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California Paid Family Leave and Parental Time Use

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Abstract

Paid family leave policies are intended to help working parents fulfill their work and child care responsibilities by providing them with paid time off from work after the birth of a child. While other research has shown that paid leave policies increase leave-taking among parents, little is known about how parents of infants spend their time while they are on leave and shortly after returning to work. Using the American Heritage Time Use Study and taking a difference-in-differences approach, this paper shows that the California Paid Family Leave policy led to an additional six hours per week mothers spend on child care activities, four additional hours in basic care and two in educational or recreational care. Notably, the availability of paid leave resulted in increases in time mothers spend with children even after they return to work. The increases in maternal time investments also appear to persist beyond infancy, until children reach age three. While fathers are also eligible for paid leave under the California policy, the policy did not induce a change in the total amount of time fathers spend on child care but did result in slightly more time spent playing with children and less time on basic care activities. Given the large literature showing that parental time investments, especially those made early in a child's life, play a strong role in child cognitive skill development, the findings in this paper are important for policymakers considering enacting paid leave policies.

JEL No.: J13, J18, J100

Keywords: Paid Family Leave, Parental Time Use

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I. Introduction

There is a large and growing literature connecting early childhood investments and later life outcomes such as educational attainment, workplace productivity, and participation in crime. Parental time investments are an important component in children's cognitive skill development as they lay the foundation for further development once children begin formal education (Cunha and Heckman, 2007). An open question, however, is how public policy can be used to induce parents to make important investments in their young children, especially when parents are income and time constrained. This paper examines how paid parental leave policies might affect the amount of time parents spend with children as well as how they spend this time, both while they are on leave and shortly after returning to work.

Every OECD nation, except the US, offers a minimum of 14 weeks of paid leave, with many of the countries offering much longer durations of paid leave (Ruhm, 2011). While the US does not have a federal leave policy, many states are beginning to enact their own paid leave policies to help parents bond with their newborn (or newly adopted) children. California implemented the nation's first paid leave policy in July of 2004. The policy allows new parents, both mothers and fathers, to take up to six weeks of leave with a wage replacement rate of 55% up to a ceiling. Taking a differences-in-differences approach, I explore whether mothers and fathers with a child born in California after the implementation of the policy have different time use patterns compared to parents of children born in other states or in California before the policy was implemented.

The CA-PFL might impact time use patterns of parents for several different reasons. First, given the evidence that the policy increased leave take-up among mothers and fathers (Rossin-Slater et al., 2013; Bartel et al., 2017; Baum and Ruhm, 2016), then while parents are on leave, they will have more time available to spend with their children. Second, the policy may have changed time use patterns even

after parents return to work. Parents who have grown accustomed to providing child care while on leave may be more likely to return to work on a part time basis freeing up more time for child care activities. The extended leave may also affect the preferences for child care of parents returning to work full time. Even among parents who would have taken a long leave regardless of the policy, the additional income during the leave may have changed time use patterns of parents both during and after the leave. This is the first paper to examine how paid leave policy impacted the amount of time spent directly caring for children as opposed to performing household chores or leisure.

My analysis contributes to a growing literature on the impacts of the CA-PFL (Rossin-Slater et al., 2013; Bartel et al., 2017; Baum and Ruhm, 2016; Bana et al., 2018; Lichtman-Sadot and Bell, 2017; Pihl and Basso, 2018). Several studies in particular show that the policy improved child health outcomes. By examining how time use patterns of parents changed as a result of the policy, I provide evidence of a potential mechanism through which the policy improved outcomes. In addition, I am the first to consider how the policy impacts the following: (1) time use patterns between mothers and fathers, (2) time use patterns between mothers currently on paid leave and mothers who have returned to work after the leave period is over, and (3) maternal time use patterns between when their children are first born and when their children are older.

The study uses time use data available from the American Heritage Time Use Study (AHTUS). The AHTUS combines multiple time use surveys conducted in the US and harmonizes the variables. For this particular question, I use time use data from the National Survey of Parents from 1999-2000 and the American Time Use Survey from 2003 to 2012. To focus on the individuals most likely to be eligible for the policy, I restrict the sample to employed individuals and include those that are either working or are on leave from work.

Using a difference-in-differences empirical strategy, similar to other studies examining the impacts of California paid leave (Baum and Ruhm, 2016; Lichtman-Sadot and Bell, 2017), I show that mothers significantly increase the amount of time spent caring for children as a result of the policy. The amount of time spent in child care activities increased by 34 percent, or by an additional 6.3 hours per week. Over half of this additional time is spent in basic child care activities, while the remaining increase is due to more time spent in educational or recreational activities. Mothers also continue to increase their time with children once they return to work, with all of the additional 4 hours per week spent in educational or recreational care. For fathers, there is no change in time spent in all child care activities, but this is mainly due to the fact that the policy causes them to reduce their time in basic child care and increase their time in educational or recreational care by roughly the same amount.

Results indicate that mothers who were exposed to CA-PFL not only increase their time in child care when children are first born, but they continue to spend more time with their children as they begin to age. Mothers of 2 and 3 year old children who were born after the policy's implementation increase their time in basic care by 17 and 10 percent respectively. Lastly, the policy affects parental time use for alternate outcomes, including market work, domestic work, and leisure. Results show that both mothers and fathers reduced their time in market work and increased their time in domestic work after CA-PFL was implemented. Fathers reduced the amount of time spent in leisure activities while mothers increased leisure time. However, when further exploring these results, it appears the additional time spent in leisure for mothers is mainly driven by personal care activities, such as sleeping or grooming.

The paper is organized as follows. Section 2 provides a review of the relevant literature, including background information on parental leave in the US and related research, as well as the determinants of time use and the effect of parental time use on child outcomes. In section three, I introduce the data and section four discusses the empirical strategy used in the paper. Section 5 presents

the results for mothers, including results for mothers on leave versus mothers who return to work, tests for heterogeneity, and possible long run effects of the policy on time use. Results for fathers are presented in section 6, followed by alternate time use outcomes in section 7. Section 8 concludes.

II. Literature Review

2.1 Background on Parental Leave

The United States is the only developed nation that does not offer paid parental leave. The only federal policy that grants leave to new parents is the Family Medical Leave Act (FMLA).¹ In order to determine how the FMLA affected take up of leave in the US, most studies use a difference-in-differences design and compare states that had existing leave policies to states without prior leave policies. Results show the policy increase leave take up for both mothers and fathers (Waldfogel, 1999; Han et al., 2009). Additionally, mothers who are eligible for leave under the FMLA are more likely to return to their pre-birth employer (Waldfogel et al., 1999; Baum, 2003). Research on female wages and employment do not find any significant effects (Waldfogel, 1999; Han et al., 2009). The policy also is seen to have positive effects on infant health, including a reduction in premature births and infant mortality and an increase in birth weight (Rossin, 2011).

While it is important to understand how parents respond to leave policies, parents may have different responses to a paid leave policy compared to an unpaid leave policy. To gain insight into the effects of paid leave policies, researchers have examined state level policies offering partial wage replacement. After the passages of the Pregnancy Discrimination Act in 1978, states that offer Temporary Disability Insurance (TDI) were required to treat pregnancy as a short-term disability. Five

¹ Passed by Congress in 1993, the FMLA grants 12 weeks of unpaid, job protected leave. In order to be eligible for this leave, employees must have worked 1,250 hours in the previous 12 months and must work at a firm with 50 employees or more. Due to this eligibility constraint, less than 60% of workers are able to take advantage of leave through the FMLA. In contrast, only 12 percent of workers had access to paid family leave through their employers as of 2015 (Rossin-Slater, 2017).

states currently offer partial wage replacement through TDI: California, Hawaii, New Jersey, New York, and Rhode Island. New mothers in these states receive partial payment for an average of six weeks, ranging from 50% to 55% of their salary. TDI benefits only apply to new mothers and not to new fathers. Stearns (2015) examines the impact of TDI on birth outcomes. She finds paid maternity leave available through TDI reduced the share of low birth weight births and decreases the likelihood of early term birth. I contribute to the literature of how paid leave policies affect children by examining how the policy changes time use patterns of parents with young children, but I focus on California's paid family leave policy.

California was the first state to offer paid family leave in the US. Beginning in July 2004, new parents are able to take six weeks of leave with a wage replacement rate of 55% up to a ceiling. Because mothers were previously eligible to paid leave through TDI, in practice, the CA-PFL increased the duration of paid leave from six weeks to twelve weeks for mothers. This is also the first policy to grant paid leave to fathers. Neither TDI nor CA-PFL offers job protection, but eligible employees can combine either of these paid leaves with FMLA to benefit from job protection as well.

CA-PFL provides almost universal coverage to all private sector workers in the state; self-employed and most public sector employees are not eligible to paid leave under this policy. There are no working hours or firm size requirements. To be eligible for paid leave, workers need to have earned \$300 in a state disability insurance covered job in any quarter in the 5 to 17 months prior to filing a PFL claim. Paid family leave and TDI are both financed entirely by payroll taxes levied on employees.

Much of the early research on CA-PFL has focused on take up and leave duration. In order to examine the policy's effect on take up rates, the majority of the studies use a difference-in-differences design, similar to the one used in this paper. In the first study to examine the effects of the policy, Rossin-Slater et al. (2013) find that the policy increases the use of maternity leave by an average of 3 to 6 weeks.

For fathers, Bartel et al. (2017) find that new fathers are 0.9 percentage points or 46 percent more likely to take leave. Interestingly, half of this result is driven by fathers who take leave while the mother is also on leave, while the other half is driven by fathers who take leave on their own while the mothers are at work. Utilizing alternate data sources, Baum and Ruhm (2016) find similar patterns - mothers increase leave duration by 3 weeks while fathers increase leave duration by 1 week. They also find that leave increases right at birth for new fathers and after TDI benefits have been exhausted for mothers.

Few studies examine how the policy impacts time use, but they mainly focus on hours of work. Baum and Ruhm (2016) find mothers eligible for paid leave become more likely to return to work by a year after birth. They also see an increase in maternal work hours and weeks worked during the second year of the child's life. Bana et al. (2018) find a similar pattern when focusing on the weekly benefit amount available to mothers. When examining the outcomes of mothers with pre-leave earnings that fall just below or just above the threshold where the maximum benefit applies, they find an increase in the weekly benefit amount increases the share of quarters worked in the first one to two years after the initiation of leave. While we know how CA-PFL affects the amount of time mothers spend working, we do not know how the policy affects how mothers spend their time when they are not working, which is one of the contributions of this study.

