	4,043	4,043	4,043	4,043	4,043	4,043	4,043	4,043	4,043	4,043
Panel C: Stacked										
School	-0.14	-0.01	0.06	0.16*	-0.04	-0.01	0.03	-0.02	-0.04	0.05
	(0.11)	(0.05)	(0.11)	(0.09)	(0.21)	(0.05)	(0.15)	(0.04)	(0.03)	(0.06)
Summer Mean	8.37	0.93	2.27	0.67	5.12	0.17	3.84	1.00	0.25	1.24
Observations	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961	7,961

Notes: This table considers weekdays only and is for women age 25-55 with no children age 3-18 in the household. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W3: Men, 25-55, at least one child 6-17 in HH, weekdays

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.11	-0.04	0.01	0.24**	0.47	0.03	-0.52**	-0.12**	-0.07	0.11
	(0.14)	(0.06)	(0.14)	(0.09)	(0.30)	(0.05)	(0.19)	(0.06)	(0.07)	(0.10)
Summer Mean	7.80	0.67	1.46	0.69	7.12	0.05	3.14	1.09	0.35	1.46
Observations	3,397	3,397	3,397	3,397	3,397	3,397	3,397	3,397	3,397	3,397

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.26*	-0.04	-0.08	-0.00	0.74**	-0.03	-0.22	0.06	-0.11	-0.02
	(0.13)	(0.06)	(0.14)	(0.10)	(0.29)	(0.04)	(0.18)	(0.06)	(0.08)	(0.10)
Summer Mean	7.77	0.68	1.45	0.72	7.13	0.06	3.11	1.09	0.37	1.47
Observations	3,456	3,456	3,456	3,456	3,456	3,456	3,456	3,456	3,456	3,456

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.21**	-0.05	-0.02	0.13*	0.58**	0.00	-0.36***	-0.03	-0.08	0.05
	(0.10)	(0.04)	(0.10)	(0.07)	(0.21)	(0.03)	(0.13)	(0.04)	(0.05)	(0.07)
Summer Mean	7.79	0.67	1.45	0.71	7.13	0.05	3.13	1.09	0.36	1.47
Observations	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853	6,853

Notes: This table considers weekdays only and is for men age 25-55 with at least one child age 6-17 in the household. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W4: 15-17 Year Olds, Weekdays

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-1.42***	0.20**	-0.59***	-0.03	-0.52*	5.55***	-2.27***	-0.12	-0.64***	-0.09
	(0.28)	(0.07)	(0.16)	(0.07)	(0.27)	(0.35)	(0.37)	(0.07)	(0.19)	(0.14)
Summer Mean	10.12	0.74	1.22	0.23	1.40	0.62	6.07	0.92	1.23	1.23
Observations	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312	1,312

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-1.23***	0.15*	-0.80***	-0.25***	-0.95***	5.55***	-1.78***	-0.03	-0.50***	-0.05
	(0.25)	(0.08)	(0.17)	(0.09)	(0.27)	(0.33)	(0.36)	(0.08)	(0.17)	(0.11)
Summer Mean	10.07	0.74	1.24	0.26	1.37	0.67	6.12	0.95	1.16	1.20
Observations	1,382	1,382	1,382	1,382	1,382	1,382	1,382	1,382	1,382	1,382

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-1.30***	0.17***	-0.68***	-0.14**	-0.77***	5.55***	-2.03***	-0.08	-0.56***	-0.08
	(0.19)	(0.05)	(0.11)	(0.06)	(0.19)	(0.24)	(0.26)	(0.05)	(0.13)	(0.09)
Summer Mean	10.09	0.74	1.23	0.25	1.39	0.65	6.10	0.93	1.20	1.22
Observations	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694	2,694

Notes: This table considers weekdays only and is for children age 15-17. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W5: Women, 25-55, at least one child 6-17 in HH, weekends

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.22*	0.02	0.20	0.31**	-0.26	0.07*	-0.23	-0.05	-0.09	-0.16*
	(0.13)	(0.06)	(0.17)	(0.11)	(0.18)	(0.04)	(0.19)	(0.06)	(0.06)	(0.08)
Summer Mean	9.20	0.79	3.59	1.11	1.15	0.07	4.98	1.17	0.41	1.34
Observations	4,914	4,914	4,914	4,914	4,914	4,914	4,914	4,914	4,914	4,914

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.02	0.04	-0.03	0.14	-0.16	0.02	0.38**	-0.08	-0.16**	-0.16*
	(0.13)	(0.06)	(0.17)	(0.11)	(0.17)	(0.05)	(0.19)	(0.06)	(0.06)	(0.09)
Summer Mean	9.19	0.79	3.59	1.12	1.14	0.08	4.96	1.18	0.39	1.35
Observations	4,908	4,908	4,908	4,908	4,908	4,908	4,908	4,908	4,908	4,908

