Published in final edited form as:

Fam Relat. 2013 December ; 62(5): 795–807. doi:10.1111/fare.12037.

Time in Parenting Activities in Dual-Earner Families at the Transition to Parenthood

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Abstract

Time in parenting was compared for new mothers and fathers in a sample of 182 dual-earner families. Parenting domains included positive engagement, responsibility, routine childcare, and accessibility. Time diaries captured parents' time use over a 24-hour workday and nonworkday when infants were 3 and 9 months old. Parents were highly involved with their infants. Mothers were more involved than fathers in positive engagement and routine childcare on both days and at each assessment, and allocated more available time on workdays to these domains than fathers, with one exception. Fathers and mothers allocated similar shares of available workday time to positive engagement at 9 months. Greater equity in responsibility and accessibility was found; Mothers spent more, and a greater share of, parenting time in responsibility than fathers on the 9-month workday only, and were more accessible on the 3 month workday only. Implications for parents in today's diverse families are discussed.

Keywords

father involvement; mother involvement; parenting time; family development; gender

In the U.S., 71% of children under 18 and 64% of children under six have a mother who works outside the home (U.S. Census Bureau, 2011). This, coupled with the popularity of “equally shared parenting” and “involved father” ideals (e.g., Gerson, 2009), makes it surprising that mothers devote twice as much time to childrearing as fathers (Bianchi, Robinson, & Milkie, 2006). Research has revealed gender differences in parental involvement with older children, but the developmental origins of these differences remain unknown. Exploring parental involvement at its inception – the transition to parenthood – is crucial to understanding later involvement patterns that have important implications for child and family functioning. Our study extends the literature on parental involvement by using time diary data from dual-earner, first-time parents to explore gender differences in multiple facets of parenting time in infancy.

Mothers are generally children's primary caregivers (Bianchi et al., 2006), and maternal involvement is closely linked with child outcomes (Flouri & Buchanan, 2004); however, a

large body of research also indicates the importance of fathers. Actively involved fathers have children who experience successful development in multiple domains (e.g., Lamb, 2010). Moves toward more egalitarian romantic relationships in recent decades (Cherlin, 2009), coupled with an increase in the proportion of married, dual-earner families, have shifted parenting ideals from the father as breadwinner to the father as co-parent, sharing childcare with his partner .

The emergence of “involved fathering” ideals (Gerson, 2009) that are particularly salient for middle class, dual-earner fathers (e.g., Townsend, 2002) encourage today's fathers to be more involved in childrearing than ever before. Further, contemporary parenting practices such as “equally shared parenting” have urged fathers to not only share, but to contribute equally to parenting with mothers (Deutsch, 2001). Yet, it is unclear to what extent fathers of infants meet these expectations, as the transition to parenthood spurs a more traditional division of labor (Katz-Wise, Preiss, & Hyde, 2010). Likewise, mothers – especially those who are working – may strive to meet social standards of “intensive mothering” that compel them to be primarily responsible for all aspects of their child's care (Douglas & Michaels, 2004), leaving little room for involved fathering. In fact, working mothers have increased their engagement time in recent decades despite working more hours outside the home than ever before (Bianchi et al., 2006).

Given the complementary but conflicting ideals of involved fathering, equally shared parenting, and intensive mothering, it is important to investigate how well contemporary, dual-earner parents are re-negotiating their parenting roles. Some studies indicate persistent discrepancies in involvement between mothers and fathers (e.g., Sayer, Bianchi, & Robinson, 2004), whereas others point to a more equitable division of parenting activities among dual-earner parents (Milkie, Raley, & Bianchi, 2009). Existing research on parenting time has often used the American Time Use Survey (ATUS; U.S. Bureau of Labor Statistics, 2006), a time-use study that is collected as part of the Current Population Survey of the U.S. Bureau of Labor Statics. These valuable data provide reliable cross-sectional estimates of individual parenting time but do not include mothers and fathers from the same families. Additionally, parental involvement comparisons are often based on data from parents with older and multiple children (e.g., McBride & Mills, 1993), and do not compare involvement in a wide range of specific parenting activities (e.g., Milkie et al.). Moreover, in-depth, quantitative comparisons of parental involvement are lacking in the larger literature on parenting due to the propensity for researchers to consider the quality of mothers’ parenting and the quantity of fathers’ parenting.

We provide a descriptive analysis of how dual-earner, first-time parents divided and allocated parenting time on workdays and nonworkdays to describe how this time is structured in families balancing work and family demands. Particularly, we compared involvement in positive engagement, responsibility, routine childcare, and accessibility activities assessed via 24-hour time diaries on workdays and nonworkdays when infants were 3 and 9 months of age.