My work is closely related to the impacts of CA-PFL on child health. Huang and Yang (2015) find paid leave increases breastfeeding rates by 10 to 20 percentage points in the first three, six, and nine months after birth. More recently, Pihl and Basso (2018) find the policy reduced infant hospitalizations by 3 to 6 percent. Potential mechanisms for these results include higher quality care provided while parents are on leave, increased breastfeeding, and more time for parents to seek preventative care. Furthermore, Lichtman-Sadot and Bell (2017) find the policy reduced the likelihood of obesity, ADHD, hearing issues, and frequent ear infections in children entering elementary school. They believe potential

mechanisms for their results may be reduced parental stress, increased breastfeeding, and greater parental care. While the authors were not able to test their predictions, my study sheds some light on the potential mechanism through which paid leave generates improved outcomes of children. Broadly, I will examine how the policy affected the time parents spend with children, an important input into child development more generally. More specifically, I will be able to look at the amount of time parents spend providing medical care and breastfeeding - which more directly speak to the outcomes in the child health literature.

2.2 Time Use and Parental Investment Literature

There is a small but growing literature examining parental investments using time use data. Much of the earlier work focuses on documenting patterns in time investments by parental demographic characteristics. By examining time use of parents in Canada, Germany, Italy, and Norway, Sayer et al. (2004) find parents with higher educational attainment spend more time with their children than those with fewer years of education. Guryan et al. (2008) find this to be true for mothers and fathers in the US. They also find a similar pattern with parental income - parents with higher income spend more time with children than lower income parents. In addition to the education and income gradient, Kalil et al. (2012) find evidence of a development gradient. Not only do more highly educated mothers spend more time with their children, but they also alter their time investments to suit the developmental needs of the child.

While this is the first paper to examine the effect of paid leave on parental time use, others have examined how employment affects time use. Employed parents have less time to spend in certain activities compared to their nonworking counterparts, but it is unclear how this reduction in available time affects children. It may be the case that parents trade quantity for quality and spend what little time they have in activities that are more beneficial for child outcomes. Additionally, while employment reduced

the amount of time spent in favorable activities for children, it may also reduce the amount of time spent in less favorable activities. Hsin and Felfe (2014) find maternal employment reduces the amount of time spent with children. Upon closer examination, they find the reduction is driven by less time spent in unstructured activities, such as watching television, rather than educational or structured activities, which are shown to have positive effects on child cognitive development.

While most of the time use literature is rather descriptive, Amuedo-Dorantes and Sevilla-Sanz (2014) examine how changes in low-skilled immigration affect the amount of time college-educated mothers spend with their children. They find that as a result of increases of low-skilled immigration in the US, mothers reduce the amount of time spent in basic care activities but do not reduce their time in educational or recreational activities. This suggests that care provided by low-skilled immigrants may be a good substitute for basic maternal care but not for activities requiring higher levels of human capital. My study is similar in that it examines how parental time use changes when the time constraint is weakened, but instead of examining how child care availability or other service workers affect time use, I consider the effect of a paid leave policy. I expect my results for time use patterns of highly educated mothers to be similar to their results. On the other hand, I expect to find changes in time use patterns for mothers with lower educational attainment, since their time constraint is also weakened as a result of the policy.

Many researchers have shown parental time investments are important for child skill development. Cunha and Heckman (2007, 2008) and Cunha et al (2010) find evidence of sensitive periods for child development, where the productivity of parental investments in child cognitive skills are higher earlier in life, while investments in non-cognitive skills are more productive in later stages. Using a different estimation strategy, Del Bono et al. (2016) find maternal time affects child cognitive and non-cognitive development, and that early time investments are more productive than later time investments.

Similarly, Del Boco et al. (2014) find time investments made by both mothers and fathers are equally important for cognitive development but diminish with child age. Lastly, Fiorini and Keane (2014) find parental time spent in educational activities with their children is the most productive input for cognitive skill. Given that parental time investments play a large role in child development early in life, it is important to understand how a policy that allows parents to spend more time with their children by giving them paid leave impacts the amount of time and types of activities they perform during the period of leave.

III. Data

Data for this study comes from the American Heritage Time Use Study (AHTUS) from 1998 to 2012. The AHTUS is a harmonized data set containing the responses of multiple time use surveys conducted in the US. This paper uses two time use surveys in its analysis - the National Survey of Parents from 1999-2000 and the American Time Use Survey from 2003-2012. Appendix Table 1 describes each of these surveys in detail.

For each of the surveys, respondents were asked to record their activity within a 24 hour time period. Respondents must report the primary activity they are performing but they can also report secondary activities when they are performing more than one activity at a time. For example, if parents are grocery shopping with their children, they would report shopping as the primary activity and child care as a secondary activity. Respondents may also report if anyone else is present while they perform an activity.

Following Amuedo-Dorantes & Sevilla-Sanz (2014), I define parental time investments as the amount of time respondents report performing any child care as the primary activity. While incorporating secondary activities or the “with whom” responses provide a broader understanding of the time parents

spend in child care, there are potential issues that arise when using them. First, they may not always capture quality time investments made by parents. As mentioned previously, secondary activities take into account when a parent has a child in their care while performing another activity, but it is possible that the parent is more or less supervising and not necessarily engaging with the child. For example, a parent must be home while the child is napping or sleeping (Guryan et al., 2008). Therefore, using child care as the primary activity is attempting to capture more quality interactions between parents and children, which could be more beneficial to children. Additionally, information on secondary activities is only available beginning in the 2000s for my sample, which would not provide enough data in the pre-policy period to understand how CA-PFL affects parental time investments using this broader measure. While the “with whom” data is available in the pre-policy years, parents are unable to report if their child under the age of 5 is present and thus cannot be used in my analysis.

In addition to using the time spent in child care as my outcome of interest, I distinguish between two types of care following Aguiar and Hurst (2007) and Amuedo-Dorantes & Sevilla-Sanz (2014) - (1) basic child care and (2) educational or recreational care. Examples of basic care include breastfeeding, rocking a child to sleep, changing diapers, providing medical care, or grooming. Educational care includes reading to children, helping them with homework, or attending school meetings. Recreational child care includes activities such as playing games, playing outdoors, going to the zoo, taking walks, or going to a sporting event or dance recital.²

² Time in basic child care is calculated by aggregating the following time use variables - care of infants (includes children under the age of 5), care of older children (includes children ages 5-17), other child care, and medical care. Educational or recreational care aggregates the time spent reading or talking, playing, and supervising child or help with homework. Time spent in child care includes all activities from both basic care and educational/recreational care. It is possible that parents with infants may report spending time in educational activities if they also have older children in the household. The variable captures the total amount of time parents spend in these activities on a given day, but it cannot always be determined who they spend the time with.

Ideally, the best way to examine the effects of CA-PFL on parental time use would be to select a sample of parents who qualify to take leave, meaning they have earned \$300 in a state disability insurance covered job in any quarter in the previous 5 to 17 months before filing a claim. After all, the policy is unlikely to have an impact on women who have never working in the labor force. Unfortunately, my data does not provide information on previous work history. Therefore, I follow Bartel et al. (2017) and limit my sample to only those who report being employed. Respondents in the survey are listed as employed if they are working part time or full time. If individuals report they are not working due to vacation, illness, or parental leave, they are still considered employed but are absent from work. While my sample selection ensures that most of the parents in the survey are eligible for paid leave, I am unfortunately excluding individuals who were eligible for the policy, and even took leave, but later left the labor force. In section 5.2, I examine the sensitivity of my results to adding parents who are out of the labor force.

The primary group of interest in this study is parents between the ages of 16 and 54 who recently gave birth and are either currently at work or on leave. Summary statistics are presented in Table 1 for mothers and fathers.³ Comparing demographic characteristics, mothers are less likely to be married and more likely to be white than fathers in the sample. For the time use variables, mothers spend more time than fathers in every type of child care activity. On average, mothers spend 18.4 hours per week in care as the primary activity, whereas fathers spend 10 hours per week. Mothers spend over double the amount of time in basic care than fathers - 12.3 compared to 5.3 hours per week. For both parents, they spend a large portion of basic child care by caring for infants while the bulk of the time spent in

³ Appendix Table 2 presents summary statistics separately for the two time use surveys used in the analysis.

educational and recreational activities is driven by the amount of time they spend playing with their children.

Tables 2A and 2B separate the means of the demographic variables by parents in California and the control states in the period before and after July 2004, when the policy was implemented.⁴ For each group, I present the differences between the pre and post period, and in the last column, I calculate the difference between the treatment and control state differences. Again, there appears to be a large difference in educational attainment for both mothers and fathers. Additionally, the race/ethnicity groups differ largely for fathers, mainly regarding the change in white and Hispanic fathers. To address this issue, I turn to regression analysis.

IV. Empirical Strategy

This study uses a difference-in-differences design, similar to Baum and Ruhm (2016) and Lichtman-Sadot and Bell (2017) who examine various effects of California Paid Family Leave, to test if mothers eligible for paid parental leave spend more time with their children. I will estimate the following equation:

$$Y_{ist} = \beta_0 + \beta_1 \text{California}_s * \text{Post}_t + \beta_2 \mathbf{X}_{ist} + \phi_s + \gamma_t + \varepsilon_{ist}$$

The dependent variable is the amount of time person i living in state s at time t spends doing the following activities (in hours per week): all child care, basic child care, and educational/recreational care. California is an indicator variable equal to one if the respondent lives in this state and Post is an indicator variable equal to one if the parent gave birth to a child after CA-PFL was implemented. The coefficient of interest is β_1 , which captures the effect of the policy. I expect this coefficient to be positive if mothers spend more time with their children as a result of the policy.

⁴ I use parents in all other states except California as my control group.

The demographic controls included in the vector X are as follows: marital status, race/ethnicity, educational attainment, age, number of children under age 18, income quartile, and an indicator variable for if the respondent was surveyed on a weekday. State (ϕ_s) and year (γ_t) fixed effects are also included in the model.

