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Signs of Change? At-Home and Breadwinner Parents' Housework and Child-Care Time

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Abstract

We analyze American Time Use Survey (ATUS) data to examine patterns in domestic work among at-home and breadwinner parents to further gauge how time availability, relative earnings, and gender shape time use in couples with extreme differences in earnings and work hours. We find that involvement in female-typed housework is an important driver of overall housework time. It is counter-normative housework behavior by at-home fathers that shapes conclusions about how time availability, relative resources, and gender influence parents' housework. While time availability appears to shape child care in comparable ways across parents, mothers are more engaged in child care than similarly-situated fathers. Overall, our comparisons point to the importance of distinguishing among gender-normative housework tasks and accounting for differences in engagement on work and non-work days. Our results also provide a basis for assessing the social significance of growing numbers of parents in work-family roles that are not gender-normative.

Keywords

Child Care; Employment; Fathers; Gender; Inequality; Mothers

Social analysts claim that increases in numbers of breadwinner mothers and at-home fathers are evidence of a shift in how gender shapes contemporary work and family life (Mundy, 2012; Rosin, 2010; Smith, 2009). Few scholars dispute that more mothers are working, and, sometimes, out-earning their male partners as more fathers take on increased responsibility at home (in limited cases leaving employment altogether to care for their children). However, whether these shifts are evidence of significant change in the embedded institutional and cultural forces that support gender inequality is not clear. Indeed, some prominent scholars have argued that change in gendered social systems is uneven, and, perhaps "stalled" (Coontz, 2013; England, 2010) and that much of the breakdown in gender progress is rooted in the organization, especially, of intimate relationships and family life (England, 2010).

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Parenthood is a key family process shaping the adoption and maintenance of more gendertraditional work/family attitudes and behavior (Bianchi, Sayer, Milkie, & Robinson, 2012; Boeckmann, Misra, & Budig, 2014). Both structural and cultural factors play a role in maintaining the relationship between parenthood and gender-traditional work/family arrangements. State policies that support male breadwinner/female care giver families (Crompton, 1999; Lewis, 2001), a gender wage gap that favors men (Misra & Murray-Close, 2014), the ability to access quality paid child care (Boeckmann et al., 2014), and the availability of cultural support for working mothers or caregiving fathers (Boeckmann et al., 2014; Kramer & Kramer, 2015) all influence parents' participation in paid work and caregiving.

These factors likely contribute to the relatively small number of parents that take on roles that run counter to gender expectations. As of 2013, just 15.1 percent of married mothers were the family breadwinner in their households (Wang, Parker, & Taylor, 2013). Primary caregiving fathers are even more rare; less than 5% of fathers were "at home" full time in 2015 (U.S. Census Bureau, 2015). Thus, married breadwinner mothers and their at-home father counterparts represent an unusual family type whose work-family arrangements deviate from those of most married-couple families, the majority of whom are in dual-earner arrangements (Kramer, Kelly, & McColloch, 2013). Alternatively, while the overall numbers of parents in these gender-atypical arrangements are small, the recent growth in couples who adopt them may suggest eroding support for more gender-traditional attitudes and behaviors.

How parents divide time in paid and unpaid work is one measure of gender inequality. A wealth of studies show that, while overall time in paid and unpaid work is relatively equal across married parents, mothers spend a higher proportion of their time in unpaid work compared to fathers (Bianchi, Robinson, & Milkie, 2007). Scholarship focused on better understanding this division highlights that both time availability and relative earnings differences help explain why women do more unpaid work and men do less (Raley, Bianchi, & Wang, 2012; Sullivan, 2011). However, among individuals in unusual family forms, such as unemployed men married to full-time working women, research sometimes uncovers results that run counter to explanations of time availability or bargaining power linked to earnings and point to the role of gender in shaping the household division of labor (Bittman, England, Folbre, Sayer, & Matheson, 2003; Brines, 1994; Gough & Killewald, 2011; Schneider, 2011). Further investigation of time spent in unpaid work among parents in these unusual work/family arrangements may help us better understand when and how time, money, and gender come into play in parents' decision-making and behavior. Additionally, since many investigations focus on time in housework only, further investigation of these processes in shaping child care time is warranted.

