

Balancing college and kids: estimating time allocation differences for college students with and without children

Student-parents (i.e., students with dependent children) are an increasingly large share of the college population, but little is known about how they balance the demands of college with those of parenthood and household responsibilities. In this article, we use data from the American Time Use Survey to explore the time-allocation decisions of student-parents, and compare them with those of their more traditional college peers, student-nonparents. We begin with exploratory descriptive statistics, which show that student-parents spend significantly less time in educational activities, but more time in paid work, than their student-nonparent peers. Our regression analysis shows that being a student-parent reduces the likelihood of paid work by 5 percentage points and is associated with 24 fewer minutes of homework and 15 fewer minutes of sleep per day, relative to student-nonparents.

The share of college students who have dependent children at home, which we refer to as “student-parents,” is large, yet there is a scarcity of literature studying this group of nontraditional students. With more than 25 percent of undergraduates raising children while attending school,¹ understanding the challenges faced by these students is important for researchers, policymakers, and colleges; the latter of which may need to adapt course schedules, childcare offerings, and the traditional educational model.

The research in this area² has been minimal and largely qualitative, and only one study has examined schools or students in the United States.³ This literature finds that student-parents are more likely to be women, older than traditional college students, studying part-time in an undergraduate program,⁴ and concerned with financial hardships,⁵ with their largest concern being the balance between the demands of school and those of their household.⁶ The Institute for Women’s Policy Research has published several descriptive studies about student-



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parents,⁷ including a 2014 study showing that undergraduate student-parents are more likely to be single women and minorities.⁸

In this article, we examine how student-parents allocate their time during the school year to human-capital-building activities, including schoolwork (class and homework), extracurriculars, and paid work. Certainly, childcare responsibilities require parents to take time away from these activities; tradeoffs that traditional college students, which we refer to as “student-nonparents,” do not face. We use time-diary data from the 2003 through 2015 American Time Use Survey (ATUS) to analyze how college students spend their time on a given day. We begin our analysis with descriptive statistics, showing the time allocated to human-capital-building activities for student-nonparents and student-parents, as well as the time allocated to childcare activities for student-parents. We then estimate the effect of being a student-parent on the time allocated to four human-capital-building activities: class time, homework time, extracurricular time, and paid work time.

Data

Data description and sample selection

We use data from the ATUS from 2003 to 2015.⁹ The key feature of this dataset is a 24-hour time diary for all respondents, who are chosen from a sample of households rotating out of the Current Population Survey (CPS). Participants in the ATUS provide detailed time-diary information, beginning at 4 a.m. on their diary day and ending at 4 a.m. the following morning. This detailed information includes their primary activities, location, other people who were present, and, in some cases, their secondary activities (e.g., eating and drinking, childcare). The diary data are also linked with CPS data, so additional demographic and household information is available for respondents.

Our sample includes all college students, both full-time and part-time, who were interviewed from September to May (excluding summer months June, July, and August). We excluded those who were interviewed on a holiday and those with “low quality” time diaries.¹⁰ Our sample includes 7,161 college students. It is important to note that students are typically only interviewed if they are living in the household, so the sample primarily captures independent adults enrolled in school and college students living at home with their parents.¹¹

Time-use variables

We are primarily interested in human-capital-building activities, so we limit most of our analyses to the following time-use variables: class time, homework time, paid work time, and extracurricular time.¹² Since we are interested in student-parents, we also study time spent in primary caregiving activities for dependent children.¹³ In addition, we also include sleep time in some of our analyses, since increased time devoted to sleep could increase productivity during human-capital-building activities.¹⁴

Presence of children and control variables

Our key variable of interest is whether an individual is a student-parent, meaning that they have dependent children in the household while they are enrolled in school. We measure this in the most basic way: the presence of own child under 18 in the household.