V. Results for Mothers

5.1 Baseline Results

Table 3 presents the results for the baseline specification, both with and without controls. Results show mothers eligible for CA-PFL spend an additional 6.3 hours per week with their children, or a 34 percent increase. When examining time spent in the two different types of child care, results show the increase in child care seems to be driven by more time spent in basic care. Mothers spend an additional 4.2 hours per week in basic child care activities, and increase their time in educational or recreational activities by 2.1 hours per week. The coefficient estimates do not change drastically with the inclusion of the demographic controls in the model. This helps alleviate some concerns that the differences in parental time use are being driven by differences between California and comparison states.⁵

In Table 4, I examine each of the individual time use variables included in the broader child care variables to determine if the policy differentially affects the specific activities parents perform while providing care. Basic care is comprised of time spent providing care, such as feeding, bathing, and medical

⁵ These results are presented using the rest of the US as the control states. Appendix Table 3 examines the robustness of the results to alternate control groups. Since there are other states that offer paid leave for mothers through TDI during this time period, there may be a concern that these states are driving the results. Panel A drops these states from the control group (Hawaii, New York, New Jersey, and Rhode Island) and finds no difference, implying the results are not being driven by these states. On the other hand, states that currently offer paid leave to mothers through TDI may be a more ideal control group because it allows me to isolate the effects of CA-PFL and thus Panel B limits the control group to these four states. Although the sample size is much smaller, a similar pattern emerges. There may also be concerns that a large portion of the data in the post period falls within the Great Recession, and residents of California may have reacted differently to the Great Recession than residents of other states even if the paid leave policy had not been enacted. To address this issue, I shorten the amount of data used in the post period and estimate the baseline model using data from 1999 to 2007. Results are presented in Appendix Table 4 and show very similar patterns for mothers, although the magnitudes of the estimates are slightly smaller.

care, while educational and recreational care includes playing, reading and talking with children, and supervision and helping with homework. For mothers, the large increase in time spent in basic care is driven by more time caring for children who are 4 years old and younger. There is also a slight increase in the amount of time spent caring for children age 5 and younger, approximately 0.7 hours per week, suggesting the policy has spillover effects to older children in regards to parental time. For educational and recreational care, mothers spend more time playing and reading/talking with children, 2.2 and 0.4 hours more per week respectively. The policy also leads to a reduction in the amount of time spent supervising or helping children with homework.

A key assumption when using this empirical strategy is that the time use patterns of parents in the treatment and control groups would have continued on the same trend in the absence of CA-PFL. Although I cannot directly test this assumption, I can test whether the two groups follow the same trends before the policy change. Specifically, I add a linear time trend variable to the regression model and limit the analysis to the pre-policy period.⁶ Additionally, I interact the time trend with the indicator variable for California and remove the interaction between California and the post period. The model includes the same controls and fixed effects as the baseline model above. If the treatment and control states have similar pre-trends prior to the policy change, the estimate of the coefficient on the interaction variable should be small and statistically insignificant. Table 5 presents the results of these regressions. The coefficient of the interaction variables is indeed significant for both mothers and fathers for each of the time use variables, indicating there is no significant difference in pre-trends for these groups.

Identification could potentially be threatened if there were changes in the time varying characteristics of California parents, which are potential determinants of time usage. For example, this

⁶ The pre-policy period in my data is 1999-2000 and January 2003 to June 2004.

could be driven by changes in the composition of California's population relative to population trends in other states. Many other studies examining CA-PFL note that it is highly unlikely that the policy affected parental migration patterns into California, given the monetary benefit is capped at less than \$5,000 for the six week period (Lichtman-Sadot and Bell, 2017). Nevertheless, there may be another reason for compositional changes that affect the time use and therefore, I perform balance tests on the observable characteristics on my sample.

In order to determine if parental characteristics changes substantially before and after the implementation of CA-PFL relative to other states, I estimate a variation of my baseline model with the demographic characteristics as the dependent variable and drop the control variables from the model. Results are presented in Appendix Table 5. Each cell represents a separate regression with the dependent variable listed in the left hand column. There do appear to be demographic changes after the policy, especially regarding race/ethnic groups and educational attainment, however I do control for these characteristics in all my specifications.

5.2 Sensitivity of Sample Selection

Another potential issue with these results is that by selecting the sample on current employment status, I am failing to capture effects for parents who took paid leave in California and subsequently left the labor force. To investigate my choice of sample, I run my baseline model for all parents and then separately for those who report being currently employed and those who are out of the labor force (which the survey describes as being non-employed).⁷ Results for all mothers, presented in Table 6, show the policy increases the amount of time spent in all three types of time investments, however the magnitudes

⁷ Employed parents report currently having a job but they may either be working or on paid leave at the time they are surveyed. Non-employed parents are those who report they are not employed, which may be a result of retirement, being a student or a home-maker, and does not indicate unemployment, but rather they are not participating in the labor force.

of the estimates are much smaller. For those mothers who are not participating in the labor force, results are mainly negative, with the reduction in basic care only marginally significant. A possible explanation for these results may be that CA-PFL induced different women to stay home. In California, mothers who would have otherwise worked stay home, whereas in other states, only mothers who were completely devoted to their children stay home since there is no paid leave. These mothers in California may not be the type to spend a lot of time with their children compared to mothers in other states, and thus the regression results may be reflecting this difference.

5.3 On Leave versus At Work

Returning to the baseline sample of employed mothers, results thus far have shown that CA-PFL increases the amount of time mothers spend with their children. For mothers who are currently on leave, they have more available time, and thus we would expect time in child care to increase. What about mothers who have returned to work? Do they continue to spend more time with their children as a result of this policy? I investigate this question by examining child care patterns of employed mothers who report working zero hours and those who report working some positive amount of time at the time they were surveyed.⁸

The estimates presented in the left hand side of Table 7 examine the effects of CA-PFL for mothers with positive work hours. Results show these women increase their time in child care by roughly 4.3 hours per week, or 27 percent, as a result of the policy. These results are largely driven by increases in time spent in educational and recreational care. Additionally, when I separate the results based on which day of the week they were surveyed, it appears these women increase their time in these activities on both the weekends and weekdays.

⁸ I split the sample conditional on the amount of time spent in market work. Appendix Table 7 describes how I define market work using time use data.

There are several reasons why mothers who have returned to work may continue to increase their time in child care. It may be the case that women who return to work only do so part time, which increases the time available to spend with their children. Their decision to return to work part time may be influenced by a stronger attachment to their newborn, which makes the mother want to stay home more, or it could be that the wage replacement during the leave period enables them to return at reduced hours. Another possible explanation is that the policy caused a shift in parental norms or preferences, which caused new working mothers to spend more time with their children, regardless of whether they return to work full time or part time.

The right hand side of Table 7 examines time use of women who report working zero hours. Results show employed mothers in California spend an additional 6.4 hours per week in child care as a result of the policy, and even larger effects for mothers surveyed on weekdays compared to weekends. This is mainly driven by increases in time spent in basic care activities. There is no change for time spent in educational or recreational activities. While these results are similar to my predictions given the nature of the policy, we need to be cautious when interpreting the results. Mothers may report working zero hours for many reasons, including illness, vacation, or family leave. While many of the new mothers in California may be on paid leave, it might not be the case for new mothers in other states, where there is no state level paid leave policy in place. As a result, I may be comparing mothers on leave in California to mothers in other states who are sick or on vacation, and thus may not be using their time off work to spend more time with their children. Although the results for mothers who are not currently working appear to be in the right direction, I cannot be certain I am capturing the effects of the policy.

5.4 Heterogeneity

Other studies examining CA-PFL have found larger, positive effects for certain groups, such as disadvantaged mothers. For example, when examining take up of the policy, Rossin-Slater et al. (2013) find the policy had larger effects for black, Hispanic, unmarried, and low educated mothers. The duration of leave for these women increased by an average of 6 weeks, as opposed to 3 weeks for their white or higher educated counterparts. Additionally, when examining the effects of the policy on child health, Lichtman-Sadot and Bell (2017) find the improvements in child health to be driven by children from mothers with lower educational attainment or from households with a lower socioeconomic ranking. On the other hand, studies examining the effects of the FMLA find married or higher educated mothers may benefit more since they are most able to take advantage of unpaid leave (Han et al., 2009).

Table 8 explores the heterogeneity of results by splitting the sample based on parental demographic characteristics. When examining differential effects on child care patterns by race, results show CA-PFL has very large significant effects for white mothers, but no effects for non-white mothers. Panel A shows that white mothers increase their time in child care by roughly 13 hours per week, or 63 percent, which is much larger than the baseline result. Results for different levels of education, presented in Panel B, show the policy increases child care for both high and low educated mothers.⁹ Higher educated mothers increase their time in total child care by 33 percent, and spend significantly more time in both basic care and educational and recreational care activities. Mothers with lower levels of education also increase child care time by approximately 30 percent, which appears to be driven by these mothers spending more time in educational and recreational care.

⁹ High education parents are those that have at least some college or more years of educational attainment, while low educated parents are those with a high school degree or fewer years of education.

Table 9 investigates if paid family leave affects parental time inputs differently by child birth order. All mothers, regardless of whether this is their first or third birth, increase the amount of time spent in child care as a result of the policy. While first time mothers and mothers having their third child increase their time investments by roughly the same amount, first time mothers appear to split the time equally between basic and educational/recreational care, while more experienced mothers spend all this additional time in basic care. Mothers giving birth to their second child see the largest increase in child care time as a result of the policy, with a 47 percent increase in the time spent in care. Over half of this result is driven by increases in basic care, but these mothers also experience large increases in educational and recreational care.

5.5 Short Run versus Long Run Effects

Thus far, we have seen CA-PFL increases maternal time with infant children, both for mothers currently on leave and those who are working. Since we see these effects continue for mothers who are working, it is important to understand how long these effects persist. Parental time investments are important for child skill development, both when children are infants and as they age. In order to determine if the policy affects parental time investments as children age, I change my sample to examine mothers with children between the ages of 2 and 4 in California and the rest of the US and examine their time use patterns before and after the policy change.¹⁰

Results in Table 10 replicate the results for infants in the first panel and separate the results by child age in the subsequent panels. They show mothers continue to increase their time in child care as children age as a result of exposure to CA-PFL. Mothers with an infant see the largest increases in time,

¹⁰ Tests for parallel pre-trends for the sample of mothers with older children are presented in Appendix Table 6.

but mothers of 2 and 3 year old children who were eligible for paid leave also continue to increase their time in child care. For mothers of older children, the additional time is spent mainly in basic care activities.

