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## What Are Men Doing While Women Perform Extra Unpaid Labor? Leisure and Specialization at the Transition to Parenthood

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### Abstract

Marriage has significantly changed since Becker proposed his specialization model yet some scholars maintain that specialization characterizes modern couples. Specialization occurs when one partner, traditionally the man, concentrates on market work while the other partner, traditionally the woman, focuses on nonmarket work such as housework or childcare. Using innovative time diary data from primarily highly-educated, White, dual-earner U.S. couples, we examine how couples manage their time in market and household work and leisure across a momentous, gendered life course turning point-the transition to parenthood. We find little evidence of specialization, but stronger evidence of nonspecialization where both partners concurrently engaged in market work or leisure. Yet gender still mattered. Men enjoyed more leisure time, particularly on nonworkdays, whereas their partners performed more nonmarket work. Our study is the first known to uncover exactly what men were doing while women performed additional minutes of housework and childcare. On nonworkdays, fathers engaged in leisure 47% and 35% of the time during which mothers performed childcare and routine housework, respectively. Mothers engaged in leisure only about 16% to 19% of the time that fathers performed childcare and routine housework. In sum, although our study challenges economic theories of specialization by showing that nonspecialization is the norm for new parents' time among highly-educated, dual-earner couples, persistent gender inequalities continue to characterize family work and leisure time.

Compliance with Ethical Standards

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The authors of this manuscript, Claire M. Kamp Dush, Jill E. Yavorsky, and Sarah J. Schoppe-Sullivan, assert that principles of ethical and professional conduct have been followed.

The contents of this paper are the responsibility of the authors and do not necessarily represent official views of NICHD, NSF, or The Ohio State University.

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This study was approved by The Ohio State University Institutional Review Board (Study ID: 2007B0228). Informed consent was obtained from the human subjects involved with this research.

The informed consent forms are attached.

### Keywords

specialization; division of labor; transition to parenthood; gender gap; gender equality; housework; leisure

Ever since the Treatise on the Family (Becker, 1981) was first published, economists have argued that marriage is a union that produces efficiency and increases well-being through specialization. *Specialization* occurs when one partner, traditionally the man, concentrates on market work while the other partner, traditionally the woman, focuses on nonmarket work such as housework or childcare (Pollak, 2012; Stevenson & Wolfers, 2007). Yet, Stevenson and Wolfers (2007) suggest that because technological advances (e.g., dishwashers, microwaves) have dramatically decreased the time necessary to complete household tasks and women have increased their labor force participation, couples no longer rely on specialization as a motivation to marry. Rather, people seek partners based on consumption complementarities whereby they seek partners with whom they can jointly consume household goods and share mutually enjoyable leisure activities. But does specialization still take precedence among couples during intensive gendered time periods such as the transition to parenthood? Or do new parents, especially those who hold egalitarian beliefs and are highly educated, primarily maintain practices of shared work and leisure immediately following the birth of a child?

Despite that women and men state that they prefer and expect to equally share paid and unpaid labor (Gerson, 2010; Pedulla & Thébaud, 2015), gender norms persist (Donnelly et al., 2015; Yoshida, 2012) and tend to intensify after couples have their first child (Lundberg, 2005). Thus, women still shoulder the majority of childcare and housework, and men still prioritize breadwinning and their careers, even in dual-earner couples (Bianchi, Sayer, Milkie, & Robinson, 2012; Sayer, 2005). But we know little about actual *concurrent work time* (work performed together at the same time) between new parents; or about what the other partner is doing while one works or leisures (Bianchi et al., 2012; Yavorsky, Kamp Dush, & Schoppe-Sullivan, 2015). What are men in dual-career families doing while women perform extra childcare and housework?

The transition to parenthood is a key life course turning point that can set into motion market work, housework, and childcare routines that will likely persist for years to come. Yet most research on family time has focused on couples with toddlers or older children, not on newborns (Bianchi, Milkie, Sayer, & Robinson, 2000; Milkie, Raley, & Bianchi, 2009; Offer, 2016). The few studies (Gjerdingen & Center, 2005; Sanchez & Thomson, 1997) that have examined new parents' time across the transition to parenthood have relied on less accurate self-report survey data that can conceal gender inequalities (Press & Townsley, 1998; Yavorsky et al., 2015). Time-diaries offer a significantly more accurate method to capture men's and women's work and leisure time because respondents sequentially recall all activities performed in a given 24-hour time period (Lee & Waite, 2005).

Nevertheless studies that rely on time-diaries to measure concurrent and specialized work have significant limitations. First, because time diaries are often collected from only one family member, as is the method of the American Time Use Survey (ATUS; Bureau of

Labor Statistics, 2007), researchers often match time use of men and women from different families who have comparable social and demographic characteristics. Although this technique (known as propensity score matching; Connelly & Kimmel, 2009) is innovative and rests on the valid assumption that marriage is homogamous (Schwartz & Mare, 2005; Xie, Raymo, Goyette, & Arland, 2003), the reliability of couple-matching remains to be tested. Because these studies have been predominately based on averages of men and women in different couples, they could mask differences that can only be illuminated in within-couple data. Second, time diaries typically capture respondents' accounts of whether someone else was in the room during the activity. These data are sometimes leveraged to make assumptions about whether parents are completing household labor alone or with someone else. But this limited approach does not reveal how the other person in the room is actually spending their time while their partner performs labor.

Using community data from a small sample of primarily highly-educated, White, dualearner U.S. couples, we address a critical need for research that (a) uses minute-by-minute time diaries from both members of a couple, on the same day, in order to more accurately assess specialization and inequalities in division of labor without the limitations of matching procedures and (b) examines couples across the transition to parenthood, one of the most pivotal transitions a couple will experience in their lifetime. By studying dual-earner, highlyeducated couples, we study couples perhaps most inclined to replace specialization with shared work time that could lead to subsequent shared leisure time, even during this particularly gendered time period. Men and women in the current study both have timepressures given their full-time employed status, have financial resources to outsource some unpaid nonmarket work, and reported desires to share divisions of labor prior to the birth of their child. Given that these characteristics generally promote egalitarianism (Corrigall & Konrad, 2007; Cunningham, 2008), our study provides important knowledge on whether advantaged couples display a greater elasticity of gendered work and leisure practices than often theorized of new parents more generally or whether persistent gender inequalities still demarcate family work and leisure time.

### Specialization and Changes in Marital Norms

Becker's (1981) economic theory of the family posited that efficiency in marriage was achieved by one partner (the man) specializing in market work and the second partner (the woman) specializing in household production. He argued that women should specialize in nonmarket work because of the biological burden of gestation and women's inherent advantages in caring for children. Pollak (2012) expanded the definition of specialization in the new home economics to include strong specialization. Strong specialization is when one partner performs only market work and the second partner performs only housework and childcare. Pollak also defined two types of weak specialization: one in which both spouses work in the market but only one performs nonmarket work and another in which both spouses work in nonmarket work but only one works in the market.