In all of our regressions, we include a comprehensive set of controls for individual, household, and location characteristics that could influence how an individual spends their time. At the individual level, we include controls for age, race, gender, marital status, a full-time school enrollment indicator, and highest level of education completed. At the household level, we include family income and number of adults in the household. In addition, we include state-fixed effects, year-fixed effects, an indicator for urban status, and an indicator for weekend time diaries.

Descriptive statistics

In table 1, we show the summary statistics from our sample of college students. We also divide the sample into two groups: student-parents (the focus of this study) and student-nonparents. Comparing time use across these two groups, unsurprisingly, we find that student-parents spend, on average, significantly more time caring for children than their student-nonparent peers (1.5 hours versus 2 minutes per day), while spending less time in school-related activities. Student-parents spend approximately 21 minutes less per day in class, 34 minutes less on homework, and 7 minutes less in extracurriculars, relative to their peers. However, student-parents spend more time on paid work than their peers, by approximately 40 minutes per day. We also find that student-parents sleep less than student-nonparents, by approximately 42 minutes (also unsurprising, as anyone with children can attest).

Table 1. Summary statistics for college students in the sample

| Variables | Full sample | | Student-parents | | Student-nonparents | | Mean difference by parental status (2) - (3) |
|---------------------------------|-------------|--------------------|-----------------|--------------------|--------------------|--------------------|--|
| | Mean (1) | Standard deviation | Mean (2) | Standard deviation | Mean (3) | Standard deviation | |
| Time-use variables (in minutes) | | | | | | | |
| Childcare time | 21.77 | 64.79 | 89.91 | 107.47 | 1.59 | 15.39 | 88.32** |
| Class time | 67.20 | 125.12 | 50.76 | 110.96 | 72.07 | 128.63 | -21.31** |
| Homework time | 88.61 | 143.57 | 62.47 | 118.09 | 96.35 | 149.43 | -33.88** |
| Work time | 168.92 | 231.21 | 201.20 | 248.62 | 159.36 | 224.93 | 41.84* |
| Extracurricular time | 11.54 | 40.87 | 6.15 | 29.31 | 13.14 | 43.59 | -6.99** |
| Sleep time | 520.77 | 138.30 | 489.42 | 126.70 | 530.06 | 140.23 | -40.64** |
| Other variables | | | | | | | |
| Age (in years) | 26.21 | 7.96 | 33.10 | 7.65 | 24.17 | 6.83 | 8.93** |
| Female | 0.56 | — | 0.72 | — | 0.52 | — | 0.20** |
| Black | 0.13 | — | 0.19 | — | 0.11 | — | 0.08** |
| Non-White, non-Black | 0.09 | — | 0.07 | — | 0.10 | — | -0.03** |
| Marital status | | | | | | | |
| Married, spouse absent | 0.01 | — | 0.01 | — | 0.01 | — | 0.00 |
| Widowed | 0.00 | — | 0.01 | — | 0.00 | — | 0.01** |
| Divorced | 0.04 | — | 0.09 | — | 0.02 | — | 0.07** |
| Separated | 0.02 | — | 0.03 | — | 0.01 | — | 0.02** |
| Never married | 0.70 | — | 0.20 | — | 0.85 | — | -0.65** |
| Education level | | | | | | | |
| High school diploma | 0.17 | — | 0.17 | — | 0.17 | — | 0.00 |

See footnotes at end of table.