Table 11 breaks down the broader child care variables into their more narrow time use components. For mothers of two year old children, increases in basic care are driven by more time spent caring for infants and providing medical care, while mothers of three year old children increase their time in other care and medical care. There are marginal changes in care of older children and other care for mothers of four year olds. These results provide evidence that as a result of the policy, parents are providing more medical care to their children. This is consistent with the hypothesis from Lichtman-Sadot and Bell (2017) that prompt medical care could be one of the mechanisms driving improved health outcomes of elementary school age children that were exposed to CA-PFL.

VI. Results for Fathers

Baseline results for fathers are presented in the bottom panel of Table 4. It appears that CA-PFL does not impact the amount of time fathers spend in all child care activities. However, when examining the effects of the policy on the two categories of care, I do see effects. Fathers reduce their time in basic care by 24 percent, or roughly 1.3 hours per week, while increasing their time in educational or recreational care by 30 percent, or 1.4 hours per week.¹¹

When examining the more narrow types of child care activities in the bottom panel of Table 5, I find fathers decrease the amount of time in infant care, other child care, and medical care, but they increase the amount of time spent caring for older children. This suggests there may be possible beneficial spillovers to older children as a result of paid family leave. Upon further examination of the components

¹¹ When shortening the length of the post period used in the analysis, results change slightly. Appendix Table 4 shows fathers significantly reduce their time in all child care and basic care, while the time spent in educational and recreational care is positive but insignificant.

of educational and recreational care, I find that there is a reduction in the time fathers spend reading, talking, and supervising, but a 45 percent increase in the time spent playing with children.

Lastly, Table 6 explores my choice of sample by estimates the baseline model with all fathers, regardless of employment status, and then separately by those who are currently employed and out of the labor force or non-employed. For all fathers, there are significant increases in educational and recreational care and marginally significant increases in all child care. This result is largely driven by employed fathers. Those who report being currently non-employed see increases in time spent in basic care activities, however the sample size for this group is very small.

Combining these findings with the results for mothers, they may point to specialization occurring between parents regarding the types of activities that are performing with their children. We know from the literature that CA-PFL increase the amount of leave new mothers take by 3 to 6 weeks, while fathers saw only a one week increase in leave (Rossin-Slater et al., 2013; Baum and Ruhm, 2016). It may be the case that since mothers are spending more time on leave, they become better at basic care activities, such as changing diapers or putting children down for a nap. Therefore, fathers do not have the opportunity to learn how to perform these activities since mothers always do them, even when fathers are home. This may suggest that for more routine basic care activities, there are greater returns to experience. On the other hand, educational or recreational activities may have smaller returns to experience because these activities are less structured. For example, playing with children may differ from day to day depending on the child's mood or current interests. The difference in the returns to experience may be the reason why we see time spent in basic care decrease for fathers while they increase their time in educational and recreational care.

VII. Alternate Time Use Outcomes

This next section examines alternate time use outcomes to determine if and how CA-PFL affects parental time outside of child care. More specifically, I examine how time spent in leisure, unpaid domestic work, and market work changes as a result of the policy. The definitions of these alternate time use variables are similar to those described by Aguiar and Hurst (2007). I use two definitions of leisure. The first, I call Leisure 1, consists of socializing, passive leisure (such as reading books, watching television), active leisure (such as playing sports), volunteering, pet care, and gardening, and it is a very narrow definition of leisure. The second definition is slightly broader and takes into account all the activities included in Leisure 1 but adds personal care activities, such as sleeping, eating, or showering. I call this measure Leisure 2. Unpaid domestic work (also known as nonmarket work) consists of activities such as meal preparation and clean up, laundry, vacuuming, and grocery shopping or acquiring other goods and services (except medical care or education). Lastly, market work includes all time spent in paid work, including main and secondary jobs, as well as time spent in breaks at work or time looking for a job.

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The literature has found that when parents face time constraints due to employment, they respond in ways to prevent interference in time in child care. For example, Bianchi et al. (2006) find that working mothers reduce their time spent in personal care (showering or sleeping), leisure, and domestic work in order to spend more time with children. Thus, if the time constraint is somewhat alleviated as a result of paid leave, I would expect to see increases in time spent in these activities in addition to increases in child care.

¹² For more information on the activities included in each category, see Appendix Table 7. Additionally, pre-trend tests are available in Appendix Table 8 for each of the alternate outcomes.

Table 12 presents the regression results for these alternate time use outcomes. For the more narrow definition of leisure, Leisure 1, there does not appear to be a significant effect for mothers, although the estimated coefficient is positive. However, when including personal care activities in the broader measure of leisure, CA-PFL significantly increases the amount of time new mothers spend in leisure by 3.3 hours per week. For mothers, it appears that paid leave does not increase the amount of time they spend watching television or going out to dinner, but rather it increases the amount of time they spend sleeping or showering. For fathers, there is a decrease in time spent in leisure for both the narrow and broad measure, with a 2.7 hour and 2 hour decrease for Leisure 1 and Leisure 2 respectively. For fathers, it appears the policy leads them to reduce their time spent in more traditional leisure activities, such as playing in a sports league or grabbing drinks with coworkers after work.

Both mothers and fathers increase the amount of time spent in unpaid domestic work as a result of the policy. Mothers spend an additional 5.5 hours in domestic work, while fathers spend 3.5 hours more per week. Lastly, mothers and fathers both decrease their time in market work after CA-PFL was implemented, although the effects are much larger for mothers. New mothers reduce their time spent in market work by 11 hours per week, whereas fathers only decrease their time in paid work by 3.5 hours.

VIII. Conclusion

Parental time investments play a significant role in child development and thus it is important to understand how public policy can affect the amount of time parents spend with their children. This paper is the first to examine how California Paid Family Leave impacts the amount of time parents spend with their children. This is also the first study to examine how effects differ for mothers and fathers, mothers who are on leave versus mothers who have returned to work, and mothers of infants versus mothers of older children.

Results suggest mothers increase the amount of time spent in child care by 34 percent, or by about 6.3 hours per week. Over half of this additional time is spent in basic care activities, such as breastfeeding or bathing, while the other portion is due to more time spent in educational or recreational activities, such as reading or playing. On net, the policy did not have large impacts on the total amount of time fathers devoted to child care, but it did change how they spent that time. Fathers reduce the amount of time spent in basic care by 24 percent, but increase their time spent in educational or recreational activities by 30 percent as a result of the policy. The differences in the amount of time mothers and fathers spend in these activities may be driven by differences in returns to experience. Since mothers take longer periods of leave compared to fathers, they spend more time performing more routine basic care activities, such as changing diapers, and thus become better at these activities over time. Therefore, fathers spend more time in activities that do not have such high returns to experience, and so we see them spending more time playing with their children.

Mothers continue to increase their time in child care after they return to work. The results are similar for both mothers who are surveyed on weekends and weekdays, and are mainly driven by increased in educational and recreational care. There is also evidence to suggest the increases in maternal time use are not limited to when the child is an infant, but mothers exposed to CA-PFL continue to spend more time with their children as they grow up. Results for mothers of two and three year old children born after the policy indicate increases in basic child care activities. Upon further investigation into the more narrow time use categories, these results are primarily driven by increased time caring for infants, and providing medical and other types of care.

Lastly, when examining how the policy affects other time use outcomes, I find both mothers and fathers reduce their time in market work and increase their time in unpaid domestic work. Fathers also

reduce their time in leisure, while mothers increase their amount of leisure time, although this increase is mainly driven by more time spent in personal care activities, such as grooming or sleeping.

These results may help shed light on some of the potential mechanisms discussed in other work examining the effects of CA-PFL, particularly those on infant and child health outcomes. Both Pihl and Basso (2018) and Lichtman-Sadot and Bell (2017) believe increased breastfeeding and more time spent in preventative care may lead to reduced infant hospitalizations and improved health outcomes for children entering elementary school. Although I cannot distinguish the exact amount of time mothers spend breastfeeding, it is a component of basic child care activities and I do find the policy increases the amount of time spent in this type of care. I am able to identify the amount of time providing medical care, and although there are no changes as a result of the policy for infants, mothers of two and three year old children spend more time in medical care after being exposed to CA-PFL. In addition to providing evidence of potential mechanisms driving some of the effects we see on child health outcomes, this study highlights the effectiveness of paid family leave as a potential tool for policy makers to consider if they are aiming to affect the amount of time parents spend with their children.

References

- Aguiar, M. & Hurst, E. (2007). Measuring Trends in Leisure: The Allocation of Time Over Five Decades. *Quarterly Journal of Economics* 122(3), 969-1006.
- Amuedo-Dorantes, C., & Sevilla-Sanz, A. (2014). Low-Skilled Immigration and Parenting Investments of College-Educated Mothers in the United States: Evidence from Time Use Data. *Journal of Human Resources*, 49(3), 509-539.
- Bana, S., Bedard, K., & Rossin-Slater, M. (2018). The Impacts of Paid Family Leave Benefits: Regression Kink Evidence from California Administrative Data. IZA Discussion Papers, No. 11381. Bonn: Institute of Labor Economics (IZA).
- Bartel, A., Rossin-Slater, M., Ruhm, C. J., Stearns, J., & Waldfogel, J. (2017). Paid Family Leave, Fathers' Leave-Taking, and Leave-Sharing in Dual-Earner Households. *Journal of Policy Analysis and Management*, 37(1), 10-37.
- Baum, C. L. (2003). The Effects of Maternity Leave Legislation on Mothers' Labor Supply after Childbirth. *Southern Economic Journal*, 69(4), 772-799.
- Baum, C. L. (2003). Does Early Maternal Employment Harm Child Development? An Analysis of the Potential Benefits of Leave Taking. *Journal of Labor Economics*, 21(2), 409-448.
- Baum, C. L. & Ruhm, C. J. (2016). The Effects of Paid Family Leave in California on Labor Market Outcomes. *Journal of Policy Analysis and Management* 35(2), 333-356.
- Bianchi, S., Robinson, J., & Milkie, M. (2006). *Changing rhythms of American family life*. New York, NY: Russell Sage.
- Cunha, F., & Heckman, J. (2007). The Technology of Skill Formation. *The American Economic Review* 97(2), 31-47.
- Cunha, F. & Heckman, J. (2008). Formulating, Identifying, and Estimating the Technology of Cognitive and Noncognitive Skill Formation. *Journal of Human Resources* 43(4), 738-782.
- Del Boco, D., Flinn, C., & Wiswall, M. (2014). Household Choices and Child Development. *Review of Economic Studies*, 81, 137-185.
- Del Bono, E., Francesconi, M., Kelly, Y., & Sacker, A. (2016). Early Maternal Time Investments and Early Child Outcomes. *The Economic Journal*, 126, F96-F135.
- Fiorini, M., & Keane, M. P. (2014). How the Allocation of Children's Time Affects Cognitive and Noncognitive Development. *Journal of Labor Economics*, 32(4), 787-836.