We analyze data from the American Time Use Survey (ATUS) to examine patterns in housework and child care time among at-home and breadwinner parents. We focus on these types of parents for two key reasons. First, current debate centers on the growing significance of individuals engaging in gender-atypical roles for challenging the gender status-quo. Our focus on at-home and breadwinner parents allows us to assess how similar or different domestic work patterns are when the individuals in them are behaving in counternormative or gender-traditional ways at a life stage (e.g., as parents) when key structural and

cultural forces reward more gender-traditional behavior. Few studies that assess the importance of increasing numbers of primary earning mothers or primary caregiving fathers actually compare men and women within each of these social roles, such as comparing the experiences of stay-at-home fathers to similarly-situated stay-at-home mothers. Second, our focus on at-home fathers and breadwinner mothers centers our analysis on exactly those individuals who appear to deviate from more general patterns in, especially, previous housework studies. By honing in on these individuals and contrasting them with parents who are in the same family structure, but who are not deviating from culturally prescribed gender roles, we contribute to broader understanding of the relationship among time availability, relative earnings, and gender in shaping the household division of labor. We argue this focus enriches development of theory aimed at identifying mechanisms of change in gendered social systems.

THEORY AND HYPOTHESES

Relative Differences in Time and Money in Heterosexual Couples

Previous theorizing on the household division of labor points to the importance of both time and money differences in heterosexual couples in shaping allocations to paid and unpaid work (Raley et al., 2012). Time is a finite resource, and, in general, more time in employment means less time for either child care or housework among parents. Since mothers, on average, are less likely to be employed at all and, when employed, to work fewer hours, research generally finds that mothers spend more time engaged in housework and child care than fathers (Bianchi et al., 2007). Previous work also finds that fathers respond to increases in women's work hours by doing more housework and more child care (Bianchi et al., 2007). Thus, differences in paid work commitments are important in shaping who does what at home.

Money differences within heterosexual couples also matter. Bargaining (Becker, 1981; Lundberg & Pollack, 1996) and exchange theories (Blood & Wolfe, 1960; Molm & Cook, 1995) posit that relative differences in earnings influence couples' decisions about dividing responsibilities for housework and child care duties between spouses. In particular, these theories suggest that relative earnings differences are indicative of power differences in couples that enhance the bargaining position of the higher-earning spouse (Thebaud, 2010). When coupled with the assumption that most people would prefer not to engage in domestic labor (Sullivan, 2011), a relative resources perspective predicts that the couple member with higher earnings will have enhanced bargaining power to negotiate less involvement in unpaid domestic work than a lower-earning spouse. In families with just one employed member, like those we study here, a relative resources perspective would predict that the full-time employed parent would do much less housework or child care than the nonemployed parent, regardless of the gender of the employed or at-home parent.

Relative Resources and Housework—Support for the relative resources perspective is best demonstrated in studies examining how earnings differences among men and women shape housework time in the context of heterosexual relationships (e.g., Bittman et al., 2003; Brines, 1994; Greenstein, 2000; Gupta, 2007; Schneider, 2011; Sullivan, 2011, 2013).

Consistent with the role of relative resources in bargaining processes, many studies find that individuals with higher relative earnings do less housework. However, multiple studies have noted deviations from this general relationship that inform research on, especially, couples with an at-home father or breadwinner mother. First, some studies find that men with lower earnings than their wives do less housework (Brines, 1994; Greenstein, 2000, although see null findings in Bittman, 2003 and Schneider, 2011), even though women with lower relative earnings tend to do more housework than their higher-earning male partners. In addition, research focused on the role of unemployment on housework time finds that unemployment is generally associated with more time in domestic labor than employment and unemployed women's domestic contribution increases at twice the rate of unemployed men's contribution (Gough & Killewald, 2011). These patterns may be important for understanding whether and how gender shapes non-employed at-home parents' time in domestic work.

Second, some studies find a curvilinear relationship between a couple's relative earnings and housework time for women in that higher relative earnings lead to less housework up to a point, but once a woman is a primary earner, she does more housework despite higher relative earnings (Bittman et al., 2003; Schneider, 2011). This finding has been criticized as a "statistical artifact" (Gupta, 2007; Sullivan, 2011) that is related to a relationship between women's relative and absolute earnings. Since breadwinner women generally have lower earnings than women in couples with more equal relative earnings, their housework time may reflect their more precarious labor market position rather than serving as an indicator of increased bargaining power within the family. Further study of families in which wives are absolute earners, such as those with a full-time working mother and at-home father, contrasted with breadwinner fathers/at-home mothers may help clarify the role absolute earnings differences play in shaping the household division of labor.