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.10	0.04	0.06	0.26***	-0.23*	0.05	0.09	-0.06	-0.13***	-0.15**
	(0.09)	(0.04)	(0.11)	(0.08)	(0.12)	(0.03)	(0.13)	(0.04)	(0.04)	(0.06)
Summer Mean	9.19	0.79	3.59	1.11	1.14	0.08	4.97	1.17	0.40	1.34
Observations	9,822	9,822	9,822	9,822	9,822	9,822	9,822	9,822	9,822	9,822

Notes: This table considers weekends only and is for women age 25-55 with at least one child age 6-17 in the household. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W6: Women, 25-55, no child 3-18 in HH, weekends

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.20	-0.06	-0.08	0.08	0.11	0.07	0.20	0.02	-0.00	-0.12
	(0.17)	(0.07)	(0.18)	(0.12)	(0.20)	(0.06)	(0.23)	(0.06)	(0.06)	(0.11)
Summer Mean	9.35	0.89	3.12	0.66	1.33	0.08	5.59	1.14	0.34	1.33
Observations	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091	4,091

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.16	-0.00	0.03	-0.07	-0.13	0.01	-0.11	0.08	-0.05	0.09
	(0.16)	(0.07)	(0.18)	(0.12)	(0.22)	(0.05)	(0.23)	(0.07)	(0.07)	(0.10)
Summer Mean	9.32	0.87	3.13	0.66	1.38	0.06	5.59	1.14	0.35	1.33
Observations	4,025	4,025	4,025	4,025	4,025	4,025	4,025	4,025	4,025	4,025

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.02	-0.02	-0.02	0.00	0.01	0.03	0.01	0.06	-0.04	-0.00
	(0.11)	(0.05)	(0.13)	(0.08)	(0.14)	(0.04)	(0.16)	(0.05)	(0.05)	(0.07)
Summer Mean	9.34	0.88	3.13	0.66	1.35	0.07	5.59	1.14	0.34	1.33
Observations	8,116	8,116	8,116	8,116	8,116	8,116	8,116	8,116	8,116	8,116

Notes: This table considers weekends only and is for women age 25-55 with no children age 3-18 in the household. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W7: Men, 25-55, at least one child 6-17 in HH, weekends

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.02	-0.01	-0.04	0.11	-0.10	-0.01	0.39	-0.03	-0.26**	-0.07
	(0.15)	(0.05)	(0.20)	(0.12)	(0.26)	(0.04)	(0.24)	(0.07)	(0.11)	(0.12)
Summer Mean	8.86	0.54	2.82	0.84	1.78	0.04	5.34	1.31	0.73	1.54
Observations	3,531	3,531	3,531	3,531	3,531	3,531	3,531	3,531	3,531	3,531

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.04	0.03	-0.09	0.41***	0.04	0.02	-0.13	0.08	-0.11	-0.30**
	(0.15)	(0.06)	(0.22)	(0.12)	(0.27)	(0.03)	(0.25)	(0.07)	(0.12)	(0.13)
Summer Mean	8.91	0.54	2.87	0.81	1.74	0.04	5.31	1.28	0.72	1.57
Observations	3,405	3,405	3,405	3,405	3,405	3,405	3,405	3,405	3,405	3,405

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.04	0.02	0.00	0.29***	-0.04	-0.00	0.06	0.01	-0.21**	-0.17*
	(0.10)	(0.04)	(0.14)	(0.08)	(0.18)	(0.02)	(0.17)	(0.05)	(0.08)	(0.09)
Summer Mean	8.89	0.54	2.85	0.83	1.76	0.04	5.33	1.29	0.73	1.55
Observations	6,936	6,936	6,936	6,936	6,936	6,936	6,936	6,936	6,936	6,936

Notes: This table considers weekends only and is for men age 25-55 with at least one child age 6-17 in the household. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W8: 15-17 Year Olds, Weekends

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.25	0.02	-0.24	0.06	-0.18	0.54***	-0.05	0.00	-0.15	-0.22
	(0.29)	(0.08)	(0.22)	(0.10)	(0.27)	(0.16)	(0.41)	(0.08)	(0.24)	(0.17)
Summer Mean	10.52	0.71	1.27	0.23	1.01	0.24	6.42	0.96	1.12	1.33
Observations	1,464	1,464	1,464	1,464	1,464	1,464	1,464	1,464	1,464	1,464