Table 1. Summary statistics for college students in the sample

| Variables | Full sample | | Student-parents | | Student-nonparents | | Mean difference by parental status (2) - (3) |
|---------------------------------|-------------|--------------------|-----------------|--------------------|--------------------|--------------------|--|
| | Mean (1) | Standard deviation | Mean (2) | Standard deviation | Mean (3) | Standard deviation | |
| Some college | 0.46 | — | 0.33 | — | 0.50 | — | -0.17** |
| Associate's degree | 0.09 | — | 0.15 | — | 0.07 | — | 0.08** |
| Bachelor's degree | 0.18 | — | 0.22 | — | 0.16 | — | 0.06** |
| Master's degree or higher | 0.06 | — | 0.10 | — | 0.04 | — | 0.06** |
| Full-time enrollment | 0.67 | — | 0.48 | — | 0.73 | — | -0.25** |
| Child under 18 in household | 0.23 | — | — | — | — | — | — |
| 1 child under 18 | 0.10 | — | 0.43 | — | — | — | — |
| 2 children under 18 | 0.08 | — | 0.36 | — | — | — | — |
| 3 children under 18 | 0.05 | — | 0.14 | — | — | — | — |
| 4 or more children under 18 | 0.02 | — | 0.06 | — | — | — | — |
| Number of adults in household | 2.66 | 1.12 | 2.14 | 0.82 | — | — | — |
| Household income | | | | | | | |
| \$15,000 to \$29,999 | 0.14 | — | 0.15 | — | 0.13 | — | 0.02 |
| \$30,000 to \$49,999 | 0.15 | — | 0.20 | — | 0.16 | — | 0.04** |
| \$50,000 to \$74,999 | 0.16 | — | 0.18 | — | 0.16 | — | 0.02** |
| \$75,000 or more | 0.33 | — | 0.27 | — | 0.35 | — | -0.08** |
| Income missing or unknown | 0.06 | — | 0.07 | — | 0.06 | — | 0.01 |
| Urban status | 0.88 | — | 0.84 | — | 0.89 | — | -0.05** |
| Urban status missing or unknown | 0.01 | — | 0.01 | — | 0.00 | — | 0.01** |
| Weekday | 0.72 | — | 0.73 | — | 0.71 | — | 0.02* |
| Total number of observations | 7,161 | — | 2,822 | — | 4,339 | — | — |

Notes: Summary statistics are weighted using panel weights.

* Significant at 10 percent.

** Significant at 1 percent.

Source: American Time Use Survey, 2003–15.

Several of these patterns may be explained by differences in demographic characteristics between the two groups. Student-parents, on average, are older, more likely to be married, more likely to be women, more likely to have a postsecondary degree (associate's or higher), and more likely to be part-time students. Based on these demographic differences, the average student-parent may be one who is returning to school while working, perhaps to complete a degree for career purposes, while the average student-nonparent is a more traditional college student (typically 18–22 years old, working part-time [if at all], and single with no childcare responsibilities).

To further explore time use for student-parents and compare them with their peers, we separate the sample by student-parents and student-nonparents, as well as by weekday and weekend. Then, we calculate the descriptive

statistics to find the share of each group engaged in each activity, and the time allocated to each activity. This analysis is shown in table 2.

Table 2. Descriptive statistics for time-use variables

| Time-use variables | Weekday | | | | Weekend | | | |
|--|-----------------|--------------------|--------------------|--------------------|-----------------|--------------------|--------------------|--------------------|
| | Student-parents | | Student-nonparents | | Student-parents | | Student-nonparents | |
| | Mean | Standard deviation | Mean | Standard deviation | Mean | Standard deviation | Mean | Standard deviation |
| Class time indicator | 0.30 | — | 0.44 | — | 0.03 | — | 0.03 | — |
| Class time (in minutes) if class indicator > 0 | 223.29 | 121.40 | 222.60 | 131.18 | 262.57 | 182.98 | 229.13 | 174.38 |
| Homework indicator | 0.39 | — | 0.50 | — | 0.31 | — | 0.37 | — |
| Homework time (in minutes) if homework indicator > 0 | 160.36 | 134.89 | 202.58 | 155.53 | 210.34 | 149.57 | 229.50 | 163.63 |
| Work indicator | 0.55 | — | 0.45 | — | 0.21 | — | 0.26 | — |
| Work time (in minutes) if indicator > 0 | 456.19 | 159.49 | 413.55 | 168.34 | 303.34 | 225.95 | 353.38 | 185.68 |
| Extracurricular indicator | 0.07 | — | 0.13 | — | 0.07 | — | 0.12 | — |
| Extracurricular time (in minutes) if extracurricular indicator > 0 | 89.31 | 65.10 | 90.64 | 64.07 | 102.11 | 82.61 | 130.28 | 93.93 |
| Childcare indicator | 0.81 | — | 0.03 | — | 0.70 | — | 0.03 | — |
| Childcare time (in minutes) if childcare indicator > 0 | 112.98 | 104.80 | 43.72 | 58.69 | 122.64 | 120.94 | 80.63 | 98.99 |