Perspectives on Parental Involvement

“Doing Gender” and Parental Involvement

One might expect to find gender differences in parental involvement even in contemporary dual-earner families. A gender perspective suggests that these differences between parents may be a result of “doing gender”, as both women and men define and express their gender through mundane, everyday interactions (West & Zimmerman, 1987). Thus, women may devote more time than men to parenting because doing so is consistent with cultural notions of femininity. In turn, even as today's men devote more time to parenting than previous generations of fathers, they are unlikely to meet or exceed mothers' involvement in parenting. Instead, fathers may act as “helpers”, maintaining lower involvement than their partners to achieve consistency with cultural notions of masculinity. In line with this perspective, it is expected that the greatest gender differences in involvement would occur in domains that are closely associated with a particular gender, such as the routine child care domain that includes changing diapers and giving baths, which are stereotypically “feminine” tasks.

Evolutionary Perspective on Parental Involvement

Gender differences in involvement may also be driven by innate tendencies to maximize reproductive success and ensure offspring survival. Put simply, a father will invest in the care of his young when 1) their survival is maximized by his care and 2) he receives a reproductive benefit (for review see Geary & Flinn, 2001). Reproductive success is maximized when both parents share in the care of their child; partners gain more consistent sexual access and mothers' infertility time following pregnancy is reduced when she is well cared for (Hamilton, 1984). Historically the father's investment in the child has been primarily financial; however, in increasingly challenging social and economic contexts, the return to paternal investment is increasing (Kaplan, 1996). Today's fathers interact with children in developmentally stimulating ways to ensure they are prepared for social interaction and employment in an increasingly complex world (Lancaster & Lancaster, 1987). Moreover, when mothers are employed and unable to provide primary care, fathers must provide more routine childcare, share greater responsibility, and be readily accessible to dependent infants; indeed, fathers are more involved when mothers work (Craig, 2006). At the same time, mothers are unlikely to relinquish primary care even when fathers are involved (Bianchi et al., 2006). As a result of mothers' prolonged, intensive caregiving to infants and fathers' necessary provision for both mother and child, specialization in parenting developed and persists (Kaplan & Lancaster, 2003).

Conceptualization and Measurement of Parental Involvement

Following Lamb, Pleck, Charnov, and Levine (1987), we conceptualized parental involvement as engagement, responsibility, and accessibility. Consistent with Pleck (2010), we refer to engagement as “positive engagement” and focus primarily on activities that promote optimal child development, such as playing, singing, or reading with children. Although often included in measures of engagement, basic childcare activities make up a significant portion of parenting activities during infancy; hence we measured routine

childcare (e.g., feeding, bathing, or diapering the child) separately from positive engagement. Responsibility refers to the indirect role parents take in ensuring their children's needs are met and resources are readily available (Lamb et al.). Our responsibility measure included activities such as scheduling doctor appointments or making childcare arrangements. Accessible parents are available to their children even when they are not directly or indirectly caring for them (Lamb et al.). Our accessibility measure included the time in which parents were close enough and able to respond to their infants but were not participating in any activities either with or for their child.

We used time diary methodology and focus our review of prior literature on time diary studies because this method is among the best for assessing time use. Time diaries are superior to stylized time-use questions (e.g., How much time per week do you spend changing diapers?), which commonly overestimate time – especially for intermittent, yet frequent activities like child care (Hofferth & Sandberg, 2001). Frequencies, or counts of how often an individual performs an activity (e.g., McBride & Mills, 1993) fail to take into account actual time expenditures and make comparisons between parents problematic. In contrast, time diaries provide chronologies of events that lessen social desirability bias in reporting (Kan & Pudney, 2008), as time must be decreased in one activity to account for increases in another.

Time Diary Research on Positive Engagement Activities

Popular notions suggest fathers spend more parenting time “playing” with their children relative to mothers. However, using time diary data from parents of multiple children of various ages, McBride and Mills (1993) and Craig (2006) found lower engagement among fathers compared to mothers, although fathers spent a greater proportion of their parenting time in play with preschoolers (McBride & Mills). Craig's study was able to separate parental engagement from other aspects of involvement, but children were as old as 12, many families had more than one child, and engagement time with each child was not measured separately. In Pleck's (1997) review of time diary studies, he found that fathers allocated a lower proportion of their parenting time to positive engagement than mothers; yet the children studied ranged in age and measures of positive engagement were inconsistent across studies. As today's parents are urged to invest considerable time in the intellectual stimulation of their infants (Quirke, 2006), parents may strive to meet these demands by prioritizing engagement above all other forms of involvement.

Time Diary Research on Responsibility Activities

Responsibility activities ensure children's needs are met and are an integral aspect of parental involvement (Lamb et al., 1987); however, time diary comparisons of parental responsibility are few. Using questionnaires measuring the degree of authority over, rather than time spent in responsibility activities, McBride and Mills (1993) found that fathers were more involved in responsibility activities than their partners. Responsibility is indirect care, and may translate into greater flexibility and a more equitable division of responsibility time between parents; time diaries from parents with children under six suggest that this may be the case (Milkie et al., 2009). Using time diaries from families with children under 13, Raley, Bianchi, and Wang (2012) showed that father involvement in responsibility was

greater when mothers were employed. Yet, we have little knowledge of how dual-earner parents of infants divide and allocate their responsibility parenting time.