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.31	0.09	-0.03	-0.06	-0.14	0.66***	-0.50	-0.03	0.03	0.23
	(0.29)	(0.08)	(0.21)	(0.10)	(0.27)	(0.16)	(0.40)	(0.09)	(0.23)	(0.16)
Summer Mean	10.44	0.71	1.23	0.24	1.07	0.24	6.52	0.97	1.12	1.28
Observations	1,410	1,410	1,410	1,410	1,410	1,410	1,410	1,410	1,410	1,410

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	0.02	0.06	-0.14	0.00	-0.17	0.59***	-0.26	0.00	-0.06	-0.03
	(0.20)	(0.06)	(0.15)	(0.07)	(0.18)	(0.11)	(0.27)	(0.06)	(0.16)	(0.11)
Summer Mean	10.48	0.71	1.25	0.23	1.04	0.24	6.47	0.97	1.12	1.31
Observations	2,874	2,874	2,874	2,874	2,874	2,874	2,874	2,874	2,874	2,874

Notes: This table considers weekends only and is for children age 15-17. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W9: Women, 25-55, at least one child 6-17 in HH, Not Employed

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.52**	-0.24*	0.76**	0.82***	-0.04	0.16	-0.70**	-0.11	-0.07	-0.15
	(0.22)	(0.13)	(0.30)	(0.24)	(0.25)	(0.13)	(0.30)	(0.07)	(0.07)	(0.14)
Summer Mean	8.89	0.69	4.31	2.02	0.77	0.13	4.32	1.03	0.30	1.24
Observations	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480	1,480

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.72***	0.15	0.34	1.18***	-0.57**	0.16	-0.41	-0.03	-0.04	0.05
	(0.22)	(0.11)	(0.30)	(0.24)	(0.24)	(0.16)	(0.32)	(0.08)	(0.09)	(0.13)
Summer Mean	8.93	0.70	4.32	1.90	0.79	0.18	4.37	1.00	0.31	1.19
Observations	1,526	1,526	1,526	1,526	1,526	1,526	1,526	1,526	1,526	1,526

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.62***	-0.06	0.54**	1.03***	-0.33*	0.15	-0.56**	-0.07	-0.05	-0.03
	(0.15)	(0.08)	(0.21)	(0.17)	(0.17)	(0.10)	(0.22)	(0.05)	(0.06)	(0.09)
Summer Mean	8.91	0.70	4.32	1.96	0.78	0.15	4.35	1.01	0.31	1.21
Observations	3,006	3,006	3,006	3,006	3,006	3,006	3,006	3,006	3,006	3,006

Notes: This table considers weekdays only and is for women age 25-55 with at least one child age 6-17 in the household who were not employed as of the last CPS interview. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W10: Women, 25-55, at least one child 6-17 in HH, Employed

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.27**	-0.05	-0.17	0.56***	0.21	-0.01	-0.25	-0.01	-0.07	0.08
	(0.13)	(0.06)	(0.17)	(0.11)	(0.29)	(0.04)	(0.18)	(0.05)	(0.05)	(0.08)
Summer Mean	8.07	0.88	2.46	1.02	5.73	0.10	2.93	0.96	0.26	1.40
Observations	3,106	3,106	3,106	3,106	3,106	3,106	3,106	3,106	3,106	3,106

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.41***	-0.06	0.17	0.26**	0.45	0.03	-0.41**	-0.09	-0.14**	0.15*
	(0.14)	(0.07)	(0.17)	(0.11)	(0.30)	(0.06)	(0.17)	(0.05)	(0.05)	(0.08)
Summer Mean	8.06	0.88	2.46	1.01	5.72	0.10	2.97	0.97	0.25	1.39
Observations	3,234	3,234	3,234	3,234	3,234	3,234	3,234	3,234	3,234	3,234

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.32***	-0.05	0.01	0.41***	0.29	0.01	-0.32**	-0.05	-0.11***	0.11*
	(0.10)	(0.04)	(0.12)	(0.08)	(0.21)	(0.03)	(0.12)	(0.04)	(0.03)	(0.06)
Summer Mean	8.06	0.88	2.46	1.02	5.73	0.10	2.95	0.97	0.25	1.40
Observations	6,340	6,340	6,340	6,340	6,340	6,340	6,340	6,340	6,340	6,340

Notes: This table considers weekdays only and is for women age 25-55 with at least one child age 6-17 in the household who were employed as of the last CPS interview. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W11: Women, 25-55, at least one child 6-17 in HH, Under $50,000 HH Income

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.01	-0.23*	-0.07	0.49*	-0.40	0.28*	-0.32	-0.01	-0.05	0.14
	(0.29)	(0.13)	(0.34)	(0.27)	(0.58)	(0.15)	(0.39)	(0.09)	(0.06)	(0.15)
Summer Mean	8.75	0.82	3.19	1.46	3.55	0.19	3.56	0.91	0.16	1.18
Observations	977	977	977	977	977	977	977	977	977	977