Notes: Number of observations is 3,613 for weekdays and 3,548 for weekends. Calculations were performed using sample weights.

Source: American Time Use Survey, 2003–15.

Beginning with time spent in class, we find that very few students take weekend classes. However, on weekdays, only 30 percent of student-parents had class on their diary day, while 44 percent of student-nonparents had class. Of those who had class, the time spent in class is nearly identical across groups.

There are noticeable differences across groups for homework time. On both weekdays and weekends, both groups had a substantial share engaged in homework. On weekdays, nearly 40 percent of student-parents did homework, while 50 percent of student-nonparents did homework. A smaller share of both groups spent time doing homework on weekends—31 percent of student-parents and 37 percent of student-nonparents. Of those who did homework during the weekend, the amount of time spent is very similar for both groups; however, on weekdays, student-parents did 42 fewer minutes of homework per day than student-nonparents.

We see the opposite patterns for paid work. For those working on their diary day, there is a 10-percentage-point higher share of student-parents than student-nonparents working on weekdays, and student-parents work 43 more minutes per day more than student-nonparents. This suggests that student-parents may substitute time away from homework in order to engage in paid work on weekdays, a hypothesis that will be tested in our regression analysis. For extracurriculars, the share of student-nonparents engaged in extracurriculars is nearly twice as large as the share of student-parents for both weekdays and weekends. And while the time engaged in extracurriculars

is similar for both groups on weekdays (for those who participated in extracurriculars), student-nonparents spend about half an hour more on extracurriculars on weekends.

Lastly, as expected, a significant share of student-parents spend time on childcare, while essentially none of the student-nonparents engage in childcare. For student-parents who engaged in some childcare, the average time spent on childcare ranged from 112 to 122 minutes per day.

The descriptive statistics in table 2 indicate that student-parents are possibly taking fewer classes (which is consistent with the smaller share of full-time students documented earlier), but that of those taking classes, the time spent per day is very similar across groups. However, with all other school-related activities, student-parents are less likely to engage in the activities (particularly on weekdays), and when engaged, they spend less time on the activity. The exception in this pattern is for paid work, in which, on weekdays, student-parents are more likely to work and spend more time on work than student-nonparents; the reverse is true of weekends. Overall, these patterns suggest that caring for dependent children is associated with less engagement in human-capital-building activities.

Regression analysis

To test whether there are significant differences in time allocation for student-parents, all else being equal, we estimate several versions of the basic regression:

$$TU_{ij} = \alpha_j + \beta_{j1}SP_i + \beta_{j2}X_i + \varepsilon_{ij},$$

where TU_{ij} is the time use for individual i in activity j ; SP_i is a dummy variable equal to 1 if the individual is a student-parent; X_i is a vector of student, household, and location characteristics; and ε_{ij} is a set of unobserved factors that affect the time spent on each activity for each student. Our coefficient of interest is β_{j1} , which represents the differences in time allocated to activity j when students have childcare responsibilities.

We first estimate the equation above using indicators for whether the student engaged in each of four activities on their diary day: class, homework, paid work, and extracurriculars. Each of these four regressions is estimated using a probit model. The results are shown in table 3. Then, we estimate the time allocated to each of the above activities, along with time allocated to sleep, using ordinary least squares (“OLS”) estimation. Each of the models includes weekday, urban status, state, and year fixed effects. These results are shown in table 4.