Time Diary Research on Routine Childcare

Time diary evidence consistently places the burden of routine childcare on women (Bryant & Zick, 1996; McBride & Mills, 1993; Sayer et al., 2004). Bryant and Zick found that working, married women spent more time than fathers caring for children; however, this measure of care included a wide range of activities, including teaching, managing, and entertaining, rather than the demanding and inflexible routine childcare activities common during infancy. Sayer et al. measured daily childcare time in a manner similar to the current study; however, parents were from different families, had more than one child, and children were as old as 18. McBride and Mills also used a comparable routine childcare measure, but studied families with children who ranged in age from three to five – children with less demanding care needs. Thus, we have little understanding of how working, first-time parents compare in terms of basic childcare time.

Time Diary Research on Accessibility

Accessible parents are present and available to respond to children's requests for attention. Using time-use data from parents of older children, Pleck (1997) reported that fathers were available to their children for an average of 3.6 hours per day, although still less accessible than mothers. However, Pleck's samples consisted of single- and dual-earner families of children as old as 18, and we know that parenting time varies by family earner status (Raley et al., 2012) and child age (e.g., Deluccie & Davis, 1991). Infants require constant supervision; thus, this review likely underestimated accessibility time for parents of infants. Similarly, McBride and Mills (1993) found that working mothers were more accessible to their preschoolers than fathers. However, their accessibility measure included all direct interaction with the child, making distinct comparisons between positive engagement and accessibility difficult. In the context of maternal employment, dual-earner fathers may be highly accessible to their children, looking after children when mothers are away, consistent with their “helper” role. In contrast, “intensive mothering” may reduce mothers’ accessibility time, as they may fill their limited time with active, rather than passive, involvement.

The Present Study

Dual-earner parents face considerable time pressure when negotiating work and family demands (Jacobs & Gerson, 2004). Yet it is within the context of the dual-earner family that fathers may have the most opportunities to become involved, moving mothers and fathers toward greater equality in parenting time. At the same time, today's new parents negotiate complementary but conflicting cultural prescriptions of “involved fathering”, “equally-shared parenting”, and “intensive mothering”. Our study addressed the following research questions: 1) Does parenting time differ between dual-earner parents experiencing first-time parenthood within the four involvement domains? and 2) Are there gender differences in the allocation of parenting time (i.e., proportions of domain-specific involvement)?

Equally shared parenting and involved fathering ideals encourage father involvement and may provide opportunities for mothers to practice intensive mothering. However, both the gender and evolutionary perspectives suggest that mothers will remain more involved with infants than fathers overall. Moreover, intensive mothering, an extreme manifestation of femininity, stands in stark contrast to equally shared parenting and maintains inequality in parenting time, particularly in engagement and routine childcare activities that define notions of femininity and motherhood (West & Zimmerman, 1987). Because intensive mothering prioritizes active involvement (Douglas & Michaels, 2004), we expected mothers to be more involved than fathers in all parenting domains except accessibility.

Amidst a parenting landscape that encourages involved fathering and stimulating, child-centric parenting (Gerson, 2009; Quirke, 2006), we expected both parents to allocate the majority of their parenting time to positive engagement. However, in accordance with the intensive mothering and gender perspectives, we expected mothers to allocate greater shares of parenting time to all parenting domains excluding accessibility, when compared to fathers. Finally, in line with notions of intensive mothering, involved fathering in the context of maternal employment, and gender and evolutionary perspectives that describe a “helper” role for fathers, we expected fathers to allocate a greater proportion of their parenting time to accessibility than mothers.

Method

Participants and Procedures

Data came from the New Parents Project, a longitudinal study designed to examine father involvement and maternal gatekeeping. Data were collected from 182 dual-earner families experiencing first-time parenthood residing in a large, Midwestern city in the third trimester of pregnancy and at 3, 6, and 9 months postpartum. We compared parents' time diary reports of involvement at the 3 and 9 month assessments to capture the greatest variation in parenting time use, as these ages mark significant differences in the developmental capabilities of children. Participants were recruited through childbirth education classes, newspaper ads, and flyers posted at doctors' offices, pregnancy and health centers. Parents must have been married or cohabiting, at least 18 years old, expecting their first child, the biological parents of the child, able to read and speak English, employed during the third trimester and planning to return to paid employment after the birth. Parents received modest incentives for participation.