- Fisher, K., Gershuny, J., Flood, S. M. Roman, J. G., & Hofferth, S. L. *American Heritage Time Use Study Extract Builder: Version 1.2*[dataset]. Minneapolis, MN: University of Minnesota, 2018. <https://doi.org/10.18128/D061.V1.2>
- Guryan, J., Hurst, E., & Kearney, M. (2008). Parental Education and Parental Time with Children. *Journal of Economic Perspectives*, 22(3), 23-46.
- Han, W., Ruhm, C., & Waldfogel, J. (2009). Parental Leave Policies and Parents' Employment and Leave-Taking. *Journal of Policy Analysis and Management*, 28(1), 29-54.
- Hsin, A., & Felfe, C. (2014). When Does Time Matter? Maternal Employment, Children's Time with Parents, and Child Development. *Demography*, 51, 1867-1894.
- Hunag, R., & Yang, M. (2015). Paid Maternity Leave and Breastfeeding Practice Before And After California's Implementation of the Nation's First Paid Leave Program. *Economics and Human Biology*, 16, 45-59.
- Kalil, A., Ryan, R., & Corey, M. (2012). Diverging Destinies: Maternal Education and the Development Gradient in Time with Children. *Demography*, 49, 1361-1383.
- Lichtman-Sadot, S. & Bell, N.P. (2017). Child Health in Elementary School Following California's Paid Family Leave Program. *Journal of Policy Analysis and Management* 36(4), 790-827.
- Pihl, A., M., & Basso, G. (2018). Did California Paid Family Leave Impact Infant Health? *Journal of Policy Analysis and Management*, 0(0), 1-26.
- Rossin, M. (2011). The Effects of Maternity Leave on Children's Birth and Infant Health Outcomes in the United States. *Journal of Health Economics*, 30, 221-239.
- Rossin-Slater, M. (2017). Maternity and Family Leave Policy. National Bureau of Economic Research Working Paper No. 23069. Cambridge: National Bureau of Economic Research.
- Rossin-Slater, M., Ruhm, C. J., & Waldfogel, J. (2013). The Effects of California's Paid Family Leave Program on Mothers' Leave-Taking and Subsequent Labor Market Outcomes. *Journal of Policy Analysis and Management*, 32(2), 224-245.
- Ruhm, C. J. (2011). Policies to Assist Parents with Young Children. *The Future of Children*, 21(2), 37-68
- Sayer, L., Gauthier, A., & Furstenberg, F. (2004) Educational Differences in Parents' Time with Children: Cross-National Variations. *Journal of Marriage and the Family*, 66(5), 1149-1166.

Stearns, J. (2015). The Effects of Paid Maternity Leave: Evidence from Temporary Disability Insurance. *Journal of Health Economics*, 43, 85-102.

Waldfogel, J. (1999). The Impact of the Family and Medical Leave Act. *Journal of Policy Analysis and Management*, 18(2), 281-302.

Table 1: Summary Statistics

Demographic Variables				
	Mothers		Fathers	
	Mean	SD	Mean	SD
Married	0.73	0.45	0.94	0.23
White	0.67	0.47	0.71	0.45
Black	0.12	0.32	0.05	0.21
Hispanic	0.16	0.37	0.17	0.38
Asian	0.04	0.19	0.05	0.22
Other Race	0.02	0.15	0.02	0.15
Less than HS Degree	0.09	0.29	0.10	0.30
High School Degree	0.22	0.41	0.23	0.42
Some College	0.20	0.40	0.17	0.37
College or Higher Degree	0.50	0.50	0.51	0.50
Age 16-24	0.27	0.44	0.13	0.33
Age 25-34	0.51	0.50	0.54	0.50
Age 35-44	0.18	0.39	0.28	0.45
Age 45-54	0.04	0.19	0.06	0.24
Number of Children	1.94	1.07	2.04	1.08
Income Quartile	2.71	1.15	2.89	1.07
Weekday Survey	0.71	0.45	0.70	0.46
Weekend Survey	0.29	0.45	0.30	0.46
Time Use Variables				
	Mothers		Fathers	
	Mean	SD	Mean	SD
All Time with Child	18.41	16.25	10.05	13.16
Time in Basic Care	12.26	12.67	5.32	9.14
Time in Edu/Recreational Care	6.15	9.37	4.73	8.66
Care of Infants	10.19	11.13	4.53	8.17
Care of Older Children	0.58	2.52	0.23	1.36
Other Child Care	0.90	2.15	0.36	1.79
Medical Care	0.59	4.96	0.20	3.07
Playing	5.08	8.74	4.12	8.28
Reading or Talking	0.64	2.06	0.41	1.45
Supervise or Homework Help	0.43	2.25	0.20	1.41
N	2,898		3,246	

Notes: Summary statistics are weighted using recommended sample weights inflated to the national population. The sample is limited to employed women between the ages of 16 and 54 that report having a child under (or equal to) the age of 1 in household. Time with children is the sum of the time spent in basic child care and educational/recreational activities. Time in basic care is the sum of care of infants, care of older children, medical care, and other child care. Time in educational/recreational care is the sum of playing, reading or talking, and supervising or help with homework.

Table 2A: Summary Statistics by Treatment Group and Time Period for Mothers

	California			Rest of US			Diff-in-Diff
	Pre	Post	Diff	Pre	Post	Diff	
Married	0.717 (0.454)	0.712 (0.454)	-0.005	0.766 (0.424)	0.720 (0.449)	-0.046*	-0.041
White	0.371 (0.487)	0.369 (0.484)	-0.003	0.747 (0.435)	0.694 (0.461)	-0.053**	-0.051
Black	0.050 (0.220)	0.046 (0.209)	-0.004	0.092 (0.289)	0.131 (0.338)	0.039**	0.043
Asian	0.133 (0.342)	0.133 (0.340)	0.00	0.015 (0.122)	0.029 (0.167)	0.014	0.014
Hispanic	0.433 (0.499)	0.463 (0.500)	0.030	0.119 (0.324)	0.129 (0.335)	0.009	-0.020
Other Race	0.013 (0.113)	0.012 (0.111)	-0.001	0.027 (0.161)	0.022 (0.147)	-0.005	-0.004
Less than HS	0.121 (0.329)	0.134 (0.342)	0.013	0.102 (0.302)	0.082 (0.275)	-0.020	-0.033
HS Degree	0.148 (0.358)	0.201 (0.402)	0.053	0.236 (0.425)	0.216 (0.411)	-0.020	-0.073
Some College	0.181 (0.388)	0.225 (0.419)	0.044	0.234 (0.424)	0.191 (0.393)	-0.043*	-0.087
BA or Higher	0.550 (0.501)	0.439 (0.498)	-0.110	0.429 (0.495)	0.511 (0.500)	0.083***	0.193
Age 16-24	0.260 (0.442)	0.296 (0.456)	0.036	0.261 (0.440)	0.263 (0.440)	0.002	-0.034
Age 25-34	0.483 (0.504)	0.436 (0.497)	-0.047	0.509 (0.500)	0.521 (0.500)	0.012	0.059
Age 35-44	0.192 (0.397)	0.198 (0.400)	0.006	0.209 (0.407)	0.179 (0.383)	-0.030	-0.036
Age 45-54	0.066 (0.250)	0.070 (0.256)	0.005	0.021 (0.143)	0.037 (0.189)	0.016	0.012
Num of Kids	2.100 (1.078)	2.155 (1.432)	0.055	2.017 (1.105)	1.904 (1.012)	-0.113**	-0.168
Weekday	0.723 (0.451)	0.767 (0.424)	0.044	0.701 (0.458)	0.711 (0.453)	0.010	-0.034
Weekend	0.277 (0.451)	0.233 (0.424)	-0.044	0.299 (0.458)	0.289 (0.453)	-0.010	0.034
Income QT	2.719 (1.092)	2.831 (1.146)	0.112	2.566 (1.135)	2.722 (1.147)	0.162**	0.044
N	65	198		576	2,059		

Notes: The first four columns present means and standard deviations for the treatment and control groups in the pre and post treatment period.

*** p<0.01, ** p<0.05, * p<0.1

Table 2B: Summary Statistics by Treatment Group and Time Period for Fathers

	California			Rest of US			Difference
	Pre	Post	Diff	Pre	Post	Diff	
Married	0.943 (0.233)	0.924 (0.266)	-0.019	0.956 (0.205)	0.943 (0.232)	-0.013	0.006
White	0.491 (0.503)	0.357 (0.480)	-0.134*	0.755 (0.430)	0.756 (0.430)	0.001	0.135
Black	0.045 (0.209)	0.022 (0.147)	-0.023	0.033 (0.179)	0.052 (0.223)	0.019*	0.042
Asian	0.123 (0.330)	0.106 (0.309)	-0.017	0.042 (0.201)	0.042 (0.201)	0.00	0.017
Hispanic	0.341 (0.477)	0.492 (0.501)	0.151**	0.161 (0.368)	0.131 (0.338)	-0.030*	-0.181
Other Race	0 0	0.023 (0.150)	0.023	0.017 (0.128)	0.023 (0.150)	0.006	-0.017
Less than HS	0.237 (0.428)	0.228 (0.420)	-0.009	0.110 (0.313)	0.078 (0.268)	-0.033**	-0.023
HS Degree	0.099 (0.301)	0.251 (0.434)	0.151**	0.239 (0.426)	0.223 (0.416)	-0.016	-0.168
Some College	0.186 (0.392)	0.127 (0.334)	-0.059	0.124 (0.330)	0.177 (0.381)	0.053***	0.112
BA or Higher	0.478 (0.503)	0.395 (0.490)	-0.083	0.527 (0.500)	0.523 (0.500)	-0.004	0.079
Age 16-24	0.184 (0.390)	0.135 (0.342)	-0.049	0.118 (0.322)	0.128 (0.334)	0.010	0.059
Age 25-34	0.400 (0.493)	0.541 (0.499)	0.141*	0.570 (0.495)	0.533 (0.499)	-0.037	-0.178
Age 35-44	0.380 (0.488)	0.278 (0.449)	-0.102	0.271 (0.445)	0.274 (0.446)	0.003	0.105
Age 45-54	0.036 (0.188)	0.046 (0.210)	0.010	0.041 (0.198)	0.065 (0.246)	0.024*	0.014
Num of Kids	2.063 (1.004)	2.214 (1.274)	0.151	1.982 (1.051)	2.026 (1.051)	0.044	-0.107
Weekday	0.683 (0.468)	0.732 (0.444)	0.049	0.681 (0.467)	0.706 (0.456)	0.025	-0.024
Weekend	0.317 (0.468)	0.268 (0.444)	-0.049	0.319 (0.467)	0.294 (0.456)	-0.025	0.024
Income QT	2.814 (1.153)	2.708 (1.164)	-0.107	2.820 (1.043)	2.929 (1.060)	0.113**	0.215
N	81	277		657	2,231		

Notes: The first four columns present means and standard deviations for the treatment and control groups in the pre and post treatment period. The last column provides the results from t-tests testing to see if there are significant differences between the treatment and control group in the pre-period.