The probit results in table 3 show the marginal effect of each independent variable on the likelihood of engaging in each of the human-capital-building activities. The variable of interest, presence of a child in the home, is only statistically significant for work time, indicating that student-parents have a 5-percentage-point lower likelihood of working than student-nonparents. However, the point estimates are all of the same sign and similar in magnitude. Very few of the included controls affect the likelihood of going to class, other than education level and income. Women and minority (non-White, non-Black) students are 5 and 7 percentage points more likely to do homework than their peers, though both are less likely to work or engage in extracurriculars.

Table 3. Probit results

| Variable | Class time | Homework time | Work time | Extracurricular time |
|---------------------------------------|---------------------|---------------------|---------------------|----------------------|
| Children under 18 | -0.03 (0.020) | -0.03 (0.022) | -0.05** (0.022) | -0.01 (0.012) |
| Age | -0.00 (0.001) | 0.00 (0.001) | 0.00*** (0.001) | -0.00 (0.001) |
| Female | -0.01 (0.016) | 0.05*** (0.017) | -0.04** (0.018) | -0.06*** (0.011) |
| Black | 0.03 (0.024) | -0.04 (0.024) | 0.02 (0.024) | -0.04*** (0.012) |
| Non-White, non-Black | 0.04 (0.030) | 0.07** (0.031) | -0.11*** (0.029) | -0.02 (0.015) |
| Married, spouse absent | 0.01 (0.069) | 0.01 (0.072) | 0.09 (0.074) | -0.05 (0.035) |
| Widowed | 0.12 (0.149) | 0.09 (0.110) | -0.14 (0.104) | 0.06 (0.089) |
| Divorced | 0.02 (0.037) | 0.06 (0.036) | 0.04 (0.038) | 0.00 (0.024) |
| Separated | -0.06 (0.047) | -0.06 (0.058) | 0.08 (0.059) | -0.02 (0.033) |
| Never married | 0.02 (0.025) | 0.03 (0.026) | 0.02 (0.026) | 0.04*** (0.013) |
| High school diploma | -0.04 (0.037) | -0.04 (0.043) | 0.19*** (0.048) | 0.01 (0.029) |
| Some college | -0.02 (0.037) | 0.00 (0.041) | 0.21*** (0.043) | 0.02 (0.026) |
| Associate's degree | -0.08** (0.035) | 0.03 (0.048) | 0.27*** (0.049) | 0.01 (0.032) |
| Bachelor's degree | -0.06* (0.037) | 0.01 (0.045) | 0.34*** (0.044) | 0.03 (0.032) |
| Master's degree or higher | -0.12*** (0.034) | 0.01 (0.052) | 0.39*** (0.043) | 0.05 (0.042) |
| Full-time enrollment | 0.12*** (0.016) | 0.18*** (0.018) | -0.18*** (0.019) | 0.00 (0.011) |
| \$15,000 to \$29,999 household income | -0.00 (0.027) | -0.04 (0.030) | 0.07** (0.032) | -0.04*** (0.015) |
| \$30,000 to \$49,999 household income | -0.07*** (0.024) | -0.06** (0.029) | 0.11*** (0.032) | -0.02 (0.017) |
| \$50,000 to \$74,999 household income | -0.10*** (0.024) | -0.12*** (0.030) | 0.09*** (0.033) | 0.02 (0.021) |
| \$75,000 or more household income | -0.10*** (0.025) | -0.09*** (0.030) | 0.06* (0.032) | -0.00 (0.018) |
| Missing or unknown household income | -0.06* (0.033) | -0.04 (0.041) | 0.06 (0.044) | -0.01 (0.022) |
| Number of adults in household | 0.03*** (0.009) | 0.02* (0.010) | -0.01 (0.010) | 0.00 (0.006) |

Notes: Standard errors are shown in parentheses. Number of observations is 7,161. Calculations were performed using sample weights. All regressions include weekday, urban status, state, and year fixed effects.

* Significant at 10 percent.