Relative Resources and Child Care—Evidence supporting a bargaining process that shapes the relationship between relative earnings and time in child care is not as clear as evidence of bargaining in housework (England & Srivastava, 2013; Raley et al., 2012; Sullivan, 2013). One difference between these two categories of domestic work is that the assumption that individuals prefer not to engage in domestic work (a key assumption linked to predictions about how relative earnings differences shape time in unpaid labor) is better supported in the case of housework than for child care activities (Raley et al., 2012; Sullivan, 2013). Child care generally gets rated more positively than housework, and both mothers and fathers report similar levels of enjoyment around caring for children (Connelly & Kimmel, 2015; Wang, 2013). There may also be a stronger sense of future investment that motivates parental care in ways that differentiate it from housework (Raley et al., 2012). In general, studies looking at mothers' and fathers' share of child care time find mixed support for the role relative resources play in shaping child care time. Some studies find that time in care activities increases in response to a partner's work hours, others do not (Raley et al., 2012).

Child care time also appears to be patterned in ways that may be more indicative of the importance of cultural differences than relative bargaining position within heterosexual couples (England & Srivastava, 2013; Raley et al., 2012; Sullivan, 2013). While parents' overall time in child care has been increasing over the last fifty or so years, child care time

has increased most dramatically among the most educated parents (Sullivan, 2013). Given the positive association between education and earnings, this suggests that higher-earning parents are also the parents most likely to be highly engaged in child care. It is not clear that higher relative earnings within heterosexual couples will result in less time engaged in child care, particularly when mothers have the income advantage (Raley et al., 2012).

Indeed, time with children has gone up among mothers even as they have increased their paid work involvement (Bianchi et al., 2007), and it has gone up the most among the most educated mothers and fathers (England & Srivastava, 2013; Sullivan, 2013). Along these lines, at least three recent studies drawing on the ATUS find that mothers' time in child care is not linked to relative resources differences in ways suggested by bargaining or exchange processes. Connelly and Kimmel (2009) utilize ATUS data from 2003-4 and find that mothers' time in child care is not influenced by relative wage differences, although fathers' child care time *is* negatively related to mothers' wages. In addition, Raley et al (2012), drawing on 2003-7 ATUS data, find that while there is some evidence of association among relative differences in earnings and time with children in ways that are consistent with a relative resources perspective, mothers who earn more spend more time with children after controlling for work hours. Finally, England and Srivastava (2013) draw on 2003-11 ATUS to investigate the influence of education level of mothers and fathers on parents' child care time. They conclude that highly educated parents do more, not less, child care than those with lower educational attainment. These current studies provide little evidence that parents use bargaining power to reduce time in child care.

Mothers, Fathers, and Domestic Work: A Gender Perspective

While time or power differences between men and women in heterosexual relationships do appear to shape the division of unpaid domestic labor in some cases, as our review shows, there are important contexts in which who is available or earns more, or at all, is not associated with doing less domestic work in ways predicted by a time availability or relative resources explanation. In particular, where we see the relationship between higher relative availability and earnings and less time in domestic work breaking down most often is in couples with unusual family forms, such as those families containing an unemployed man or a woman with very high relative earnings. These patterns suggest that the gender of the nonemployed person or of the dominant family earner also shapes decisions and behavior regarding time in domestic labor.

Scholars who study gender in the context of work and family life argue that a range of cultural and institutional forces limit the influence of bargaining processes rooted in time availability and relative earnings differences when it comes to allocating time to domestic tasks. For example, in spite of enormous changes in women's paid work involvement, the idealized, culturally normative model for work and family continues to be centered on a breadwinner/care giver ideal in which breadwinners are men and care givers are women (Crompton, 1999). Previous research indicates that breadwinning itself is inextricably linked to hegemonic masculinity (Townsend, 2003; Warren, 2007) and tightly connected to dominant cultural images of "good" fatherhood (Christensen & Palkovitz, 2001; Kaufman, 2013; Townsend, 2003). Similarly, "good" mothers, especially those who are white and

well-educated, face social pressure to engage in time- and attention-intensive parenting practices (Damaske, 2013; Garey, 1999; Hays, 1996). In addition, research consistently indicates that many parents are judged based on how well they conform to traditional work/ family roles (Berdahl & Moon, 2013). Those parents who deviate from these traditional roles face negative social judgement (Berdahl & Moon, 2013; Brescoll & Uhlmann, 2005; Bridges, Etaugh, & Barnes-Farrell, 2002).