These ideas may be outmoded given that women are now more likely to earn bachelor degrees than are men (Diprete & Buchmann, 2013), and a majority of married women in the United States are employed, regardless the presence and age of their children (England,

2010). As men's economic prospects have declined (Blau & Kahn, 2013), many women's entrance into the workforce has been necessary for families to maintain their social class. This is particularly true for White women because racial minority women have nearly always had strong ties to the U.S. labor market (Reimers, 1985). As women have moved into the labor force, men have increased their time with children over time (Bianchi, 2000), and although gender differences in parenting time continue (Kotila, Schoppe-Sullivan, & Kamp Dush, 2013), the involved father ideal (where men are expected to be more capable, involved, and nurturing parents) is now common (McGill, 2014). Thus, egalitarian cultural ideals, as well as involved father/intensive mothering ideals (Hays, 1996), suggest that even in situations of strong specialization, the second partner will be unlikely to completely disengage from all nonmarket work. These ideals are also classed and racialized, and they have been found to be particularly endorsed among highly-educated White couples (Hays, 1996; McQuillan, Greil, Shreffler, & Tichenor, 2008), such as those in our sample.

### Nonspecialization: The New Arrangement among Couples?

Nonspecialization in which partners concurrently and similarly participate in market or nonmarket work may now be the mode of contemporary couples. Marriage has become increasingly homogamous in that individuals are increasingly likely to marry someone with a similar level of education and, if differences do exist, women are more likely to marry a less educated partner compared to men (Schwartz & Mare, 2005; Xie et al., 2003). Women's economic prospects and wages have also increased relative to men's prospects and wages (Waldfogel, 1998). Thus, men should have either no advantage or a reduced advantage in household cooperative bargaining, a theorized decision-making process in which couples engage. Cooperative bargaining models assume that partners have unique interests and preferences and that they use their access to extra-household resources (e.g., income) to bargain for specific allocations of intra-household responsibilities (Katz, 1997). Women's education and income gains suggest that women should have greater bargaining power to negotiate more egalitarian divisions of labor such that men participate in culturally feminized activities such as childcare and housework.

Moreover, because the average age at which people in the United States marry is now in the late twenties (Manning, Brown, & Payne, 2014), individuals spend years living outside their parents' home and acquire household labor skills before they marry (Anxo et al., 2011). Thus it may often be the case that contemporary couples do not have one partner with a clear wage premium (at least at these earlier life stages) nor do they have one partner with more expertise in nonmarket work. Thus, nonspecialization should be the norm. Stevenson and Wolfers' (2007) argument that modern marriage is now focused on consumption complementarities (rather than specializing in particular work activities) supports a nonspecialization model as well. That is, if partners team up to jointly perform market and nonmarket work, they should have time to enjoy joint leisure, which likely was a guiding preference when they decided with whom to partner. In sum, joint leisure should be a priority for these couples.

It is true that after the transition to parenthood, mothers take more leave time from work given family policy and norms in the United States (Maume, 2015). Thus women may gain

important knowledge and skills regarding the care of their child and develop a comparative advantage in terms of childcare and household tasks involving the baby. This advantage should dissipate over time as working mothers shift back into the labor force and the infant develops new skills and needs. Thus, specialization could increase immediately after the transition to parenthood, but the family should then return to nonspecialization, as long as mothers have not suffered in terms of their relative wage or bargaining power and fathers can overcome their parenting knowledge/skill deficit. Yet critically, spousal bargaining over how to divide market and household work does not occur in a vacuum.

### Gendered Power Imbalances in the Family

Gender scholars attest that the work and leisure distribution of the family is not based on efficiency but rather on power imbalances between men and women (West & Zimmerman, 1987). Exchange and bargaining perspectives suggest that because men have traditionally specialized in the market and have out-earned their wives, husbands have been able to bargain their way out of nonmarket work. As women gain relative income to their husbands (Wang, Parker, & Taylor, 2013), they should be able to negotiate a more equal division of nonmarket work, or at least housework (some women may not want to bargain out of childcare). Yet, women's income does little to change men's housework hours; women either purchase outside household help or decrease their own housework (Bittman, England, Sayer, Folbre, & Matheson, 2003).

Some scholars contend that these lingering household-production gender imbalances are due to men and women "doing gender" (West & Zimmerman, 1987). In this view, gender is a series of behaviors and performances that are enacted on a daily basis. Berk (1985) described the marital household as a gender factory with the participation, or lack of participation, in housework and childcare as ways in which women and men do gender. Women's housework and childcare and men's lack of thereof, as well as the privileging of men's market work, strengthens feminine identities and masculine identities and secures appropriate gender relationships and hierarchies (Speakman & Marchington, 1999). Importantly, women and men do not necessarily have to espouse traditional gender beliefs to conform to gender-typed behaviors (Thébaud, 2010). Friends, family, and broader institutions hold men and women accountable to gender norms regardless of their own attitudes; thus women and men have incentives to comply with the gender order (Ridgeway & Correll, 2006).

From a structural and cultural perspective, male-oriented activities are typically more highly valued in society than female-typed activities are (England, Budig, & Folbre, 2002). Women, therefore, have greater incentives to move into male-domains than the reverse, especially considering that men's activities (i.e., paid labor) are typically associated with financial gains (England, 2010). Accordingly, over the past few decades, women's employment levels have significantly outpaced men's behavioral changes in the household (England, 2010). Highly educated mothers (who disproportionately tend to be White due to unequal gender gains in higher education across racial groups) have some of the highest rates of employment because they experience a significant economic-opportunity cost for not working (Alon & Haberfeld, 2007) and because, comparatively, lower-educated women

often cannot afford reliable childcare that would enable them to work full-time (Blau & Kahn, 2013). Although highly educated women have greater resources to outsource nonmarket work, they may still have less time available to complete housework and childcare based on long hours in market work. This means that fathers married to highly-educated White women may necessarily become more involved with childcare, even if men's total time in market and nonmarket work still does not approach women's time (Bianchi, Robinson, & Milkie, 2006; Yavorsky et al., 2015). This also means that the birth of a child could increase *concurrent* time that men and women spend performing nonmarket work, especially on a shared workday. Because couples' workload will inevitably increase from their pre-birth phase (Yavorsky et al., 2015), they may choose to simultaneously tackle nonmarket tasks so they can spend leisure together later in the day.

Men in dual-earner families may have found other ways to maintain their masculine status but still meet a family's need for efficiency by specializing *within* nonmarket work. Men have increased their time in childcare—particularly the more fun aspects of childcare like engagement or reading and playing with the child—but men have not increased their time in housework to the same degree (Sayer, 2005). Even when both partners are performing nonmarket work, men more often do less arduous tasks and more fun aspects of childcare whereas women perform less rewarding tasks like laundry or changing diapers. Men and women may also "do gender" in the area of leisure (Mattingly & Bianchi, 2003). Men engage in more leisure time than women do, and married parents with small children experience the largest gender disparities in leisure time (Bittman & Wajcman, 2000). Thus, postbirth, men could be spending some of those extra hours in leisure while she performs additional housework and childcare. The quality of leisure also differs. When women engage in leisure, they experience more interruptions than men do, are more likely to simultaneously be completing other family responsibilities, and more often remain at home (Bittman & Wajcman, 2000; Offer, 2016).

### Current Study

Using a small, innovative dataset that included minute-by-minute couple time diary data, we examined time-use in the third-trimester of pregnancy with a first-born child and at 3-months postpartum on both workdays and nonworkdays. Overall, we expected that time in nonspecialization (concurrent market work or concurrent nonmarket work) would be high in our sample of dual-earner, primarily White families and likely would increase across the transition to parenthood. Also, time in traditional (male market work/female nonmarket work) and nontraditional (female market work/male nonmarket work) specialization would be low but would increase for couples postbirth, particularly for time spent in traditional specialization due to persistent gendered norms.