** Significant at 5 percent.

See footnotes at end of table.

*** Significant at 1 percent.

Source: American Time Use Survey, 2003–15.

To test whether education level or full-time enrollment status was absorbing the variation in the previous specifications, such that few of the remaining controls were statistically significant, we re-estimated the results excluding each of these variables. We found that the results remained statistically identical to our initial results. However, the coefficient for the children-at-home indicator became statistically significant in the homework equation. These results suggest that the decision to engage in each of the four human-capital-building activities that we study is largely undetermined by the observable characteristics of the student, particularly parental status.

To test whether there were significant differences in time allocated to each activity for student-parents and student-nonparents, we estimate the OLS regressions and present the results in table 4. We find that being a student-parent reduces time spent on homework and sleep by 24 minutes and 15 minutes per day, respectively, but does not have a statistically significant relationship with the other three time use variables. We find that other covariates seem to matter more for predicting time use, but there is no consistent pattern observed in these results. For instance, women spend 25 fewer minutes at work and 9 fewer minutes in extracurriculars, but 11 more minutes sleeping, than men. As another example, Black students spend 17 fewer minutes on homework than White students, while non-White, non-Black students spend 33 more minutes on homework than Whites. The most consistent result for all regressions is that of the full-time college indicator. Full-time college enrollment is associated with a higher likelihood of attending class and doing homework on the diary day, more time spent in class and on homework, and less time spent in paid work (all relative to part-time students), which seems logical.

Table 4. Ordinary least squares results

| Variable | Class time | Homework time | Work time | Extracurricular time | Sleep time |
|------------------------|--------------------|----------------------|-----------------------|----------------------|----------------------|
| Children under 18 | -1.51 (4.994) | -23.91*** (5.364) | -14.79 (10.356) | -1.25 (1.216) | -15.31*** (5.140) |
| Age | 0.01 (0.343) | 0.85** (0.351) | 2.82*** (0.637) | -0.03 (0.084) | -2.51*** (0.320) |
| Female | -2.49 (4.560) | 4.67 (4.920) | -24.80*** (7.289) | -9.25*** (1.500) | 11.06** (4.507) |
| Black | 6.34 (6.248) | -17.39*** (5.954) | 11.48 (9.616) | -1.63 (1.935) | 3.43 (7.234) |
| Non-White, non-Black | 2.84 (7.905) | 33.00*** (10.444) | -38.72*** (11.745) | -1.60 (2.437) | 10.32 (7.924) |
| Married, spouse absent | 13.23 (19.141) | 18.87** (21.731) | 13.67** (28.370) | -4.50* (2.301) | -29.73* (16.552) |
| Widowed | 50.17 (34.507) | -11.33 (24.632) | -96.07** (42.318) | 9.40 (8.889) | 30.15 (32.409) |
| Divorced | -5.39 (7.361) | 6.63 (8.989) | 12.27 (16.608) | 1.72 (2.179) | -2.05 (9.078) |
| Separated | -12.61 (10.619) | -28.86** (11.554) | 23.32 (20.789) | -1.57 (3.237) | -2.58 (14.185) |
| Never married | 9.06 (6.260) | 1.75 (6.783) | 12.16 (12.044) | 2.28 (1.485) | 0.12 (5.926) |
| High school diploma | -14.25 (12.128) | -2.52 (9.087) | 59.85*** (15.798) | 0.03 (4.149) | -19.28 (11.776) |

See footnotes at end of table.