Pen-and-paper time diaries were completed individually by parents for their most recent workday and nonworkday during the week immediately preceding the 3 and 9 month interviews; on average, 5.5 days elapsed from diary day until time of interview. Time diary collection closely followed the format of the ATUS, a nationally representative, cross-sectional, telephone time-use study (U.S. Bureau of Labor Statistics, 2006). Parents reported all activities beginning at 4 AM on the target day and ending at 4 AM on the following day. Parents reported their location, primary, secondary, and tertiary activities, who they were with, who the primary activity was for, and if the infant was in their care at that time (postpartum). Primary activities were defined as the parent's main activity, whereas secondary and tertiary activities were defined as activities performed simultaneously but

with less importance. Parents were instructed to write their own activity description rather than choose from a predefined list.

Diaries were reviewed with the participant by a trained interviewer and audio recorded to ensure correct reporting. Some parents were unable to complete pen-and-paper time diaries during the assigned week. In this case, interviewers used conversational interviewing techniques such as those used by the ATUS, including probing in a non-leading way, redirection from erroneous information, and ensuring reported activities occurred on the target day rather than a “usual” day (U.S. Bureau of Labor Statistics, 2006). Research assistants used audio and paper time diaries to enter data into SPSS, categorizing specific activities into broader categories. For example, the activity of “making bottles for the baby” was entered as “Preparing Meals or Bottles for Household Child”. To establish consistent coding between the researchers, all assistants overlapped on nine diaries ranging in difficulty, and then individually completed the remainder of the diaries. Upon completion of the entire sample, research assistants cross-checked diaries using paper and audio reports and conferenced on major discrepancies.

Of the full sample (182), 4 (2.2%) mothers and 6 (3.3%) fathers attrited at 3 months. Of those who remained, 132 mothers and 141 fathers completed a workday time diary, and 147 mothers and 154 fathers completed a nonworkday time diary. At 9 months, 27 (14.8%) mothers and 30 (16.5%) fathers from the full sample attrited; 155 mothers and 152 fathers remained. Of these parents, 136 mothers and 139 fathers completed a workday time diary, and 154 mothers and 149 fathers completed a nonworkday time diary. Only working parents are included in the final sample. The majority (89%) of parents who completed time diaries at 3 months were married and income averaged \$82,617 (\$41,915 *sd*). Mothers averaged 29 (3.91 *sd*) years old, 76% held at least a bachelor's degree, and 86% were White. Fathers were around 31 years (4.67 *sd*) old, 69% held at least a bachelor's degree or higher, and 88% were White.

Sensitivity analyses were conducted to determine if respondents who did not complete time diaries were demographically different from respondents who did complete at least one diary day. Logistic regression analyses indicated that fathers who did not respond to time diaries at 3 months postpartum had lower family incomes than fathers who completed at least one time diary, and at 9 months postpartum, fathers who did not complete time diaries were more likely to be cohabiting versus married. No other demographic differences were found for either parent.

Parents also reported average work hours per week at each assessment using categories ranging from 0 to 10, 11 to 20, 21 to 30, 31 to 40, 41 to 50, 51 plus. Work hours were top-coded. Fathers worked significantly more hours than mothers at each phase; roughly 8 and 6 hours at 3 and 9 months, respectively. Fathers worked an average of 44 hours at each time point, whereas mothers increased work hours between 3 and 9 months from 36.8 hours to 38 hours.

Measures

Positive engagement—Positive engagement activities consisted of the total time (in minutes) parents spent in the following activities: reading, playing, arts or crafts, talking and listening, and soothing or holding the infant.

Routine childcare—Routine childcare time included all minutes parents reported: physical care (e.g., waking the infant up or getting them ready to go), feeding (breast, bottle, or solids), changing diapers, preparing meals or bottles, putting the infant to bed, giving baths, dressing the infant, and breast pumping.

Responsibility—The responsibility measure included all minutes in: child-related organization and planning (e.g., packing diaper bags), looking after the infant (e.g., watching, keeping an eye on), waiting for the infant, attending meetings or conferences, waiting associated with the child's education or infant health, providing and obtaining medical care, using childcare services, making telephone calls and exchanging emails to paid childcare providers, travel related to caring for and helping the infant, and picking up or dropping off the infant.

Accessibility—Accessibility included the total time (in minutes) parents reported with their infant, but no involvement in any of the aforementioned parenting activities or sleep.

Results

Analysis Plan

Domain-specific parenting time was calculated for each parent. Total parenting time in each domain included the sum of primary, secondary, and tertiary activities; however, parenting time was not double counted, such that a parent performing two routine childcare tasks simultaneously did not receive double the amount of parenting time that a parent performing only one routine childcare task at a time received. Parenting time was counted separately when secondary or tertiary activities were categorized within different parenting domains.