Furthermore, given arguments that the purpose of marriage has moved from the gains of specialization to gains in the form of leisure, we also expected that time in concurrent leisure would be high. At the same time, we expected a decrease in concurrent leisure across the transition to parenthood considering that a baby increases a family's total workload. Finally, given the continuing gendered nature of marriage, we expected that men's time in leisure that occurred while women engaged in market or nonmarket work would exceed women's

time in leisure that occurred while men engaged in market or nonmarket work, and this pattern would be starker after the transition to parenthood. To supplement these analyses, we also documented specific activities (e.g., housework, childcare) in which parents engaged while their co-parent was working in either the market or the home.

Notably, we use dyadic time diary, not survey, data for our study. Time diary studies most often use data in which respondents record every activity they did, as well as the duration, over a specific 24-hour period. Time diaries provide generally unbiased estimates of time because (a) respondents recall activities sequentially, providing start and end times for each, and (b) constraining the diary to a 24-hour period (1,440 minutes) reduces overestimations of time. In contrast, self-report surveys that ask respondents to estimate the time they typically spend on particular activities per week produce biased estimates of time compared to time diaries (Robinson & Godbey, 2010), particularly at the transition to parenthood when new parents are often feeling overwhelmed (Yavorsky et al., 2015).

### Method

### Data

Our data came from the New Parents Project—a short-term, longitudinal study of 182 dualearner couples experiencing the transition to parenthood. Parents lived in a large, U.S. Midwestern city and were recruited through multiple sources, including newspaper advertisements, childbirth education, and recruitment advertisements posted at healthcare facilities. Couples were interviewed between 2008 and 2010 in the third trimester of pregnancy and at 3-months postpartum. Couples were eligible if they were (a) married or cohabiting, (b) at least 18 years of age, (c) expecting their first biological child, (d) able to read and speak English, and (e) planning to return to paid employment following the birth.

The initial sample consisted of 182 mothers and fathers who were largely married, collegeeducated, and non-Hispanic White with an average age of 29 for mothers and 31 for fathers. Four subsamples were used for our study. We used time diary data from Waves 1 (thirdtrimester) and 2 (3-months postpartum). All families that had mothers who were still on leave at Wave 2 were dropped from the study (n = 25). Further, each subsample was limited to families with parents who reported a shared diary day at that wave. For example, parents were included in the Wave 1 workday subsample if their workday diary day occurred on the same date as their partner's workday diary day, and likewise, parents were included in the Wave 1 nonworkday subsample if their nonworkday diary day occurred on the same date as their partner's. Note that parents were not instructed to complete their time diary on a specific date, but rather were asked to complete their time diary on a workday and nonworkday.

Using these inclusion criteria, the samples were limited as follows. The Wave 1 subsample included 75 and 65 couples for the workday and nonworkday, respectively. The Wave 2 subsample included 52 couples for the workday and 50 couples for the nonworkday. We also conduct analyses examining change over time that required families to be in both the Wave 1 and Wave 2 subsamples. The Waves 1 and 2 subsample included 30 families for the workday and 25 families for the nonworkday.

A comparison of each of the six subsamples with the full sample at Wave 1 is reported in Table 1. Overall, there were no significant differences between the Wave 1 full sample and any of the subsamples on paternal age, maternal education, and paternal and maternal work hours. There were also no significant differences between the Wave 1 workday subsample and the full sample. The Wave 1 nonworkday sample had fathers who were significantly more likely to be non-Hispanic White compared to the full sample. The Wave 2 workday subsample had couples who were significantly more likely to be non-Hispanic White and marginally significantly less educated compared to the full sample. The Wave 2 nonworkday subsample had couples who were more likely to be married and both mothers and fathers who were significantly more likely to be non-Hispanic White as compared to the full sample. The Waves 1 and 2 workday subsample had significantly more married couples and marginally significantly older mothers compared to the full sample. The Waves 1 and 2 nonworkday subsample had significantly more married couples and significantly more non-Hispanic White mothers compared to the full sample.

### **Procedure and Variables**

Modeled after the American Time Use Survey (Bureau of Labor Statistics, 2007), parents were mailed paper time diaries and were asked to complete these on their next workday and nonworkday at each wave. This instruction of when to complete the time diary was aimed to capture heterogeneity in the sample diaries of work and nonworkdays to reduce bias that could stem from mothers and fathers selecting particularly busy or non-busy days. Notably, a workday was not designated as necessarily Monday through Friday, but could be any next market workday of the week (Monday through Sunday) in order to also capture workdays for respondents who work non-standard days. Parents provided a chronological report of their day beginning at 4 AM on the target day and ending at 4 AM on the following day. Parents reported their primary, secondary, and tertiary activities, the location of these activities, and with whom they were at the time. Trained interviewers reviewed each diary with the parent in person for accuracy and to correct incomplete or unclear information. Research assistants then classified each activity based upon broader categorizations (Bureau of Labor Statistics, 2007).

Using Stata, a data file was created for each shared workday or nonworkday for each household at each wave. There were 1440 lines of data per household per date, one line for each minute. The dataset included variables representing both the mother's and the father's primary, secondary, and tertiary activities for each minute on the given date. These data were used to create categories of family time. All family time variables were created for both workdays and nonworkdays. Each family-time variable was the sum of all the minutes in the day in which a particular activity occurred.

**Concurrent nonmarket work**—Concurrent nonmarket work time was coded for each minute in which the mother and father both reported any routine or nonroutine housework or any childcare or child engagement (i.e. playing with the child). The activity could have been reported as the primary, secondary, or tertiary activity as long as it included some kind of

household production. Routine housework included cooking, washing dishes, cleaning house, family shopping, laundry, ironing, and mending clothes, financial management, and driving (others). Nonroutine housework included automobile maintenance or home repair. Childcare (postpartum only) included all activities associated with the physical care of the child: feeding, changing diapers, preparing meals or bottles, bathing infant, putting infant to bed, dressing infant, looking after infant, picking up or dropping off infant, organizing and planning for infant, and waiting associated with medical care or other child-related events. Engagement (postpartum only) included reading to infant, playing with infant, attending infant's events, soothing or holding the infant, and talking with infant. Thus, if the father participated in any of these activities during a given minute while during the same minute the mother participated in any of these activities, the minute was coded as a minute of concurrent nonmarket work.

**Concurrent market work**—Concurrent market work was coded for each minute in which the mother and the father both reported any market work or market work-related activities as a primary, secondary, or tertiary activity, as long as they did not report simultaneous nonmarket work. Activities included working and work-related activities such as checking email, research or homework, and travel related to work. If the father engaged in any of these activities during a given minute while during the same minute the mother engaged in any of these activities, the minute was coded as a minute of concurrent market work.

**Concurrent leisure**—Concurrent leisure was coded for each minute in which the mother and the father both reported any leisure activities as their primary activity. Note that leisure was not necessarily shared leisure; both parents could be doing independent leisure activities. Leisure included activities such as watching television, reading for pleasure, relaxing, and exercise. The leisure code did not include sleep, eating, grooming, or any work activity.