Institutional practices built around this idealized and gendered male breadwinner/female care giver model may influence parents' time in domestic tasks (Connelly & Kimmel, 2015). Institutions such as schools, health care facilities, or community centers may be "gendered" in the sense that they reach out to or support the parents they assume are most involved in children's care, often mothers. Further, an institutionalized gender gap in earnings places more financial strain on families headed by a female breadwinner, leading to greater pressure for male at-home parents to look for paid work rather than to engage in domestic tasks. This might also limit female breadwinners' bargaining power with respect to domestic work if their relative earnings "dominance" is considered more temporary than it might be in at-home mother/breadwinner father families (Drago, Black, & Wooden, 2005; Winslow-Bowe, 2006). Taken together, previous research and theorizing supports the idea of a gendered breadwinner/care giver ideal that is still influential in shaping cultural and institutional practices that limit deviations from traditional work/family roles. Cultural sanctioning processes and institutional practices rooted in a more traditional family model may restrict at-home fathers' domestic involvement while also limiting breadwinner mother's ability to disengage from domestic work, in spite of high relative earnings.

Domestic Work in Gender-Atypical and Gender-Traditional Families

Investigations of families with an at-home or breadwinner parent provide mixed support for the role of time availability and bargaining as factors shaping domestic work time in these family contexts. Studies indicate that the transition to at-home fatherhood is associated with greater engagement in housework and, especially, child care (Chesley, 2011; Harrington, Van Deusen, & Humberd, 2011), although there may be large variation in how much more housework at-home fathers actually take on (Chesley, 2011). Other research suggests that athome fathers tend to step up their involvement in more traditionally male housework tasks, like remodeling or painting projects (Doucet, 2006), but may not do much more in the way of routine housework, suggesting that gender conditions, especially, housework time. Research on contemporary breadwinner father/at-home mother families suggests that breadwinner fathers rely on at-home mothers to complete the bulk of child care and housework tasks and report very little involvement in any domestic work (Kaufman, 2013), consistent with both time availability and bargaining expectations, as well as gender role expectations. Finally, one recent study with an explicit focus on the division of labor in athome father families finds that the timing of who engages in domestic work shifts such that at-home fathers do the bulk of domestic work when mothers are on the job, but domestic workloads shift back to breadwinner mothers after work and on non-work days (Latshaw & Hale, 2015), raising doubts about improvements in breadwinner mother's bargaining power related to their higher earnings or reduced availability.

Hypotheses

Both time availability and relative resources perspectives predict that individuals who work more or greatly out earn spouses will report less time in domestic work. This process appears to be generally supported in studies of housework time, although findings for "atypical" families, such as those with a non-working man or a woman with high absolute earnings are mixed. There is less clear support for these processes when time in child care is considered. If time availability and relative earnings in couples are the dominant factors shaping time allocations to domestic work, we would expect:

H1: Breadwinner parents will spend less time in housework and child care than athome parents.

H2: There will be no difference in housework or child care time when breadwinner mothers are compared to breadwinner fathers.

H3: There will be no difference in housework or child care time when at-home mothers are compared to at-home fathers.

However, if gender constrains bargaining power for mothers in gender-atypical work-family roles by pushing mothers (but not fathers) into housework and child care tasks, then we would expect:

H4a: Female breadwinners will spend more time in housework and child care than male breadwinners, all else equal.

In addition, gender effects on time in domestic work may be stronger for employed mothers than fathers (Gough & Killewald, 2011). Put differently, we might expect that the constraint of work hours is weaker for breadwinner mothers than fathers. Thus, a related hypothesis considers gender differences in domestic work for breadwinners based on daily work hours:

H4b: Female breadwinners will spend more time in housework and child care than male breadwinners, *given the same daily work hours*.

Further, if gender constrains the involvement of fathers in both housework and child care, as well, we would also expect that:

H5: At-home fathers will do less housework and child care than at-home mothers.

H6: Time in child care and housework will be more similar among at-home fathers and breadwinner mothers than among at-home mothers and breadwinner fathers, all else equal.

We test these hypotheses drawing on a sample of at-home and breadwinner parents from the 2008-12 ATUS. Our hypotheses are grounded in explanations that emphasize the role that couples' relative time and earnings play, essentially focusing attention on how similar structural conditions shape time use, and contrast these expectations with others that indicate that gender is a critical factor shaping involvement in unpaid domestic work among heterosexual parents, even when important structural conditions are held constant. We investigate parents with the most extreme time and earnings differences (our breadwinners earn most or all of the family income, work full-time, and are married to non-employed spouses) because these appear to be cases in which the relationship among time availability,

clear relative earnings differences, and less involvement in domestic work sometimes break down. This focus allows us to contrast the experiences of those who tightly conform to (athome mothers/breadwinner fathers) or clearly deviate from (at-home fathers/breadwinner mothers) prevailing gendered work/family cultural ideals because research suggests that these are the cases in which the role of entrenched individual, cultural, and institutional gender-based work/family practices should be most evident.