*** p<0.01, ** p<0.05, * p<0.1

Table 3: Baseline Results**Panel A: Results for Mothers**

	All Child Care		Basic Care		Educational/Recreational Care	
	No Controls	With Controls	No Controls	With Controls	No Controls	With Controls
California*Post	6.100*** (1.246)	6.346*** (1.216)	4.106*** (1.057)	4.206*** (1.036)	1.994*** (0.461)	2.140*** (0.474)
Mean	18.41		12.26		6.15	
Observations	2,898	2,898	2,898	2,898	2,898	2,898
R-Squared	0.044	0.118	0.040	0.094	0.038	0.071

Panel B: Results for Fathers

	All Child Care		Basic Care		Educational/Recreational Care	
	No Controls	With Controls	No Controls	With Controls	No Controls	With Controls
California*Post	-0.631 (0.600)	0.147 (0.624)	-1.734*** (0.470)	-1.281** (0.505)	1.103*** (0.363)	1.428*** (0.355)
Mean	10.05		5.32		4.73	
Observations	3,246	3,246	3,246	3,246	3,246	3,246
R-Squared	0.033	0.087	0.021	0.056	0.029	0.059

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Time use variables were converted to hours per week by multiplying each variable by 7 and dividing by 60. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. The sample is limited to employed men and women between the ages of 16 and 54 that report having a child under (or equal to) the age of 1 in household. Time with children is the sum of the time spent in basic care and time spent in educational or recreational care.

*** p<0.01, ** p<0.05, * p<0.1

Table 4: Breakdown of Care Variables

Panel A: Results for Mothers							
	Care of Infants	Basic Care			Educational/Recreational Care		
		Care of Older Children	Other Care	Medical Care	Playing	Reading & Talking	Supervision & HW Help
CA*Post	3.201*** (0.917)	0.669** (0.293)	0.136 (0.173)	0.200 (0.196)	2.197*** (0.431)	0.444*** (0.0849)	-0.500*** (0.141)
Mean	10.19	0.58	0.90	0.59	5.08	0.64	0.43
Observations	2,898	2,898	2,898	2,898	2,898	2,898	2,898
R-Squared	0.084	0.028	0.064	0.033	0.081	0.060	0.073
Panel B: Results for Fathers							
	Care of Infants	Basic Care			Educational/Recreational Care		
		Care of Older Children	Other Care	Medical Care	Playing	Reading & Talking	Supervision & HW Help
CA*Post	-1.054** (0.479)	0.309*** (0.0598)	-0.309*** (0.0691)	-0.228** (0.110)	1.866*** (0.336)	-0.148** (0.0617)	-0.289*** (0.0929)
Mean	4.53	0.23	0.36	0.20	4.12	0.41	0.20
Observations	3,246	3,246	3,246	3,246	3,246	3,246	3,246
R-Squared	0.064	0.026	0.026	0.033	0.058	0.052	0.073

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights. Time use variables were converted to hours per week by multiplying each variable by 7 and dividing by 60. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. The sample is limited to employed men and women between the ages of 16 and 54 that report having a child under (or equal to) the age of 1 in household. Care of infants is the amount of time parents spent caring for children under the age of 5, while care of older children is the amount of time spent caring for children ages 5 to 17.

*** p<0.01, ** p<0.05, * p<0.1

Table 5: Test for Significant Pre-Trends

Panel A: Results for Mothers			
	All Care	Basic Care	Edu/Recreational Care
Trend	2.133 (1.288)	1.260 (1.091)	0.872 (0.757)
California*Trend	-0.993 (2.125)	0.0419 (1.898)	-1.035 (1.274)
Observations	641	641	641
R-Squared	0.254	0.222	0.152
Panel B: Results for Fathers			
	All Care	Basic Care	Edu/Recreational Care
Trend	0.723 (0.841)	-0.218 (0.771)	0.941*** (0.336)
California*Trend	0.622 (1.430)	0.0797 (1.181)	0.542 (0.794)
Observations	738	738	738
R-Squared	0.147	0.150	0.096

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Time use variables were converted to hours per week by multiplying each variable by 7 and dividing by 60. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. The sample is limited to employed parents between the ages of 16 and 54 that report having a child under (or equal to) the age of 1 in household. Time with children is the sum of the time spent in basic care and time spent in educational/recreational care. These regressions were only run in the pre-period, which is from 1999 to June 2004.

*** p<0.01, ** p<0.05, * p<0.1

Table 6: Results for All Parents, Split by Employment Status

Panel 1: All Parents						
	Mothers			Fathers		
	All Care	Basic Care	Edu/Rec Care	All Care	Basic Care	Edu/Rec Care
CA*Post	2.490** (1.001)	1.383* (0.799)	1.107*** (0.412)	1.070* (0.621)	0.153 (0.493)	0.917*** (0.309)
Mean	20.99	13.70	7.29	10.54	5.89	4.96
Observations	5,046	5,046	5,046	3,539	3,539	3,539
R-Squared	0.111	0.086	0.066	0.076	0.045	0.062
Panel 2: Employed Parents						
	Mothers			Fathers		
	All Care	Basic Care	Edu/Rec Care	All Care	Basic Care	Edu/Rec Care
CA*Post	6.346*** (1.216)	4.206*** (1.036)	2.140*** (0.474)	0.147 (0.624)	-1.281** (0.505)	1.428*** (0.355)
Mean	18.41	12.26	6.15	10.05	5.32	4.73
Observations	2,898	2,898	2,898	3,246	3,246	3,246
R-Squared	0.118	0.094	0.071	0.087	0.056	0.059
Panel 3: Non-Employed Parents						
	Mothers			Fathers		
	All Care	Basic Care	Edu/Rec Care	All Care	Basic Care	Edu/Rec Care
CA*Post	-1.836 (1.227)	-1.708* (1.004)	-0.128 (0.606)	4.931 (3.091)	7.439** (3.103)	-2.509 (2.028)
Mean	24.27	15.53	8.74	15.42	8.17	7.25
Observations	2,148	2,148	2,148	293	293	293
R-Squared	0.191	0.135	0.134	0.427	0.282	0.503

Notes: Results are presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, employment status, and an indicator for weekday respondent, as well as state and year fixed effects. The sample is limited to employed parents between the ages of 16 and 54 that report having a child under (or equal to) the age of 1 in household. The second and third panel split the sample by employed and non-employed parents. Employed parents report currently having a job but they may either be working or on paid leave at the time they are surveyed. Non-employed parents are those who report they are not employed, which may be a result of retirement, being a student or a home-maker, and does not indicate unemployment, but rather they are not participating in the labor force.

*** p<0.01, ** p<0.05, * p<0.1

Table 7: On Leave versus Return to Work

Panel A: Time in All Child Care						
	Mothers with Positive Work Hours			Mothers with Zero Work Hours		
	All Days	Weekends	Weekday	All Days	Weekends	Weekday
All Care	4.252*** (1.426)	5.429** (2.169)	3.904** (1.633)	6.388*** (2.064)	2.743* (1.513)	10.70** (4.359)
Mean	15.55	14.26	15.77	23.05	18.81	27.44
Observations	1,511	447	1,064	1,387	1,016	371
R-Squared	0.115	0.311	0.116	0.229	0.193	0.288
Panel B: Time in Basic Care Activities						
	Mothers with Positive Work Hours			Mothers with Zero Work Hours		
	All Days	Weekends	Weekday	All Days	Weekends	Weekday
Basic Care	0.197 (0.840)	2.381 (1.881)	-0.140 (0.909)	7.651*** (1.930)	2.323* (1.228)	12.86*** (4.437)
Mean	10.35	8.52	10.67	15.34	12.21	18.59
Observations	1,511	447	1,064	1,387	1,016	371
R-Squared	0.096	0.220	0.097	0.192	0.145	0.264
Panel C: Time in Educational/Recreational Activities						
	Mothers with Positive Work Hours			Mothers with Zero Work Hours		
	All Days	Weekends	Weekday	All Days	Weekends	Weekday
Edu/Rec Care	4.056*** (0.815)	3.048*** (1.094)	4.044*** (1.009)	-1.263* (0.744)	0.420 (0.815)	-2.167 (1.826)
Mean	5.20	5.74	5.10	7.70	6.60	8.42
Observations	1,511	447	1,064	1,387	1,016	371
R-Squared	0.089	0.303	0.094	0.143	0.150	0.234

Notes: Results are presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. The sample is limited to employed mothers age 16 to 54 with a child under (or equal to) the age of 1 in the household and split by those who report working some positive amount of time or zero hours when they were surveyed. Within each category, I also separate the data based on what day of the week the mother was surveyed.