Additional variables—Mother nonmarket/father market work (*traditional specialization*) was coded for each minute in which the father was engaged in market work while the mother was engaged in nonmarket work, including routine and nonroutine housework, childcare, and child engagement. Father nonmarket/mother market work (*nontraditional specialization*) was coded for each minute in which the mother was engaged in market work while the father was engaged in nonmarket work. *Mother leisure/father work* was coded for each minute in which the mother was engaged in market work while the father was engaged in nonmarket work. *Mother leisure/father work* was coded for each minute in which the mother was engaged in market or nonmarket work. *Father leisure/mother work* was coded for each minute in which the father was engaged in leisure while the father was engaged in which the father was engaged in leisure while the mother was engaged in which the father was engaged in leisure while the mother was engaged in market work.

### Results

### **Descriptive Data**

**Family time on the workday**—Family time on the workday is presented in Table 2a. Overall, the majority of family time on the workday was spent in concurrent market work. Prebirth, partners spent about 6 hours in concurrent market work. Concurrent market work

significantly decreased after the baby was born by about 30 minutes, a medium effect. Concurrent nonmarket work increased on workdays across the transition to parenthood. Parents spent about 16 minutes in concurrent nonmarket work at Wave 1 and about 60 minutes at Wave 2 because childcare increased the household workload. The increase in concurrent nonmarket work between Waves 1 and 2 was significant and a large effect.

Turning to specialization, father nonmarket/mother market work (nontraditional specialization) was minimal at Wave 1 at 23 minutes but increased postbirth to 32 minutes, although this increase was not significant. Mother nonmarket/father market work (traditional specialization) significantly increased across the transition to parenthood to 101 minutes at Wave 2 from 25 minutes at Wave 1, a large effect.

With regard to leisure on workdays, mothers engaged in leisure while fathers engaged in market or nonmarket work for 42 and 38 minutes at Waves 1 and 2, respectively. Fathers engaged in leisure while mothers engaged in market or nonmarket work about 50 minutes at Wave 1, but this decreased significantly to 41 minutes at Wave 2, a medium effect size. Concurrent leisure significantly decreased across the transition to parenthood, from 70 minutes at Wave 1 to 38 minutes at Wave 2, a medium effect size. In other words, couples' shared leisure time was nearly cut in half on workdays postbirth.

**Family time on the nonworkday**—Family time on the nonworkday is presented in Table 2b. The majority of time on nonworkdays was spent in concurrent nonmarket work after the baby was born. Concurrent nonmarket work increased pre- to post-birth, from about 1.50 hours at Wave 1 to 2.36 hours at Wave 2, a significant effect that was about medium (d = 0.48). Across both waves, concurrent market work and nontraditional and traditional specialization were minimal on nonworkdays, and there were no significant changes across waves in these variables on the nonworkday.

Mothers spent less than an hour (about 46 to 49 minutes) in leisure while fathers engaged in market or nonmarket work at both waves on nonworkdays and there was no significant change in this variable. However, there were significant changes in fathers' time spent in leisure while mothers worked. Fathers significantly increased their time spent in leisure while mothers engaged in market or nonmarket work on nonworkdays across the transition to parenthood. Fathers engaged in about 47 minutes of leisure while mothers were working at Wave 1 and this significantly increased to 101 minutes at Wave 2, a large effect size. That is, on nonworkdays, fathers spent about 100 minutes in leisure while mothers performed some type of work.

As evidence of the prominence of leisure in family time, at Wave 1 family time in concurrent leisure exceeded concurrent nonmarket work as the most common type of family time on nonworkdays. However, concurrent leisure suffered after the transition to parenthood. Concurrent leisure time significantly decreased from about 2.8 hours at Wave 1 to about 2 hours at Wave 2, a large effect.

### **Difference-in-Difference Models**

We next conducted difference models (Allison, 2009), also known as change score or fixed effects regression models (Johnson, 2005). These examined the difference in the change in the types of family time across the transition to parenthood by gender by comparing prebirth to 3-months postpartum. These models compared two types of family time: the change in (a) time spent in market work while the partner is engaged in nonmarket work (workdays only) and (b) time spent in leisure while the other partner is engaged in market or household work (workdays and nonworkdays). The *B* and standard errors were derived from clustered fixed-effects regression models, and men and women's estimates were tested with an ANOVA. We also reported effect sizes (*d*) in the difference models; *d* was computed for each change in family time across waves (e.g.,  $M_{3 \text{ months}} - M_{\text{Third trimester}}/SD_{\text{Third trimester}}$ ) following guidelines suggested by Morris and DeShon (2002) for dependent-groups pretest—posttest designs. We follow Cohen (1992) guidelines for interpreting *d* that states that *d* = 0.20 is small, *d* = 0.50 is medium, and *d* = 0.80 is large. The models are reported in Table 3.

The first model tested gender differences in time parents spent doing nonmarket work while their partner was engaged in market work on workdays (see Table 3a). This measure is the traditional measure of specialization when men were engaged in market work and women were engaged in nonmarket work, and it is the nontraditional measure of specialization when the roles are reversed. Overall, we found that men significantly increased their time spent in nonmarket work while their partner performed market work across the transition to parenthood and that this increase was significantly different from women, who experienced no significant change in the market work in which they engaged while men did nonmarket work. The effect size estimate of the gender difference suggested a large effect.

Next we examined gender differences in time spent in leisure while the partner was engaged in either market or nonmarket work on both work and nonworkdays (see Table 3b). With regard to workdays, we found that fathers significantly increased their time spent in leisure while their partner was working between Waves 1 and 2 and that the gender difference between men and women was significant. The effect size suggested a medium effect. Note that these results from the Waves 1 and 2 workday subsample were different from those found for the full Wave 2 subsample. Men also significantly increased their time in leisure while their partner was engaged in market or nonmarket work on nonworkdays between Waves 1 and 2, and the effect was large.

### **Discrete Activity Analyses**

Given the gender differences found in the difference-in-difference models, we explored what each parent was doing, postbirth, while the other parent was engaged in routine and nonroutine housework, childcare, child engagement, and leisure on workdays and nonworkdays (see Table 4). We also report the amount of time each partner was engaged in that activity while their partner was engaged in childcare, engagement, routine housework, nonroutine housework, leisure, or paid work on the workday and nonworkday. We used *t*-tests to test for gender differences. Each of the following subsections discusses a single set of row values for mothers and fathers in Table 4. Thus, for each subsection, you should focus your attention on the designated row of values.

**Partner-performed childcare**—First, we examined what each parent was doing in Wave 2 while their partner engaged in childcare (see percentages in first set of rows marked Childcare in Table 4). On workdays, mothers were most often doing childcare (32%) or paid work (25%) while fathers performed childcare. Fathers were doing paid work 51% of the time and doing childcare 13% of the time while their partners performed childcare on workdays. Thus, on workdays, mothers *and* fathers predominately engaged in some sort of work while the other performed childcare. Mothers were significantly more likely to be engaged in paid work while their partner was engaged in childcare. Mothers spent significantly more time in childcare than fathers on workdays (99 vs. 38 minutes).

On nonworkdays, mothers continued to be more likely to be doing childcare while fathers were doing childcare; 32% of the time that fathers were doing childcare, the mother was too, while only 14% of the time when mothers were doing childcare was the father also doing childcare. Contrary to the workdays, fathers spent significantly more time engaged in leisure while their partner was engaged in childcare on the nonworkday. Fathers were engaged in leisure 46% of the time when their partners were doing childcare on the nonworkday. In contrast, mothers were engaged in leisure only about 16% of the time while their partners were engaged in childcare. Although the time spent in nonroutine housework was small, fathers were more likely than mothers to be engaged in nonroutine housework while their partner was performing childcare. Mothers also spent significantly more time in childcare than fathers, 92 minutes versus 34 minutes.