Next, we calculated each parent's total available parenting time (not shown), calculated as $1440 - (\text{total sleep} + \text{total work} + \text{total work-related} + \text{total travel to/from work})$, and the proportion of available parenting time for each child-related domain (i.e., domain-specific time/total available time). Thus, available time is more appropriate to compare how parents allocate their parenting time with their child, rather than how much time parents spend parenting. We compared mothers' and fathers' available time on the workday and nonworkday at each time point and found only one difference: Mothers were available for 69 more minutes on workdays when their child was 3 months. Of note, some parents' total involvement exceeded available parenting time, pushing the ratio of total involvement to available involvement above 1, a result of multitasking. For instance, a parent may have reported two or three simultaneous activities that were counted in two or three different parenting domains. Thus, their total parenting time exceeded their available parenting time. In additional analyses (not shown) and consistent with prior research (Craig, 2006), we

found that mothers reported multitasking more often than fathers, most commonly the co-occurrence of engagement and routine childcare activities.

Paired *t*-tests were used to compare mothers and fathers in absolute and allocated domain-specific parenting time on a workday and nonworkday at 3 and 9 months. Reported results are limited to the paired *t*-test samples, yielding final workday samples of 116 and 119, and nonworkday samples of 114 and 138, at 3 and 9 months, respectively. To assess whether significant change occurred over time in each domain, we used paired *t*-tests to compare mothers at 3 months to mothers at 9 months, and the same for fathers. Comparisons were limited to 101 mothers and 113 fathers on the workday, and 111 mothers and 113 fathers on the nonworkday.

Positive Engagement

Workday—Mothers were significantly more involved in engagement activities like playing with their infants than fathers at each time point on the workday (Table 1). Mothers spent an average of 28 more minutes per day than fathers in positive engagement (3 months = 22.81 min; 9 months = 32.76 min). When proportions of available parenting time (excluding sleep and work-related time) were considered, however, there were no differences in positive engagement on the workday at 3 months (Table 1). At 9 months, mothers spent a greater proportion of their available parenting time engaged with their children than fathers (Table 1). There was no change in positive engagement over time for either parent (Table 1).

Nonworkday—On the nonworkday, at each time point, mothers were significantly more engaged than fathers (Table 1). Mothers averaged two and a half more hours than fathers in positive engagement on the nonworkday (3 months = 160.97 min; 9 months = 156.79 min). Mothers significantly decreased their nonworkday positive engagement over time (Table 1).

Responsibility

Workday—There were no significant differences in responsibility time between parents at 3 months (Table 2). At 9 months, mothers were significantly more involved in responsibility activities than fathers (Table 2), though this difference was small (13.12 min). When available parenting time was considered, mothers allocated a significantly greater proportion of their available parenting time to responsibility than fathers at 9 months (Table 2). There were no changes in responsibility over time for either parent (Table 2).

Nonworkday—There were no significant differences in responsibility time between parents on the nonworkday at either time point, or for either parent across time (Table 2).

Routine Childcare

Workday—Mothers were significantly more involved in routine childcare than fathers on the workday at each time point (Table 3). Mothers decreased in routine childcare time from 3 to 9 months by over three-quarters of an hour, but fathers' routine childcare time remained virtually unchanged from 3 to 9 months. Differences in routine childcare time expenditure were large, with mothers averaging 106.32 and 67.53 more minutes than fathers at each time point, respectively. Mothers also allocated a significantly greater proportion of their

available parenting time to routine childcare than fathers – nearly 20% more on the workday at 3 months, and experienced a significant increase in routine childcare over time (Table 3).

Nonworkday—Fathers were more involved in routine childcare on the nonworkday compared to the workday; however, this increase was not enough to eliminate significant differences between parents at each time point (Table 3). Mothers averaged 134.14 and 73.02 more minutes in routine childcare than fathers at 3 and 9 months, respectively, and spent significantly more time in routine childcare over time; Fathers spent significantly less (Table 3).

Accessibility

Workday—Mothers were more accessible than fathers on the workday at 3 months; however, the magnitude of this difference was small, only 25 minutes (Table 4). When available parenting time was compared, no gender differences in the proportion of available parenting time spent accessible to their infants were found. Fathers were more accessible over time (Table 4).

Nonworkday—No significant differences between parents' total accessibility time were found on the nonworkday at either time point; However both parents increased in accessibility (Table 4).

Summary of Major Findings

In sum, we found that mothers were more involved than fathers in positive engagement and routine childcare on both diary days and at each time point, and spent more of their available time on workdays in these types of involvement than fathers, with one exception: fathers and mothers spent similar proportions of available workday time in positive engagement at 9 months. Mothers spent more time and a greater proportion of their parenting time in responsibility than fathers on the 9-month workday, but at 3 months and on nonworkdays there were no parent gender differences in this domain. Finally, with the exception of greater maternal accessibility on the workday at 3 months, mothers and fathers were similarly accessible to their infants.

Discussion

This study has provided a unique look at parental involvement during infancy in contemporary, dual-earner families, and is among the few that has compared parental involvement in specific domains and in quantitative terms using data derived from 24-hour time diaries. Parenthood has changed; today's fathers are encouraged to be actively involved co-parents, equally sharing with mothers in the care of their child (Deutsch, 2001). New parenting norms may have encouraged equal involvement; however, mothers face significant pressure to be actively involved in all aspects of childcare and to remain their child's primary caregiver (Douglas & Michaels, 2004). These social pressures are especially salient for dual-earner parents (e.g., Townsend, 2002), a defining characteristic of our sample.