Table 4. Ordinary least squares results

| Variable | Class time | Homework time | Work time | Extracurricular time | Sleep time |
|---------------------------------------|-----------------------|----------------------|-----------------------|----------------------|-----------------------|
| Some college | -14.86 (11.564) | 19.47** (9.011) | 56.08*** (14.133) | -0.38 (3.943) | -25.05** (10.800) |
| Associate's degree | -25.60* (13.060) | 26.40** (11.100) | 105.27*** (19.403) | -4.26 (3.984) | -44.34*** (12.253) |
| Bachelor's degree | -18.06 (12.588) | 35.25*** (11.427) | 116.57*** (16.861) | -1.37 (3.982) | -54.82*** (11.482) |
| Master's degree or higher | -36.70*** (12.848) | 32.22 (12.365) | 128.06*** (20.299) | 0.11 (4.312) | -37.02*** (13.097) |
| Full-time enrollment | 40.08*** (4.054) | 55.44*** (4.568) | -86.01*** (8.539) | 2.02 (1.255) | -5.05 (4.605) |
| \$15,000 to \$29,999 household income | -10.97 (7.873) | -12.29 (9.337) | 32.32*** (12.041) | -6.28*** (2.246) | -3.05 (9.043) |
| \$30,000 to \$49,999 household income | -17.58** (8.166) | -24.24*** (8.813) | 53.07*** (11.891) | -2.66 (2.629) | -6.00 (9.140) |
| \$50,000 to \$74,999 household income | -27.61*** (8.142) | -33.99*** (8.987) | 59.08*** (12.776) | 1.86 (3.004) | -9.86 (9.501) |
| \$75,000 or more household income | -24.56*** (8.342) | -31.44*** (9.270) | 41.05*** (11.583) | -1.10 (2.851) | -2.38 (9.095) |
| Missing or unknown household income | -11.84 (10.904) | 1.56 (16.483) | 37.24** (17.042) | -0.15 (3.623) | -23.28** (11.376) |
| Number of adults in household | 3.71 (2.556) | 4.58* (2.633) | -4.05 (4.059) | 1.39 (0.903) | -2.21 (2.517) |

Notes: Standard errors are shown in parentheses. Number of observations is 7,161. Calculations were performed using sample weights. All regressions include weekday, urban status, state, and year fixed effects.

* Significant at 10 percent.

** Significant at 5 percent.

*** Significant at 1 percent.

Source: American Time Use Survey, 2003–15.

Conclusion

Because student-parents are a large and growing portion of the college population, it is important to understand their time demands in order to create programs and policies to accommodate them. This article is the first to use a large-scale dataset, the American Time Use Survey, to study the demographic characteristics of student-parents and to analyze how student-parents allocate their time to various productive activities throughout their day.

Similar to previous qualitative studies, we find that student-parents are more likely to be women, non-White, non-Black, and older than traditional college students. By analyzing time diary data, we find that student-parents are spending less time in school-related activities (classes, homework, and extracurriculars), but more time on paid work, than student-nonparents. Our regression results showed that, although being a student-parent is not strongly correlated with most of the time use categories of interest, it is negatively correlated with time spent on homework and sleep time.

While this descriptive study provides an important contribution to the scant and largely qualitative literature on student-parents, we remain interested in identifying causal effects so that our results can be used to advise universities and policymakers when making programming decisions. Therefore, in future research, we plan to use propensity score matching methods to identify causal effects of being a student-parent on each of the time use variables of interest.

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Laura M. Crispin and Dimitrios Nikolaou, "Balancing college and kids: estimating time allocation differences for college students with and without children," *Monthly Labor Review*, U.S. Bureau of Labor Statistics, February 2019, <https://doi.org/10.21916/mlr.2019.3>

NOTES

¹ Barbara Gault, Lindsey Reichlin Cruse, Elizabeth Reynolds, and Meghan Froehner, "4.8 million college students are raising children," Fact Sheet #C424 (Institute for Women's Policy Research, November 2014), p. 1, <https://iwpr.org/iwpr-issues/student-parent-success-initiative/4-8-million-college-students-are-raising-children/>.