**Partner engaged with child**—Second, we examined what each parent was doing while their partner engaged with their baby (see percentages in second set of rows marked Engagement in Table 4). Note there were no gender differences in time spent in engagement on neither the workday nor the nonworkday. On workdays, mothers were most often engaged in routine housework (16% of the time) while their partners engaged with their babies. Otherwise, their time was split largely between childcare, also engaging with the baby, and paid work. Mothers were doing leisure about 8% of the time. In contrast, fathers were predominately doing paid work (26% of the time) while their partners engaged with the baby on workdays. They also engaged with the baby as well about 13% of the time and engaged in leisure or routine housework about 10% of the time that mothers were engaged with the baby. *t*-tests revealed that mothers were significantly more likely than fathers to be doing childcare while their partner was engaging with the baby.

On nonworkdays, when a respondent's partner was engaged with the baby, about 20% of the time the parent (for both mothers and fathers) was doing housework, between 14 and 19% of the time the parent was doing leisure, and about 8% of the time the parent was also engaging with the baby. The only significant gender difference was that mothers were significantly more likely than fathers to be doing childcare while their partner was engaged with the baby.

**Partner performed routine housework**—Next, we explored what parents were doing while their partner performed routine housework (see percentages in third set of rows marked Routine Housework in Table 4). On workdays, women were mostly performing a

work activity, too, while their partners engaged in routine housework. Then, mothers were doing childcare 18%, engaging with their baby 10%, performing routine housework 20%, doing leisure 11%, and engaging in paid work 25% of the time while their partners engaged in routine housework. Similarly, fathers engaged in some type of work activity while their partners did routine housework; however, fathers, were significantly more likely to be engaging in market work (45% of the time) and significantly less likely to be doing childcare (8% of the time) while mothers performed routine housework. There were no gender differences in routine housework on the workday.

On nonworkdays, women were also doing routine housework 31% of the time while fathers performed routine housework. Otherwise, mothers were caring for (25%) or engaging with the baby (11%) (about a total of 36% of the time while their partners performed routine housework). Mothers engaged in leisure only 19% of the time while their partners performed routine housework. Compared to mothers, fathers were significantly more likely to be doing leisure while their partners performed routine housework. Fathers engaged in leisure activities 35% of the time while their partners performed routine housework. Fathers were significantly less likely to be doing childcare (7%) while their partner was doing routine housework, and they were significantly more likely to be doing nonroutine housework while their partner was doing routine housework (8%). Mothers spent significantly more time in routine housework on the nonworkday compared to fathers (117 vs. 87 minutes).

**Partner performed nonroutine housework**—We next present what parents were doing while their partner participated in nonroutine housework (see percentages in fourth set of rows marked Nonroutine Housework in Table 4). There were no gender differences and very low percentages of activities for the workday due to the low frequency of nonroutine work on the workday; both mothers and fathers spent less than a minute, on average, in nonroutine housework on the workday.

**Partner engaged in leisure**—We examined what parents were doing while their partner participated in leisure activities (see percentages in fifth set of rows marked Leisure in Table 4). On workdays, between 35 and 40% of the time when one parent was engaged in leisure, the other parent was also engaged in leisure. Mothers were significantly more likely than fathers to be engaged in childcare while their partner did leisure (24% vs. 9%). There was no significant gender difference in the overall amount of leisure each parent had on the workday.

Nonworkday time had greater gender disparities. Mothers were doing leisure activities 48% of the time that their partners engaged in leisure. But, fathers were doing significantly more leisure (63%) while their partners engaged in leisure on nonworkdays as compared to mothers. Mothers did significantly more childcare (21% vs. 6%) and routine housework (21% vs. 8%) when their partner was doing leisure compared to fathers. Overall, mothers participated in a work activity about 46% of the time that their partner was leisuring; comparatively, this was true of fathers only 22% of the time. Fathers had significantly more time in leisure on the nonworkday compared to mothers (222 vs. 170 minutes).

**Partner performed paid work**—Finally, we examined what parents were doing while their partner engaged in paid work (see percentages in sixth set of rows marked Paid Work in Table 4). On workdays, mothers engaged in significantly more childcare and routine housework while their partners worked compared to fathers. Mothers spent about 12% of their time in childcare, 8% in routine housework, and 5% in leisure while their partner was working on workdays, whereas comparable numbers for fathers were 4%, 3%, and 2% respectively. With regard to concurrent paid work, fathers were significantly more likely to engage in paid work while their partner was working compared to mothers; 89% of the time that mothers were working, fathers were also working, whereas 72% of the time that fathers were working, mothers were working. Fathers also worked significantly more than mothers on workdays, working about 463 minutes while their partner was engaged in childcare, engagement, routine housework, nonroutine housework, leisure, and paid work. The comparable amount of work for mothers was 380 minutes.

In sum, these analyses supported our previous results. Men had a greater proportion of time in leisure while women engaged in housework and childcare, particularly on nonworkdays. In comparison, on nonworkdays when fathers engaged in housework, childcare, or leisure, mothers most often engaged in that same activity.

### Discussion

The present study included the first known analyses based on minute-by-minute time diary data from *both* partners in the same couple for the same day. Even more unique, these data allowed for an examination of couple-level time across the transition to parenthood. Overall, as hypothesized, new parents in this highly educated, primarily White, dual-earner U.S. sample spent little time engaged in either nontraditional or traditional specialization. Instead, we found that parents spent a majority of their time, particularly after the transition to parenthood, in nonspecialized work or more specifically, in concurrent market work on workdays and concurrent nonmarket work on nonworkdays. This suggests that the majority of family time within these couples with infants was *not* specialized time, but rather nonspecialized. The fact that our sample had counter-veiling statuses, such as dualearnership and high education, may have reduced gendered specialization processes. Regardless, we still find that even advantaged couples succumbed to unequal work and leisure practices. Men enjoyed more leisure time, especially on nonworkdays, while their partners performed nonmarket work compared to women, and notably, the time spent leisuring while their partner worked *increased* across the transition to parenthood. This was not the case, however, for women. Mothers' time spent in leisure while fathers engaged in work remained constant across waves.

Perhaps not surprisingly, our results did not support Becker's (1981) decades old treatise on the family, but nor did our results support more contemporary work in family economics (Baker & Jacobsen, 2007; Pollak, 2012). These results challenge Pollak's (2012) theories of weak specialization—that both partners perform market work but only one person, typically the woman, performs nonmarket work—in that, even at this inherently gendered life course turning point, both partners contributed to market and nonmarket work. Indeed, the year following the birth of a child would be most likely to lend itself to specialization due to

breastfeeding and a greater availability of maternity leave in the United States (Maume, 2015). Rather, family time in concurrent leisure was high, even after the transition to parenthood. This finding supports economists Stevenson and Wolfers' (2007) claim of the rise of the importance of leisure and hence consumption complementarities in contemporary marriages.