Indeed, these parents were highly involved with their children. For instance, on the nonworkday at 9 months, parents each reported over 2.75 hours of positive engagement time with their infants. Parents were also highly accessible, spending at least 1.3 hours on workdays, and 2.5 hours on nonworkdays, in passive care for their child. However, these findings cannot obscure the fact that for almost every comparison within the active and demanding parenting domains of positive engagement and routine childcare, mothers reported greater involvement than fathers. That accessibility was the most equitably shared parenting activity is not surprising given gender and evolutionary perspectives that describe even highly involved fathers as less proximal care providers than mothers. Yet, for dual-earner mothers, this form of assistance from fathers brings little relief from frequent and necessary childcare activities during infancy.

Strikingly, mothers not only spent more time than fathers in basic childcare, but allocated more than twice as much available parenting time to routine childcare than fathers at each time point – differences that remained even after breastfeeding and pumping were accounted for. Surprisingly, we found that fathers allocated a greater share of their available parenting time to accessibility, rather than positive engagement, at each time point. At the same time, mothers' proportion of available parenting time spent in engagement increased from 3 to 9 months, surpassing her accessibility allocation at 9 months, and more than doubling fathers' increase. What is more, mothers filled nearly 70% of their time after work-related activities and sleep were excluded with some form of childcare on the 9 month workday. In comparison, fathers allocated less than 50% of their available parenting time on the 9 month workday to child-related care, a finding consistent with the gender and evolutionary perspectives. Importantly, we extend previous time diary findings indicating that mothers of older children are more engaged than fathers (Craig, 2006; McBride & Mills, 1993; Pleck, 1997) by showing that discrepancies in engagement time begin as early as the first few months of a child's life.

Our findings suggest that gender divisions in parenting continue to persist despite idealized notions of equally shared parenting. When fathers did share in their child's care, the care came in the form of responsibility or accessibility, arguably the least demanding forms of involvement. Parents continued to “do gender,” as fathers occupied “helper” roles while mothers remained children's primary caregivers even when available parenting time constraints were similar. These findings are in line with the intensive mothering, gender, and evolutionary perspectives, and support previous findings that the transition to parenthood cements a traditional division of household labor (Katz-Wise et al., 2010). For women juggling work and family demands, parenting time investments may come at the price of personal and couple time, leaving these women especially vulnerable to declines in well-being and relationship quality. Moreover, personal and couple adjustment can suffer when first-time parent's expectations for their partner's involvement are unmet (Biehle & Mickelson, 2011). Given the importance of healthy parental relationships for children's positive development, policies and programs designed to increase fathers' involvement in active care, and particularly in routine childcare, may provide the most long-term benefits for all family members.

Though our sample consisted primarily of married parents, these striking discrepancies in parental involvement are likely to be found in diverse family contexts. An evolutionary perspective suggests that paternal investment may be even lower in relationships that are perceived as less permanent, such as cohabitation or dating partnerships (e.g., Gangestad & Simpson, 2000). Often young and socioeconomically disadvantaged (Hamilton, Martin, & Ventura, 2011), unmarried mothers may benefit the most from paternal involvement, offering mothers opportunities to invest time in education or other personal development activities. Because father involvement declines sharply following relationship dissolution (Tach, Mincy, & Edin, 2010) and unmarried parents are not likely to see their relationships endure (Kamp Dush, 2011), establishing highly involved fathering routines from birth may protect mothers and children from some of the disadvantage associated with single motherhood.

Most parents who remain partnered will have additional children, and a gendered division of labor is likely to persist (Aldous, Mulligan, & Bjarnason, 1998). This suggests working mothers of multiple children will strive to meet standards of intensive mothering by continuing to outpace fathers' involvement; recent findings indicate willingness for mothers to become self-employed, working from home to multitask care and work (Craig, Powell, & Cortis, 2012). Thus, while involved fathering may have the potential to make shared parenting a realized goal, intensive mothering, "doing gender," and innate differences may continue to fuel discrepant involvement in the daily care of infants among many others. Substantial parenting time investments may even deter mothers from having additional children, effectively reducing reproductive success, an idea which aligns closely with lower fertility rates in developed nations with intensive parenting strategies, such as the U.S. (Kohler, Billari, & Ortega, 2006).