*** p<0.01, ** p<0.05, * p<0.1

Table 8: Heterogeneity by Maternal Characteristics

Panel A: Maternal Race						
	White Mothers			Non-White Mothers		
	All Care	Basic Care	Edu/Rec Care	All Care	Basic Care	Edu/Rec Care
CA*Post	12.94*** (1.438)	9.590*** (1.268)	3.350*** (0.525)	2.481 (1.933)	1.367 (1.585)	1.114 (0.754)
Mean	20.45	13.32	7.12	14.29	10.09	4.20
Observations	1,976	1,976	1,976	922	922	922
R-Squared	0.094	0.098	0.069	0.176	0.142	0.143
Panel B: Educational Attainment						
	High Education Mothers			Low Education Mothers		
	All Care	Basic Care	Edu/Rec Care	All Care	Basic Care	Edu/Rec Care
CA*Post	6.792*** (1.412)	4.953*** (1.242)	1.839** (0.742)	4.115* (2.174)	2.364 (1.765)	1.751* (0.987)
Mean	20.30	13.39	6.91	14.12	9.68	4.43
Observations	2,110	2,110	2,110	788	788	788
R-Squared	0.106	0.092	0.073	0.200	0.179	0.137

Notes: Results are presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. The sample is limited to employed parents age 16 to 54 with a child under (or equal to) the age of 1 in the household and split by demographic characteristics. High education parents are those who have attended some college or have a Bachelor's or higher degree, while low educated parents have a high school degree or fewer years of education.

*** p<0.01, ** p<0.05, * p<0.1

Table 9 - Heterogeneity by Birth Parity

Panel A: First Birth			
	All Care	Basic Care	Edu/Recreational Care
California*Post	4.563** (1.709)	2.485* (1.381)	2.078** (0.881)
Mean	18.13	11.21	6.91
Observations	1,113	1,113	1,113
R-Squared	0.176	0.182	0.116
Panel B: Second Birth			
	All Care	Basic Care	Edu/Recreational Care
California*Post	9.045*** (1.678)	5.457*** (1.596)	3.588*** (0.958)
Mean	19.12	13.08	6.04
Observations	1,089	1,089	1,089
R-Squared	0.191	0.170	0.134
Panel C: Third or Higher Birth			
	All Care	Basic Care	Edu/Recreational Care
California*Post	4.292** (2.007)	4.672*** (1.665)	-0.379 (0.832)
Mean	17.79	12.81	4.98
Observations	696	696	696
R-Squared	0.207	0.197	0.146

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. The sample is limited to employed parents between the ages of 16 and 54 that report having a child under (or equal to) the age of 1 in household and split based on birth parity.

*** p<0.01, ** p<0.05, * p<0.1

Table 10 - Short Run versus Long Run Effects of CA-PFL

Panel A: Children Age 1 and Younger			
	All Care	Basic Care	Edu/Recreational Care
California*Post	6.346*** (1.216)	4.206*** (1.036)	2.140*** (0.474)
Mean	18.41	12.26	6.15
Observations	2,898	2,898	2,898
R-Squared	0.118	0.094	0.071
Panel B: 2 Year Olds			
	All Care	Basic Care	Edu/Recreational Care
California*Post	2.312** (0.953)	3.037*** (0.565)	-0.725 (0.666)
Mean	13.33	8.29	5.05
Observations	1,372	1,372	1,372
R-Squared	0.123	0.110	0.118
Panel C: 3 Year Olds			
	All Care	Basic Care	Edu/Recreational Care
California*Post	1.108* (0.598)	1.490*** (0.518)	-0.381 (0.410)
Mean	11.58	7.32	4.26
Observations	1,320	1,320	1,320
R-Squared	0.156	0.128	0.112
Panel D: 4 Year Olds			
	All Care	Basic Care	Edu/Recreational Care
California*Post	-0.520 (0.931)	-0.111 (0.522)	-0.409 (0.763)
Mean	10.36	6.55	3.81
Observations	1,139	1,139	1,139
R-Squared	0.131	0.111	0.092

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. Each panel uses a sample of employed parents age 16 to 54, but the age of the youngest child in the household in each panel.

*** p<0.01, ** p<0.05, * p<0.1

Table 11: Long Run Effects Variable Breakdown**Panel A: 2 Year Olds**

	Basic Care				Educational/Recreational Care		
	Care of Infants	Care of Older Children	Other Care	Medical Care	Playing	Reading & Talking	Supervision & HW Help
CA*Post	0.929** (0.449)	0.0435 (0.122)	-0.00794 (0.193)	2.072*** (0.240)	-0.565 (0.615)	-0.553*** (0.177)	0.393*** (0.137)
Mean	6.14	0.53	1.12	0.50	3.68	0.95	0.42
Observations	1,372	1,372	1,372	1,372	1,372	1,372	1,372
R-Squared	0.101	0.131	0.117	0.044	0.119	0.093	0.095

Panel B: 3 Year Olds

	Basic Care				Educational/Recreational Care		
	Care of Infants	Care of Older Children	Other Care	Medical Care	Playing	Reading & Talking	Supervision & HW Help
CA*Post	0.393 (0.343)	0.0205 (0.143)	0.716*** (0.203)	0.360*** (0.116)	-0.0603 (0.349)	-0.225 (0.174)	-0.0964 (0.129)
Mean	5.13	0.45	1.40	0.34	2.57	1.04	2.15
Observations	1,320	1,320	1,320	1,320	1,320	1,320	1,320
R-Squared	0.109	0.080	0.143	0.049	0.092	0.114	0.114

Panel A: 4 Year Olds

	Basic Care				Educational/Recreational Care		
	Care of Infants	Care of Older Children	Other Care	Medical Care	Playing	Reading & Talking	Supervision & HW Help
CA*Post	-0.199 (0.368)	0.250* (0.136)	-0.394* (0.210)	0.233 (0.147)	-0.396 (0.481)	0.111 (0.237)	-0.123 (0.253)
Mean	4.46	0.45	1.33	0.31	2.11	0.92	0.77
Observations	1,139	1,139	1,139	1,139	1,139	1,139	1,139
R-Squared	0.094	0.124	0.086	0.129	0.088	0.098	0.118

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. Each panel uses a sample of employed mothers age 16 to 54, but the age of the youngest child in the household in each panel.

*** p<0.01, ** p<0.05, * p<0.1

Table 12 – Alternate Time Use Outcomes

Panel A: Results for Mothers				
	Leisure 1	Leisure 2	Domestic Work	Market Work
California*Post	1.540 (1.050)	3.348*** (1.116)	5.522*** (0.977)	-11.32*** (1.463)
Mean	24.88	95.01	15.25	29.07
Observations	2,898	2,898	2,898	2,898
R-Squared	0.141	0.187	0.093	0.171
Panel B: Results for Fathers				
	Leisure 1	Leisure 2	Domestic Work	Market Work
California*Post	-2.695*** (0.911)	-2.022* (1.071)	3.523*** (0.617)	-3.514*** (1.308)
Mean	29.28	97.16	9.29	41.10
Observations	3,246	3,246	3,246	3,246
R-Squared	0.224	0.305	0.098	0.335

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. The sample is limited to employed parents between the ages of 16 and 54 that report having a child under (or equal to) the age of 1 in household. The following variables available for download through AHTUS are aggregated to create Leisure 1: (1) sports, exercise, and outdoor activity, (2) media and computing, (3) adult care, civic, voluntary, and religious, (4) in home free leisure time, and (5) out of home free leisure time. Leisure 2 combines Leisure 1 and personal care activities.

*** p<0.01, ** p<0.05, * p<0.1

APPENDIX

Appendix Table 1

Year	1999-2000	2003-2013
Survey Title	National Survey of Parents (NSP)	American Time Use Survey (ATUS)
Collector	Collected by the University of Maryland Research Centre, funded by the Alfred P. Sloan Foundation Working Families Program	Bureau of Labor Statistics, USA Department of Labor
Fieldwork Period	Main collection from May 1999-June 2000 with some follow up through 2001	Conducted continuously throughout each year
Sampling Method & Study Design	<p>The aim of this study is to gain insight into what parents do, how they balance multiple demands for their time, and what value they place on various activities. The survey uses random digit dialing to gather a national sample of parents with children under the age of 18 who are living at home. They collected one 24-hour time diary about the activities from the previous day from one parent per household using computer assisted telephone interviewing. Diaries started at midnight and collected the starting and stopping time of main activities, as well as two simultaneous activities, the presence of other individuals, and location. Age was not originally collected in the survey, although most of the participants were re-contacted for their age. For participants who were unable to be re-contacted, age was estimated from their responses to various questions in the survey. Note that much of the published research combines this data with the 1998-1999 FISCT data to create a larger sample size.</p>	<p>This study monitors what people are doing on any given day in the US. The survey creates a nationally representative sample of adults age 15 and older from a sub-sample of households that have completed the final wave of the Current Population Survey (CPS). Diaries are collected around two months after the final CPS interview for one person per household using computer assisted telephone interviewing. For households who did not have a telephone, they were sent phone cards to enable them to participate in the survey free of charge. The diaries gather information about the previous day's activities including the main activity (or secondary child care, but no secondary activities), who else was present, and the location or mode of transport. Half of the diaries were collected on weekdays and the other half were collected on weekends. Interviews were conducted in English and Spanish.</p>
Sample Size	1,200 diarists	136,870
Response Rate	64%	52.5% - 57.8%

Appendix Table 2: Summary Statistics by Sample

	Demographic Variables			
	Mothers		Fathers	
	NSP	ATUS	NSP	ATUS
Married	0.82 (0.39)	0.73 (0.44)	0.96 (0.21)	0.94 (0.23)
White	0.73 (0.45)	0.67 (0.47)	0.80 (0.40)	0.71 (0.45)
Black	0.19 (0.40)	0.12 (0.32)	0.15 (0.36)	0.05 (0.21)
Hispanic	0.08 (0.27)	0.16 (0.37)	0.05 (0.23)	0.17 (0.38)
Asian	0.02 (0.14)	0.04 (0.19)	0.00	0.05 (0.22)
Other Race	0.06 (0.23)	0.02 (0.15)	0.05 (0.23)	0.02 (0.15)
Less than HS Degree	0.10 (0.31)	0.09 (0.29)	0.10 (0.30)	0.10 (0.30)
High School Degree	0.25 (0.44)	0.22 (0.41)	0.34 (0.48)	0.23 (0.42)
Some College	0.12 (0.32)	0.20 (0.40)	0.24 (0.43)	0.17 (0.38)
College or Higher Degree	0.52 (0.50)	0.50 (0.50)	0.33 (0.48)	0.51 (0.50)
Age 16-24	0.14 (0.35)	0.27 (0.44)	0.08 (0.28)	0.13 (0.33)
Age 25-34	0.60 (0.50)	0.51 (0.50)	0.61 (0.49)	0.54 (0.50)
Age 35-44	0.23 (0.42)	0.18 (0.39)	0.28 (0.46)	0.28 (0.45)
Age 45-54	0.03 (0.17)	0.04 (0.19)	0.03 (0.16)	0.06 (0.24)
Number of Children	2.14 (0.95)	1.94 (1.07)	1.79 (0.80)	2.04 (1.08)
Income Quartile	2.66 (1.19)	2.71 (1.15)	2.58 (1.09)	2.89 (1.07)
Weekday Survey	0.65 (0.48)	0.71 (0.45)	0.82 (0.39)	0.70 (0.46)
Weekend Survey	0.35 (0.48)	0.29 (0.45)	0.18 (0.39)	0.30 (0.46)