Yet, in support of gender theory, although the men in our study actively engaged in both market and nonmarket work in the household before and after the transition to parenthood, this small sample of new fathers still engaged in "doing gender" (West & Zimmerman, 1987), particularly on nonworkdays. The finding that inequalities occurred more on nonworkdays lends support to time-squeeze perspectives that men may participate more in nonmarket work during workdays out of necessity and not necessarily due to strong commitments to egalitarianism. We confirmed and extended previous research (Bittman & Wajcman, 2000) in finding that men engaged in more leisure while women worked than women engaged in leisure while men worked. Leisure contrasts were stark postbirth, when men spent more than twice as much time as women in leisure while the other parent worked. Nonspecialized time could lead to greater efficiency in the household for dual-earner couples, but men benefitted on nonworkdays in gendered ways that women did not. That is, even among couples well-positioned to distribute leisure and work equally, gender norms prevailed. We caution that other women who have fewer advantageous couple and individual statuses may have even more difficulty negotiating equitable divisions of labor with their partner.

Additional analyses that examined exactly what the other partner was doing while the one parent worked supported these results and provided an even richer picture of gendered family time use. On nonworkdays, men had a greater proportion of time in leisure while women were engaged in housework, childcare, and leisure. In comparison, on nonworkdays when fathers were doing housework or childcare, mothers were most often doing that same activity. Similarly, on workdays when fathers were doing childcare, mothers were most often doing childcare, and when fathers were doing housework, mothers were most often doing either housework, childcare, or paid work; that is, they were most often working. Given that there was only one child in these families, that means that most often when fathers were doing childcare and engagement, they were doing so jointly with the mother and not on their own.

On the one hand, mothers and fathers spending joint time with young children may be highly valued and important for establishing strong co-parenting relationships between new parents, which are essential for healthy family functioning (Kotila & Schoppe-Sullivan, 2015). As such, complete specialization in parenting time may not only be unrealistic, but undesirable. On the other hand, there may be greater reluctance on the part of both parents for fathers to perform childcare or child engagement on their own. Fathers typically enter parenthood feeling less prepared and skilled than mothers (Hudson, Elek, & Fleck, 2001), which makes them susceptible to maternal gatekeeping—mothers' attempts to encourage or discourage fathers' involvement in childrearing (Schoppe-Sullivan, Altenburger, Lee, Bower, & Kamp Dush, 2015). Fathers may want mothers to be present when they interact with their children to provide support, or mothers may hover to make sure fathers are doing parenting

correctly and maintain their standards. At the same time, mothers may want to maximize the time they spend with their child, which includes parenting while their partner is also parenting. Because a workday for a typical full-time working parent with a child in daycare involves less child engagement time, and mainly routine childcare (e.g., feeding baby and readying him/her for daycare or later for bed), mothers simply may not want to miss out on time with their child. Thus, time constraints could be potentially combining with intensive parenting expectations for mothers, incentivizing mothers to be constantly present with their child outside of market work. Regardless, the end result may be that mothers sacrifice more leisure time than fathers do.

Notably, these findings also speak to intersecting classed features of work that produce gendered effects within the home. Because our sample consisted of mostly white-collar professionals who worked standard work hours, most men and women worked the majority of their market work during the same hours. This sample characteristic likely produced more concurrent work and leisure time among these couples and contributed to fewer opportunities for men to be alone with children. Future work should examine whether dualearner working-class men and women, who tend to work more nonstandard shift work (Kalleberg, 2013), could actually experience greater *non*-traditional specialization that would facilitate, if not necessitate, men's greater alone time with their children.

### Limitations and Future Research Directions

The most significant limitation of our project is the sample size, which limited our power. Couples were not instructed to complete their time diaries on the same day, and our sub samples only included those families that included mothers and fathers who completed at least one workday or one nonworkday on the same day. More specifically, in some couples, the man and woman both completed their workday on the same day and then also aligned on the day they completed their nonworkday time diaries. For example, this would be the case if a coupled man and woman both filled out their workday time diary on a Friday and then also both filled out their nonworkday on a Saturday. Other couples only completed their time diary on the same workday as their partner, but did not complete their time diary on the same nonworkday. Although a key strength of our study is that we had time diary data from the same couple on the same day (allowing for minute-by-minute partner analyses), this also limited our sample size. Future research should instruct couples to fill out their diary on the same day if collecting couple-level time diary data.

Another limitation of our study is that it was primarily composed of highly-educated, married, White couples. Whereas the study design intentionally focused on dual-earner couples, the primary source of recruitment for this project (childbirth education) yielded a more highly-educated, less racially diverse sample. Future research should use a more diverse array of recruitment techniques to increase diversity, such as newspaper ads and flyers in racially, ethnically, and socioeconomically diverse communities.

With regard to the time diary data, there was likely some error in our minute-by-minute file. For example, a mother or father could have misreported the time it took to conduct an activity, and because the file was a minute-by-minute activity file, these small errors could have led to error in our estimates. Overall, we expect that misreporting occurred such that

mothers and fathers over, and under, reported the time it took to conduct activities and the exact time of activities, and that over- and under-reporting balanced each other out resulting in a reliable pattern of findings. We also did not include time sleeping, doing personal care, or eating. Future research may also consider these activities and how they intersect with parenting, work, and leisure.

Although our sample had limitations, our study had several key strengths. First, our study did not have to compare men and women who were not coupled but used actual couple-level family time data. Further, these data were longitudinal, and they allowed us to examine the change in family time across a salient life course transition—the transition to parenthood. Finally, time diary data allowed us to reliably estimate family-time; self-report measures of time use have been shown to be biased in comparison to time diaries (Press & Townsley, 1998; Yavorsky et al., 2015).

### **Practice Implications**

Although couples spend a lot of time concurrently working, persistent gendered norms and expectations still privilege men's breadwinning status and women's homemaking skills (Pedulla & Thébaud, 2015). Our concern for these arrangements is at least threefold. First, if and when these patterns continue, women's career mobility may suffer. When household responsibilities become difficult to manage at the family level, women are more likely to decrease their market time to bring their total workloads closer to men's (Clawson & Gerstel, 2014). If women consistently reduce their potential future earnings and upward mobility due to increased workloads after a child, they shoulder a greater economic risk postbirth. Second, if men leisure about half of the time that women perform extra work postbirth, resentment and animosity may build among women toward their spouses (Strazdins & Broom, 2004). Accordingly, unequitable arrangements may lead to additional stress (Milkie, Bianchi, Mattingly, & Robinson, 2002) and marital distress between partners (Claffey & Mickelson, 2009), potentially even leading to divorce (Frisco & Williams, 2003). Third, the transition to parenthood is a rewarding but difficult time period that frequently has health implications for mothers. Some mothers suffer from depression and anxiety, and many mothers have minimal time to exercise-a critical activity linked to positive mental and physical health outcomes (Armstrong & Edwards, 2003; Larson-Meyer, 2002; Wegner et al., 2014). If men disproportionately enjoy the leisure time available in the family and leave women with greater childcare and housework burdens, women may have fewer opportunities to engage in activities, such as exercise or other pleasurable pursuits that could reduce stress and improve their well-being and health (Nomaguchi, Milkie, & Bianchi, 2005).