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.59*	-0.02	-0.20	0.30	1.24**	-0.02	-0.84**	-0.05	0.07	0.20
	(0.31)	(0.12)	(0.34)	(0.27)	(0.55)	(0.13)	(0.41)	(0.09)	(0.10)	(0.15)
Summer Mean	8.79	0.82	3.18	1.41	3.46	0.22	3.61	0.93	0.17	1.15
Observations	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044	1,044

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.32	-0.11	-0.20	0.39**	0.53	0.12	-0.60**	-0.04	0.03	0.15
	(0.21)	(0.09)	(0.23)	(0.19)	(0.39)	(0.10)	(0.27)	(0.06)	(0.06)	(0.10)
Summer Mean	8.77	0.82	3.19	1.44	3.50	0.20	3.58	0.92	0.17	1.16
Observations	2,021	2,021	2,021	2,021	2,021	2,021	2,021	2,021	2,021	2,021

Notes: This table considers weekdays only and is for women age 25-55 with at least one child age 6-17 in the household who were in a household with under $50k household earnings. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W12: Women, 25-55, at least one child 6-17 in HH, At Least $50,000 HH Income

Panel A: School Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.36*	0.00	0.45	0.75***	-0.18	-0.04	-0.33	-0.07	-0.13	-0.05
	(0.21)	(0.09)	(0.30)	(0.20)	(0.52)	(0.08)	(0.27)	(0.09)	(0.09)	(0.14)
Summer Mean	8.21	0.81	2.82	1.32	4.44	0.08	3.08	1.06	0.38	1.53
Observations	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269	1,269

Panel B: Summer Start

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.52**	0.06	0.07	0.45**	0.43	0.13	-0.60**	-0.12	-0.20**	0.16
	(0.22)	(0.10)	(0.29)	(0.21)	(0.53)	(0.10)	(0.27)	(0.09)	(0.09)	(0.14)
Summer Mean	8.17	0.81	2.80	1.27	4.59	0.08	3.08	1.06	0.37	1.51
Observations	1,311	1,311	1,311	1,311	1,311	1,311	1,311	1,311	1,311	1,311

Panel C: Stacked

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
School	-0.44***	0.03	0.24	0.63***	0.09	0.03	-0.45**	-0.11*	-0.17**	0.08
	(0.14)	(0.07)	(0.21)	(0.14)	(0.36)	(0.06)	(0.19)	(0.06)	(0.07)	(0.10)
Summer Mean	8.19	0.81	2.81	1.30	4.51	0.08	3.08	1.06	0.38	1.52
Observations	2,580	2,580	2,580	2,580	2,580	2,580	2,580	2,580	2,580	2,580

Notes: This table considers weekdays only and is for women age 25-55 with at least one child age 6-17 in the household who were in a household with at least $50k household earnings. It reports the results of regressions of an outcome on an indicator for being above the cutoff (for school start in Panel A, this takes value 1 for weeks after the start of school; for summer start in Panel B, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. The school start and summer start periods are stacked together in Panel C. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.

Table W13: Difference-in-RDD

	Sleep	Self Care	Household	Caring	Work	Ed	Free Time	Eating	Exercise	Travel
Panel A: Stacked										
SchoolXBaseline	-0.28***	-0.02	-0.06	0.41***	0.22*	-0.01	-0.22**	-0.06**	-0.05**	0.07**
	(0.06)	(0.03)	(0.07)	(0.05)	(0.13)	(0.03)	(0.08)	(0.02)	(0.02)	(0.04)
Summer Mean	8.36	0.87	2.70	1.02	4.59	0.14	3.61	0.99	0.26	1.29
Observations	17,307	17,307	17,307	17,307	17,307	17,307	17,307	17,307	17,307	17,307

Notes: This table considers weekdays only. It reports the results of difference-in-discontinuity regressions of an outcome on an indicator for being above the cutoff (for school start, this takes value 1 for weeks after the start of school; for summer start, it is reversed and takes value 1 for weeks before the start of summer), and a linear function of the running variable, days away from the Wednesday of the school start (or summer start). The regression also includes a number of controls. Finally, it includes "Baseline," which is 1 for women age 25-55 with at least one child age 6-17 in the household and is 0 for women age 25-55 with no children age 3-18 in the household. Finally, it includes an interaction for being over the cutoff and baseline, which is the coefficient that we report. The school start and summer start periods are stacked together. Each coefficient corresponds to a different regression. The week of school start and summer start is excluded, as are days more than 9 weeks away from the week of the school start or summer start. "Y Mean" corresponds to the mean during the summer. Standard error are clustered at the level at which the school start or summer start date was calculated. *** 0.01; ** 0.05; * 0.1.