There is likely demographic and geographic variability in parenting practices even among dual-earner couples in a nation as diverse as the U.S., and future research should replicate these results in other samples of dual-earner couples, including the self-employed. However, our sample of primarily advantaged, middle-class, dual-earner couples caring for infants in the Midwestern U.S. in the late 2000s was ideal for studying the intersection of the current parenting ideals of involved fathering, equally shared parenting, and intensive mothering, as such couples are likely to hold egalitarian attitudes regarding the division of labor (Cunningham, Beutel, Barber, & Thornton, 2005) but are also likely to endorse child-centric parenting (Douglas & Michaels, 2004). Despite the strengths of our study, including detailed measurement, multiple time points, and father-reported involvement, some limitations remain. First, respondent burden of time diaries is high; thus, parents who responded may have been the most involved with their children. Second, parents may have completed the diaries inconsistently, such that some waited until the end of the day to recall activities, or may have neglected to record simultaneous activities. In these cases, involvement may be underestimated. Finally, our study did not examine individual factors that may be associated with parental involvement; we only described raw differences in parents' involvement with infants. Yet, we feel this simple comparison is appropriate given current family policy strategies aiming to increase father involvement.

Our findings have revealed notable differences in parenting time among contemporary dual-earner mothers and fathers with infant children, highlighting gender as a pivotal force in shaping early parental involvement. Despite considerable gains in gender equity in recent decades, working mothers' primary childcare burden persists and is likely to continue. Family systems approaches that encourage the development of coparenting strategies prior to a child's birth such as communication regarding involvement expectations, establishing parenting goals, and compromise (e.g., Feinberg, Kan, & Goslin, 2009), should be incorporated into programs that aim to increase father involvement. Given that supportive coparenting encourages father involvement even after relationship dissolution (Kamp Dush, Kotila, & Schoppe-Sullivan, 2011), this approach may yield the best long-term results for today's diverse families.

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Table 1

Positive Engagement

	Workday						Nonworkday				<i>T</i> -test
	<i>n</i>	<i>M</i>	<i>SD</i>	95% CI	<i>T</i> -test	<i>n</i>	<i>M</i>	<i>SD</i>	95% CI		
3 Months											
Absolute											
Mother	116	82.08	69.72	69.26-94.90	-	119	177.45	119.63	155.74-199.17	-	
Father	116	59.27	56.14	48.94-69.59	-	119	132.49	116.24	11.39-153.59	-	
<i>T</i> -test	116	22.81	84.98	7.18-38.44	2.89**	119	44.97	160.97	15.74-74.19	3.05**	
Proportion Available											
Mother	116	0.15	0.12	0.13-0.17	-	-	-	-	-	-	
Father	116	0.13	0.12	0.11-0.15	-	-	-	-	-	-	
<i>T</i> -test	116	0.02	0.17	-0.01-0.05	1.34	-	-	-	-	-	
9 Months											
Absolute											
Mother	114	106.30	82.54	90.98-121.61	-	138	238.20	127.39	216.75-259.64	-	
Father	114	73.54	59.62	62.47-84.59	-	138	165.53	119.63	145.39-185.67	-	
<i>T</i> -test	114	32.76	90.81	15.91-49.61	3.85***	138	72.67	156.79	46.27-99.06	5.44***	
Proportion Available											
Mother	114	0.21	0.15	0.18-0.23	-	-	-	-	-	-	
Father	114	0.15	0.12	0.13-0.18	-	-	-	-	-	-	
<i>T</i> -test	114	0.05	0.17	0.02-0.08	3.33**	-	-	-	-	-	
Significant Difference											
Over Time											
Mother <i>T</i> -test	101	-10.57	101.6	-30.63-9.48	1.05	111	-48.56	158.49	-78.37-18.75	3.23**	
Father <i>T</i> -test	113	-13.82	81.39	-28.99-1.35	1.81	116	-19.65	146.12	-46.51-7.23	1.45	

Note.

**
 $p < 0.01$ ***
 $p < 0.001$.

Table 2

Responsibility

		Workday					Nonworkday				
		<i>n</i>	M	SD	95% CI	<i>T-test</i>	<i>n</i>	M	SD	95% CI	<i>T-test</i>
3 Months											
Absolute											
	Mother	116	38.58	37.48	31.69-45.47	-	119	28.54	57.27	18.14-38.93	-
	Father	116	29.64	45.47	21.28-38.00	-	119	38.98	71.88	25.94-52.03	-
	<i>T-test</i>	116	8.94	60.12	-2.12-19.99	1.60	119	-10.44	90.12	-26.80-5.91	1.26
Proportion Available											
	Mother	116	0.07	0.06	0.06-0.08	-	-	-	-	-	-
	Father	116	0.06	0.10	0.04-0.08	-	-	-	-	-	-
	<i>T-test</i>	116	0.01	0.11	-0.01-0.03	0.71	-	-	-	-	-
9 Months											
Absolute											
	Mother	114	36.47	39.79	29.09-43.86	-	138	35.91	44.25	28.47-43.36	-
	Father	114	23.35	31.49	17.51-29.19	-	138	33.62	68.32	22.11-45.11	-
	<i>T-test</i>	114	13.12	49.01	4.03-22.22	2.86**	138	2.30	77.56	-10.76-15.35	0.35
Proportion Available											
	Mother	114	0.07	0.08	0.06-0.09	-	-	-	-	-	-
	Father	114	0.05	0.07	0.04-0.06	-	-	-	-	-	-
	<i>T-test</i>	114	0.02	0.09	0.01-0.04	2.71**	-	-	-	-	-
Significant Difference											
Over Time											
	Mother <i>T-test</i>	101	1.21	51.33	-8.92-11.34	0.24	111	-7.36	71.95	-20.89-6.17	1.08
	Father <i>T-test</i>	113	7.09	54.22	-3.02-17.19	1.39	116	0.89	90.70	-15.79-17.57	0.11

Note.