We suggest that couples discuss and map out plans for divisions of labor prior to the transition to parenthood. Postbirth, we recommend that couples have regular conversations about any perceptions of unfair workloads. Men may feel that they contribute equally or "enough" to a household because they participate more on workdays, but may be less concerned with or aware of inequalities that plague nonworkdays. Our research suggests that nonworkdays are a key time period that men and women should prioritize in their discussions. Given our results, practitioners could prioritize inequalities in divisions of labor,

particularly work occurring while the other partner leisures, when providing counseling to mothers, fathers, and/or to couples, because this could be a source of tension in their relationship. Obstetricians, midwives, childbirth educators, and others who work with pregnant women could also incorporate discussion of the workload of parenting into existing appointments or programming designed for expectant parents, such as childbirth education.

### Conclusion

Our study challenges economic theories of specialization by showing that nonspecialization is the norm for new parents' time among highly educated, dual earner, primarily White U.S. families. Our findings extend results from an earlier study on the transition to parenthood, finding that family time among childless couples in the United States seems to have become less gendered, but the transition to parenthood comes with a greater burden of nonmarket work, particularly for women (Yavorsky et al., 2015). The increasing prominence of leisure among these highly educated, primarily White couples supports Stevenson and Wolfers' (2007) suggestion that consumption complementarities, particularly in leisure, has replaced specialization in partnering among U.S. couples. At the same time, persistent gender inequalities continue to characterize family work and leisure time. In sum, our study extends contemporary family perspectives on specialization by illustrating a more nuanced picture of couple's time-use and is the first known to reveal exactly what some men are doing while women perform additional minutes of housework and childcare.

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Table 1

New Parents Project Subsample Comparisons by Marital Status, Age, Education, Race, and Work Hours

|                         |                                                       | Wave 1 St                  | ubsample                      | Wave 2 St                                         | ıbsample                      | Waves 1 and                                       | 2 Subsamples                  |
|-------------------------|-------------------------------------------------------|----------------------------|-------------------------------|---------------------------------------------------|-------------------------------|---------------------------------------------------|-------------------------------|
|                         | Full Sample <i>M</i> ( <i>SD</i> ),<br>%, or <i>n</i> | Workday M (SD),<br>%, or n | Nonworkday M<br>(SD), %, or n | Workday <i>M</i> ( <i>SD</i> ),<br>%, or <i>n</i> | Nonworkday M<br>(SD), %, or n | Workday <i>M</i> ( <i>SD</i> ), %,<br>or <i>n</i> | Nonworkday M (SD),<br>%, or n |
| Married                 | 86%                                                   | 89%                        | 92%                           | $100\% \ ^{*}$                                    | 86% *                         | 100% *                                            | $100\% \ ^{*}$                |
| Mother Age              | 28.80 (3.96)                                          | 28.73 (3.91)               | 28.71 (3.45)                  | 29.59 (3.45)                                      | 28.81 (3.45)                  | $30.09~(3.54)^+$                                  | 28.30 (3.17)                  |
| Father Age              | 30.70 (4.80)                                          | 30.68 (4.37)               | 30.68 (4.59)                  | 31.70 (4.86)                                      | 30.46 (3.43)                  | 31.86 (4.53)                                      | 29.68 (3.40)                  |
| Mother Education        | 66%                                                   | 67%                        | 65%                           | 69%                                               | 72%                           | 20%                                               | 76%                           |
| Father Education        | 77%                                                   | 72%                        | 69%                           | $65\%^{+}$                                        | 72%                           | 67%                                               | 72%                           |
| Mother Race (White)     | 83%                                                   | 81%                        | 88%                           | %06                                               | 94% *                         | %06                                               | 100%                          |
| Father Race (White)     | 86%                                                   | 86%                        | $94\%$ $^{*}$                 | 96% *                                             | 98% *                         | 93%                                               | 96%                           |
| Mother work hours       | 40.71 (9.44)                                          | 41.86 (6.88)               | 41.46 (8.79)                  | 40.20 (9.40)                                      | 39.54 (8.99)                  | 43.07 (6.28)                                      | 41.10 (9.78)                  |
| Father work hours       | 43.48 (10.89)                                         | 43.09 (7.73)               | 44.49 (7.50)                  | 43.28 (8.43)                                      | 42.43 (7.81)                  | 43.80 (8.96)                                      | 43.74 (7.45)                  |
| Family <i>n</i>         | 182                                                   | 75                         | 65                            | 52                                                | 50                            | 30                                                | 25                            |
| п                       | 364                                                   | 150                        | 130                           | 104                                               | 100                           | 60                                                | 50                            |
| Note. Married was codec | 1 as 0 = cohabiting, 1 = marr                         | ried. Age was coded in ye  | ars. Education was mea        | sured as a dichotomous v:                         | ariable, where 1 = colleg     | ge degree or more education                       | and 0 = less than a college   |

degree. Race was measured as a dichotomous variable where 1 = Non-Hispanic White and 0 = Other. Weekly work hours was measured from the time-diary data as minutes of work (including working, checking working, and other income generating activities). Following (Yavorsky et al., 2015), we calculated the sum of the minutes of work on the workday times 5 and the minutes of work on the nonworkday times 2, and then divided the sum by 60 to get a weekly estimate of work hours. Family n is the number of families in the sample at that wave. n is the number of individuals who reported data at that wave.

 $_{p < .05, *}^{*}$ 

Sex Roles. Author manuscript; available in PMC 2019 June 01.

 $_{P}^{+}$  - .10 and indicates comparisons between the subsample and the full sample at Wave 1.

Table 2

Comparisons across Waves 1 (Prebirth) and 2 (3-months Postpartum)

|                                                                     | Wave 1 ( | n = 75) | Wave 2 ( | (n = 52) | Wave 1 v | s. Wave 2 | (n = 30)    |
|---------------------------------------------------------------------|----------|---------|----------|----------|----------|-----------|-------------|
|                                                                     | Μ        | SD      | W        | SD       | Diff     | p         | t           |
| (a) Woi                                                             | kday     |         |          |          |          |           |             |
| Concurrent time in nonmarket work                                   | 15.75    | 28.67   | 57.29    | 48.87    | 32       | 0.86      | $4.10^{*}$  |
| Concurrent time in market work                                      | 369.92   | 123.42  | 338.94   | 121.14   | -50      | -0.51     | $-2.25^{*}$ |
| Concurrent leisure                                                  | 70.21    | 67.94   | 38.08    | 57.16    | -40.77   | -0.64     | -3.31       |
| Father nonmarket/mother market work (nontraditional specialization) | 22.71    | 35.21   | 31.98    | 47.43    | 8.53     | 0.21      | 0.69        |
| Mother nonmarket/father market work (traditional specialization)    | 25.33    | 39.46   | 101.06   | 67.66    | 74.17    | 2.53      | $6.36^{*}$  |
| Mother leisure/father work                                          | 41.97    | 51.79   | 37.83    | 49.02    | -7.43    | -0.15     | -0.77       |
| Father leisure/mother work                                          | 50.35    | 73.71   | 40.87    | 47.00    | 22.33    | 0.62      | $2.19^{*}$  |
| Family <i>n</i>                                                     | 75       | 10      | 52       | 5        |          | 30        |             |
| (I) Nonv                                                            | orkday   |         |          |          |          |           |             |
| Concurrent time in nonmarket work                                   | 91.89    | 105.26  | 141.88   | 100.18   | 49.04    | 0.48      | 1.96        |
| Concurrent time in market work                                      | 0.40     | 3.22    | 4.70     | 23.26    | 5.56     | 1.07      | 0.91        |
| Concurrent leisure                                                  | 167.00   | 133.39  | 121.22   | 127.05   | -42.28   | -0.28     | -1.11       |
| Father nonmarket/mother market work (nontraditional specialization) | 9.15     | 34.00   | 3.66     | 15.04    | -3.40    | -0.11     | -0.47       |
| Mother nonmarket/father market work (traditional specialization)    | 5.26     | 19.81   | 11.44    | 31.15    | 4.04     | 0.67      | 1.35        |
| Mother leisure/father work                                          | 46.29    | 65.18   | 48.54    | 62.96    | -0.84    | -0.01     | -0.04       |
| Father leisure/mother work                                          | 47.14    | 61.82   | 101.22   | 95.23    | 80.72    | 1.37      | 2.54 *      |
| Family <i>n</i>                                                     | 65       | 10      | 5(       | 0        |          | 25        |             |
| *<br>p < .05.                                                       |          |         |          |          |          |           |             |