² Rachel Brooks, "Student-parents and higher education: a cross-national comparison," *Journal of Education Policy*, vol. 27, no. 3, 2012, pp. 423–39; Rachel Brooks, "Negotiating time and space for study: student-parents and familial relationships," *Sociology*, vol. 47, no. 3, 2013, pp. 443–59; Eve Gerrard and Ron Roberts, "Student parents, hardship and debt: a qualitative study," *Journal of Further and Higher Education*, vol. 30, no. 4, November 2006, pp. 393–403; Elodie Marandet and Emma Wainwright, "Invisible experiences: understanding the choices and needs of university students with dependent children," *British Educational Research Journal*, vol. 36, no. 5, January 2013, pp. 787–805; Sally Peterson, "Community college student-parents: priorities for persistence," *Community College Journal of Research and Practice*, vol. 40, no. 5, September 2015, pp. 370–84.

³ Peterson, "Community college student-parents."

⁴ Marandet and Wainwright, "Invisible experiences."

⁵ Gerrard and Roberts, "Student parents, hardship and debt."

⁶ Marandet and Wainwright, "Invisible experiences."

⁷ To access these studies, see the Institute for Women's Policy Research, <https://iwpr.org/issue/special-websites/student-parent-success-initiative/>.

⁸ Gault et al., "4.8 million college students are raising children."

⁹ Sandra L. Hofferth, Sarah M. Flood, and Matthew Sobek, *American Time Use Survey data extract builder: version 2.5*, Maryland Population Research Center and Minnesota Population Research Center, 2015, www.atusdata.org.

¹⁰ Low quality time diaries are those in which the respondent provided incorrect information, could not remember activities, or deliberately reported long durations. These are identified in the dataset using the variable "DATAQUAL."

¹¹ "Noninstitutional group quarters" are included in the Current Population Survey (CPS), but because turnover in college housing may be frequent, it may be difficult to identify these students in each round of the survey. For more information on the CPS sample design, see <https://cps.ipums.org/cps/samples.shtml>.

[12](#) American Time Use Survey (ATUS) codes for class time, homework time, and work time are BLS_EDUC_CLASS, BLS_EDUC_HWORK, and BLS_WORK_WORKING, respectively. Class time includes taking class for degree, certification, or licensure (060101); taking class for personal interest (060102); waiting associated with taking classes (060103); security procedures related to taking classes (060104); and taking class, n.e.c. (060199). Homework time includes research/homework for class for degree, certification, or licensure (060301); research/homework for class for personal interest (060302); waiting associated with administrative activities (education) (060303); and research/homework, n.e.c. (060399). Work time includes working (050100); work-related activities (050200); other income-generating activities (050300); job search and interviewing (050400); and work and work-related activities, n.e.c. (059999). Extracurricular participation time includes extracurricular club activities (060201); extracurricular music and performance activities (060202); extracurricular student government activities (060203); education-related extracurricular activities, n.e.c. (060289); playing baseball (130102); playing basketball (130103); bowling (130107); dancing (130109); fencing (130111); playing football (130113); golfing (130114); doing gymnastics (130115); playing hockey (130117); participating in martial arts (130119); playing racquet sports (130120); playing rugby (130123); running (130124); playing soccer (130126); playing softball (130127); playing volleyball (130130); participating in water sports (130132); weightlifting or strength training (130133); wrestling (130135); playing sports, n.e.c. (130199); performing (150401); participating in performance and cultural activities, n.e.c. (150499); and attending meetings, conferences, and training (150501).

[13](#) Time allocated to childcare is measured using the ATUS code BLS_CAREHH_KID. It includes physical care for household children (030101); reading to/with children (030102); playing with household children, not sports (030103); arts and crafts with household children (030104); playing sports with household children (030105); talking with/listening to household children (030186); organization and planning for household children (030108); looking after household children (as a primary activity) (030109); attending household children's activities (030110); waiting for/with household children (030111); picking up/dropping off household children (030112); and caring for and helping household children, n.e.c. (030199).

[14](#) Time allocated to sleep is measured using the ATUS code BLS_PCARE_SLEEP. It includes sleeping (010101); sleeplessness (010102); and sleeping, n.e.c. (010199).

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