Appendix Table 2: Summary Statistics by Sample (Continued)

	Time Use Variables			
	Mothers		Fathers	
	NSP	ATUS	NSP	ATUS
All Time with Child	16.81 (12.59)	18.41 (16.25)	7.83 (8.51)	10.05 (13.16)
Time in Basic Care	13.55 (11.49)	12.26 (12.67)	5.29 (6.66)	5.32 (9.14)
Time in Edu/Recreational Care	3.27 (6.82)	6.15 (9.37)	2.54 (4.98)	4.73 (8.66)
Care of Infants	7.01 (9.50)	10.19 (11.13)	2.04 (5.73)	4.53 (8.17)
Care of Older Children	5.43 (8.09)	0.58 (2.53)	2.86 (4.78)	0.23 (1.36)
Other Child Care	1.10 (2.19)	0.90 (2.15)	0.39 (0.92)	0.36 (1.78)
Medical Care	0.00	0.59 (4.96)	0.00	0.20 (3.07)
Playing	2.37 (5.56)	5.08 (8.74)	2.06 (4.98)	4.12 (8.28)
Reading or Talking	0.51 (2.01)	0.64 (2.06)	0.40 (1.12)	0.41 (1.45)
Supervise or Homework Help	0.45 (2.13)	0.43 (2.25)	0.08 (0.54)	0.20 (1.41)
N	45	2,853	36	3,210

Appendix Table 3: Robustness of Control Group for Mothers

Panel A: Drop States with TDI			
	All Care	Basic Care	Edu/Recreational Care
California*Post	6.180*** (1.323)	4.117*** (1.110)	2.063*** (0.505)
Mean	18.14	12.05	6.08
Observations	2,662	2,662	2,662
R-Squared	0.118	0.095	0.072
Panel B: Use Only States with TDI			
	All Care	Basic Care	Edu/Recreational Care
California*Post	7.722** (1.995)	4.885 (2.703)	2.894* (1.204)
Mean	19.42	13.11	6.30
Observations	499	499	499
R-Squared	0.147	0.044	0.123

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. The sample is limited to employed parents between the ages of 16 and 54 that report having a child under (or equal to) the age of 1 in household. Time with children is the sum of the time spent in basic care and time spent in educational/recreational care. Hawaii, New York, New Jersey, and Rhode Island were dropped from the sample since they also offer TDI benefits for pregnancy.

*** p<0.01, ** p<0.05, * p<0.1

Appendix Table 4: Shorter Post Period (2004-2007)

Panel A: Results for Mothers			
	All Care	Basic Care	Edu/Recreational Care
California*Post	8.001*** (1.334)	4.091*** (1.168)	3.910*** (0.650)
Mean	19.26	13.01	6.26
Observations	1,440	1,440	1,440
R-Squared	0.157	0.125	0.090
Panel B: Results for Fathers			
	All Care	Basic Care	Edu/Recreational Care
California*Post	-1.653** (0.695)	-1.389** (0.597)	-0.264 (0.383)
Mean	9.36	5.09	4.26
Observations	1,615	1,615	1,615
R-Squared	0.119	0.099	0.085

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. The sample is limited to employed parents between the ages of 16 and 54 that report having a child under (or equal to) the age of 1 in household. Time with children is the sum of the time spent in basic care and time spent in educational/recreational care. The data used in this analysis is the 1999-2000 National Survey of Parents and the 2003-2007 waves of the American Time Use Survey.

*** p<0.01, ** p<0.05, * p<0.1

Appendix Table 5: Balance Test

Dependent Variable	Mothers	Fathers
Married	0.0287 (0.0229)	0.00150 (0.0109)
White	0.0500* (0.0271)	-0.140*** (0.0187)
Black	-0.0382* (0.0201)	-0.0382*** (0.0106)
Asian	-0.0133*** (0.00478)	-0.0158** (0.00754)
Hispanic	0.0124 (0.0153)	0.180*** (0.0168)
Other Race	0.00616 (0.00885)	0.0167** (0.00691)
Less than High School	0.0398* (0.0204)	0.0123 (0.0206)
High School	0.0767*** (0.0269)	0.168*** (0.0225)
Some College	0.0914*** (0.0271)	-0.105*** (0.0175)
College or Higher Degree	-0.208*** (0.0246)	-0.0752*** (0.0221)
Age 16-24	0.0503* (0.0261)	-0.0648*** (0.0221)
Age 25-34	-0.0668** (0.0310)	0.179*** (0.0280)
Age 35-44	0.0310 (0.0250)	-0.101*** (0.0208)
Age 45-54	-0.0144** (0.00647)	-0.0138 (0.00835)
Number of Children	0.154* (0.0861)	0.126** (0.0597)
Income Quartile	-0.0791 (0.0584)	-0.203*** (0.0549)

Notes: Each cell presents the results of a separate regression with the dependent variable in the left hand column. These represent the results from running the baseline model without controls and using the demographic characteristic as the left hand side variable.

*** p<0.01, ** p<0.05, * p<0.1

Appendix Table 6 - Pre-Trends for Mothers of Older Children

Panel A: 2 Year Olds			
	All Care	Basic Care	Edu/Recreational Care
California*Trend	3.180** (1.509)	1.663 (1.059)	1.518* (0.897)
Observations	371	371	371
R-Squared	0.237	0.232	0.203
Panel B: 3 Year Olds			
	All Care	Basic Care	Edu/Recreational Care
California*Trend	-0.0476 (0.526)	0.561 (0.392)	-0.608 (0.460)
Observations	515	515	515
R-Squared	0.257	0.241	0.170
Panel C: 4 Year Olds			
	All Care	Basic Care	Edu/Recreational Care
California*Trend	-1.331*** (0.439)	-1.124*** (0.280)	-0.207 (0.355)
Observations	543	543	543
R-Squared	0.220	0.168	0.190

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. Each panel uses a sample of mothers age 16 to 54, but the age of the youngest child in the household in each panel. These regressions were only run using data from the pre-period.

*** p<0.01, ** p<0.05, * p<0.1

Appendix Table 7: Alternate Time Use Variable Description

Variable	Included Activities
Leisure 1	<p><i>Sports, Exercise, and Outdoor Activities:</i> sports and exercise, walking, cycling, outdoor recreation, physical activity/sports with child, hunting, fishing, boating, hiking, gardening, pet care</p> <p><i>Media and Computing:</i> read books, read periodicals, read newspapers, listen to music, listen to radio, watch television, writing by hand, conversation, phone, texting, use computer</p> <p><i>Adult Care, Civic, Voluntary, and Religious Activities:</i> adult care, general voluntary acts, political and civic acts, union and professional activity, volunteer child/family organization, volunteer fraternal organization, other formal volunteering, acts for religious organization, worship and religious acts</p> <p><i>In Home Free Leisure Time:</i> general indoor leisure, imputed in-home social, receive or visit friends, other in-home social games, play musical instrument, sing, act, artistic activity, crafts, hobbies, relax, think, do nothing</p> <p><i>Out of Home Free Leisure Time:</i> general out of home leisure, attend sporting event, got to cinema, theater, concert, opera, museums and exhibitions, attend other public events, restaurants/café/bars, parties or reception, imputed time away from home</p>
Leisure 2	<p><i>Personal Care:</i> general or other personal care, imputed personal or household care, sleep, imputed sleep, nap and rest, wash/dress/personal care, personal medical care, meals at work, other meals and snacks</p> <p><i>Leisure 1 activities</i></p>
Unpaid Domestic Work	<p>Food preparation/cooking, set table/wash/put away dishes, cleaning, laundry, ironing, clothing repair, home repairs and maintain vehicle, other domestic work, purchase routine goods, purchase consumer durables, purchase personal services, purchase medical services, purchase repair and laundry services, financial and government services, purchase other services</p>
Market Work	<p>Main paid work (not at home), paid work at home, second job/other paid work, work breaks, other time at workplace, time looking for work</p>

Appendix Table 8: Pre-Trends for Alternate Time Use Outcomes

Panel A: Results for Mothers				
	Leisure 1	Leisure 2	Unpaid Domestic	
			Work	Market Work
California*Trend	3.979 (3.089)	-0.443 (4.054)	-0.970 (2.255)	-3.556 (2.962)
Observations	641	641	641	641
R-Squared	0.231	0.258	0.209	0.269
Panel B: Results for Fathers				
	Leisure 1	Leisure 2	Unpaid Domestic	
			Work	Market Work
California*Trend	-3.161 (2.260)	-4.256* (2.393)	1.057 (0.951)	1.248 (3.018)
Observations	738	738	738	738
R-Squared	0.309	0.407	0.166	0.478

Notes: Results presented with state clustered standard errors and weighted using recommended sample weights inflated to the national population. Controls include marital status, educational attainment, race/ethnicity, age bins, number of children under the age of 18, income quartile, and an indicator for weekday respondent, as well as state and year fixed effects. The sample is limited to employed parents between the ages of 16 and 54 that report having a child under (or equal to) the age of 1 in household. The following variables available for download through AHTUS are aggregated to create Leisure 1: (1) sports, exercise, and outdoor activity, (2) media and computing, (3) adult care, civic, voluntary, and religious, (4) in home free leisure time, and (5) out of home free leisure time. Leisure 2 combines Leisure 1 and personal care activities. These regressions were only run in the pre-period, which is from 1999 to June 2004.

*** p<0.01, ** p<0.05, * p<0.1