 $p < 0.01$.

Table 3

Routine Childcare

	Workday					Nonworkday				
	<i>n</i>	<i>M</i>	<i>SD</i>	95% CI	<i>T-test</i>	<i>n</i>	<i>M</i>	<i>SD</i>	95% CI	<i>T-test</i>
3 Months										
Absolute										
Mother	116	150.46	73.43	136.95-163.96	-	119	197.88	94.22	180.78-214.99	-
Father	116	43.49	40.47	36.05-50.93	-	119	66.57	60.46	55.59-77.55	-
<i>T-test</i>	116	106.97	81.49	91.98-121.95	14.14***	119	131.31	113.04	110.79-151.83	12.67***
Proportion Available										
Mother	116	0.28	0.13	0.25-0.30	-	-	-	-	-	-
Father	116	0.09	0.08	0.08-0.11	-	-	-	-	-	-
<i>T-test</i>	116	0.19	0.15	0.16-0.21	13.57***	-	-	-	-	-
9 Months										
Absolute										
Mother	114	108.49	75.33	94.51-122.47	-	138	164.50	78.63	151.26-177.74	-
Father	114	42.78	32.49	36.75-48.81	-	138	87.82	68.19	76.34-99.30	-
<i>T-test</i>	114	65.71	84.69	49.99-81.43	8.28***	138	76.68	100.86	59.70-93.66	8.95***
Proportion Available										
Mother	114	0.22	0.21	0.19-0.26	-	-	-	-	-	-
Father	114	0.09	0.07	0.08-0.10	-	-	-	-	-	-
<i>T-test</i>	114	0.13	0.23	0.09-0.18	6.14***	-	-	-	-	-
Significant Difference										
Over Time										
Mother <i>T-test</i>	101	46.52	107.67	25.27-67.78	4.34***	111	38.36	97.02	20.11-56.651	4.17***
Father <i>T-test</i>	113	0.34	44.39	-7.94-8.61	0.08	116	-18.27	77.97	-32.61-3.93	2.52*

Note.

* $p < 0.05$ *** $p < 0.001$.

Table 4

Accessibility

3 Months													
Absolute		<i>n</i>	<i>M</i>	<i>SD</i>	Workday		<i>T</i> -test	<i>n</i>	<i>M</i>	<i>SD</i>	Nonworkday		<i>T</i> -test
						95% CI						95% CI	
	Mother	116	130.45	98.11	112.41-148.49		-	119	333.90	176.11	301.93-365.87		-
	Father	116	105.10	86.04	89.28-120.93		-	119	339.56	196.62	303.87-375.26		-
	<i>T</i> -test	116	25.34	120.69	3.15-47.54		2.26*	119	-5.66	241.12	-49.44-38.11		0.26
Proportion Available													
	Mother	116	0.24	0.17	0.21-0.27		-	-	-	-	-		-
	Father	116	0.22	0.18	0.19-0.25		-	-	-	-	-		-
	<i>T</i> -test	116	0.02	0.22	-0.03-0.06		0.74	-	-	-	-		-
9 Months													
Absolute		<i>n</i>	<i>M</i>	<i>SD</i>	Workday		<i>T</i> -test	<i>n</i>	<i>M</i>	<i>SD</i>	Nonworkday		<i>T</i> -test
	Mother	114	98.44	94.28	80.94-115.93		-	138	240.67	151.56	215.16-266.19		-
	Father	114	80.24	78.53	65.67-94.81		-	138	248.06	183.61	217.15-278.97		-
	<i>T</i> -test	114	18.20	120.06	-4.07-40.48		1.62	138	-7.38	218.06	-44.09-29.32		-0.40
Proportion Available													
	Mother	114	0.19	0.17	0.16-0.22		-	-	-	-	-		-
	Father	114	0.17	0.17	0.14-0.20		-	-	-	-	-		-
	<i>T</i> -test	114	0.02	0.23	-0.02-0.06		0.84	-	-	-	-		-
Significant Difference													
Over Time													
	Mother <i>T</i> -test	101	18.23	119.97	-5.46-41.91		1.53	111	89.00	219.05	47.80-130.20		4.28***
	Father <i>T</i> -test	113	33.93	102.30	14.86-52.99		3.53***	116	92.69	240.06	48.54-136.84		4.16***

Note.

* $p < 0.05$ *** $p < 0.001$