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# Table 3

Clustered Fixed-Effects Regression Coefficients of the Change in Family Time across the Transition to Parenthood and Difference-in-Difference Estimates of Differences by Gender

Note. Work hours on the workday were controlled for in each model. d for each gender was calculated as B/SDpooled (men and women) baseline. d for the difference-in-difference estimate was calculated as dfather - dmother. Cohen (1987) guidelines for d state that d = 0.20 is small, d = 0.50 is medium, and d = 0.80 is large.

 $_{p < .05.}^{*}$ 

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# Table 4

Percentages of Parent's Time Spent in Particular Activities While Partner is Doing Childcare, Engagement, Housework, Leisure, and Paid Work at Wave 2

Kamp Dush et al.

|                              |        |                 | The pare   | nt is engaged in the foll | lowing activity X% of the | time:               |                     |                                    |
|------------------------------|--------|-----------------|------------|---------------------------|---------------------------|---------------------|---------------------|------------------------------------|
| While partner is engaged in: |        | Childcare       | Engagement | <b>Routine housework</b>  | Nonroutine housework      | Leisure             | Paid work           | Partner Time in Activity (M mins.) |
|                              |        |                 |            | (a) Work                  | kday                      |                     |                     |                                    |
| Childcare                    | Mother | 32.38%          | 5.99%      | 10.52%                    | 0.85%                     | 12.13%              | 24.66% <sup>*</sup> | 37.58*                             |
|                              | Father | 13.10%          | 5.75%      | 11.14%                    | 0.29%                     | 19.36%              | 50.36%              | 99.46 *                            |
| Engagement                   | Mother | 11.20%          | 11.76%     | 16.30%                    | 0.00%                     | 7.74%               | 12.61%              | 22.77                              |
|                              | Father | 3.17%           | 12.55%     | 9.21%                     | 0.00%                     | 10.76%              | 25.86%              | 31.50                              |
| Routine housework            | Mother | 17.57% *        | 9.81%      | 19.64%                    | 0.00%                     | 11.11%              | 24.56% <sup>*</sup> | 47.69                              |
|                              | Father | 7.81% *         | 6.73%      | 15.52%                    | 0.00%                     | 11.17%              | 45.31% <sup>*</sup> | 62.85                              |
| Nonroutine housework         | Mother | 1.92%           | 0.00%      | 0.00%                     | 0.00%                     | 0.00%               | 0.00%               | 0.38                               |
|                              | Father | 3.21%           | 0.00%      | 0.00%                     | 0.00%                     | 0.64%               | 0.00%               | 0.48                               |
| Leisure                      | Mother | 23.82% *        | 5.72%      | 9.77%                     | 0.16%                     | 35.20%              | 11.87%              | 78.94                              |
|                              | Father | 8.64% *         | 4.41%      | 11.64%                    | 0.00%                     | 40.80%              | 21.05%              | 75.90                              |
| Paid work                    | Mother | 11.69%          | 3.19%      | 7.80% *                   | 0.00%                     | 5.00%               | 72.31% *            | 462.83*                            |
|                              | Father | 3.61%           | 2.17%      | 3.20%                     | 0.00%                     | 2.15%               | 88.88% *            | $380.00$ $^{*}$                    |
|                              |        |                 |            | (b) Nonwo                 | orkday                    |                     |                     |                                    |
| Childcare                    | Mother | 32.19% *        | 5.11%      | 16.57%                    | 0.57% *                   | $15.56\%^{*}$       | 2.00%               | 34.02 *                            |
|                              | Father | 14.00%          | 7.05%      | 20.77%                    | 3.90% *                   | 46.27% <sup>*</sup> | 2.00%               | 91.58                              |
| Engagement                   | Mother | 12.65% *        | 7.99%      | 20.38%                    | 0.40%                     | 13.95%              | 0.63%               | 50.56                              |
|                              | Father | 4.21% *         | 8.43%      | 22.47%                    | 3.48%                     | 19.44%              | 1.96%               | 41.16                              |
| Routine housework            | Mother | 24.95% *        | 11.39%     | 31.06%                    | 1.74%                     | 19.04%              | 1.82%               | 86.84 *                            |
|                              | Father | $6.66\% \ ^{*}$ | 13.29%     | 26.21%                    | 8.24% *                   | 34.75% *            | 4.85%               | $117.10^{*}$                       |
| Nonroutine housework         | Mother | 5.51%           | 3.71%      | 12.44% *                  | 1.66%                     | 5.47%               | 1.20%               | 22.78                              |
|                              | Father | 0.60%           | 0.20%      | 3.17% *                   | 3.33%                     | 3.50%               | 1.20%               | 8.44                               |
| Leisure                      | Mother | 21.29%          | 4.61%      | 20.58% *                  | 1.68%                     | 47.43% *            | 2.41%               | 222.44 *                           |

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|                              |        |           | The pare   | nt is engaged in the fol | lowing activity X% of the | time:   |           |                                    |
|------------------------------|--------|-----------|------------|--------------------------|---------------------------|---------|-----------|------------------------------------|
| While partner is engaged in: |        | Childcare | Engagement | Routine housework        | Nonroutine housework      | Leisure | Paid work | Partner Time in Activity (M mins.) |
|                              | Father | 5.48% *   | 7.48%      | 7.81%                    | 3.08%                     | 63.00%  | 5.14%     | $169.76^{*}$                       |
| Paid work                    | Mother | 2.69%     | 0.77%      | 9.87%                    | 2.00%                     | 8.24%   | 4.43%     | 23.04                              |
|                              | Father | 0.13%     | 0.25%      | 4.06%                    | 0.50%                     | 7.40%   | 3.67%     | 11.64                              |

that partners spent in that activity while the parent was performing childcare, engagement, routine housework, nonroutine housework, or leisure. Thus, in the example discussed, mothers' partners spent, on Fathers were engaged in childcare 13% of the time during which their partners performed childcare. The \* indicates that 32% and 13% were significantly different from one another indicating that mothers average, 38 minutes performing childcare on workdays, and fathers' partners spent, on average, 99 minutes. In other words, fathers spent 38 minutes performing childcare and mothers spent 99 minutes on spent significantly more time performing childcare while their partner was performing childcare on workdays. The far right column titled "Partner Time in Activity (M mins)" shows the average minutes Note. As an example, the top left value for mothers should be interpreted as follows: On workdays, mothers were engaged in childcare 32% of the time during which their partners performed childcare. workdays.

p < .05 marks significant differences between mothers and fathers tested with *t*-test.