METHOD

Data

We analyze American Time Use Survey (ATUS) data to test our hypotheses (Hofferth, Flood, & Sobek, 2013). The ATUS is a nationally representative time diary study of Americans. Data are collected using a computer assisted telephone interview (CATI), and the respondents report the activities they engaged in over a 24-hour period from 4:00 a.m. of a specified day until 4:00 a.m. of the following day as well as where, when, and with whom activities were done. Data are collected all days of the week, and weekends are oversampled. Sample weights correct for the survey design such that aggregating across different days of the week results in a representative picture of average time use among the population. Our results are based on pooled cross-sections from 2008 to 2012. We limit our sample to these years to incorporate a key measure of physical difficulty that is only available for ATUS respondents and their spouses beginning in 2008.

ATUS sample members are invited to complete the survey following exit from the Current Population Survey (CPS). The CPS is a household survey of the civilian, noninstitutionalized population. One individual aged 15 or older per former CPS participating household is randomly selected to participate in the ATUS during the two to five months following their household's CPS exit. ATUS response rates were over 50% for each of the survey years (Bureau of Labor Statistics and U.S. Census Bureau, 2014). Fatigue is the most common reason for ATUS nonresponse, which is a result of using CPS as the sampling frame (O'Neill & Sincavage, 2004). Nonresponse bias in the ATUS is not problematic except in studies that examine time in volunteer activities (Abraham, Helms, & Presser, 2009).

The 2008 to 2012 ATUS data include daily diary entries of 64,038 civilians age 15 and older. Despite the one member per household design, the ATUS collects demographic and employment information about spouses which allows us to identify at-home and breadwinner parents based on usual hours worked (see *Family definition*) and to incorporate select couple-level measures in our analysis. We first restrict our sample to heterosexual married respondents with a spouse who was co-resident at the time of the CPS and with one (or more) child(ren) under 18 in the household (N=17,506). Our focus on at-home and breadwinner parents based on usual hours worked (N = 5,505) excludes individuals in couples without an earner (N=572) and in dual-earner couples (N=11,429). These 5,505 records are further reduced to 4,633 because the respondent/spouse physical difficulty measures (described below) are not available until August 2008 (eliminating 872 cases where data are not available).

Measures

Family definition—All respondents are individuals in a couple where one member usually works for pay and the other member does not. The at-home and breadwinner mothers and fathers in our sample are not married to one another. Our family definition is based on both the respondent's and his/her spouse's usual hours worked per week (as reported by the respondent). A respondent is classified as "at home" if he/she does not work for pay and has a spouse who usually works 35 or more hours per week. A "breadwinner" is a respondent who usually works 35 or more hours per week for pay and has a spouse who does not work for pay.

Dependent variables—We analyze two sets of dependent variables: minutes in housework and minutes in child care. The majority of our dependent variables measure minutes on the diary day spent in the primary activity at hand; we note the instances where non-primary activity information is used to create a dependent variable. We distinguish between three types of housework—female-typed, male-typed, and gender-neutral (see Kroska, 2003). Female-typed household activities are routine and are done almost daily whereas male-typed household tasks are irregular and done less frequently (Berk, 1985). Female-typed housework includes activities such as interior cleaning, laundry, and meal preparation (a list of ATUS activity codes that underlie our variables is available on request). We classify activities such as home maintenance, yard work, and vehicle repair as male-typed housework. Gender-neutral activities include caring for animals, household management, and organizational activities.

Primary child care activities include playing with children, physical care of children, and other child care-related activities such as education, transportation, and doctor's visits. ATUS also collects information from respondents with a co-resident child under 13 in the household about secondary child care (i.e., whether respondents were caring for a child while doing something else as a primary activity) and who the respondent was with during the activity (e.g., time with children). These data allow us to consider parental child care time more broadly (Budig & Folbre, 2004; Folbre & Yoon, 2007) and analyze time spent in secondary child care and time spent with children. The time spent in secondary child care and time spent with children. The time spent in secondary child care to a child while he or she is not performing direct child care. Time spent with children is the minutes spent with household children based on the respondent's report of who he/she was with during each activity and taps physical proximity and joint engagement in activities. In the cases of secondary child care and being with children, we are indifferent about the primary activity respondents report; the result is that these variables effectively "overlap" time spent during primary activities such as leisure and housework.

Independent variables—We control for the husband's and wife's *age* given previous research that at-home fathers tend to be older than breadwinner fathers (Kramer et al., 2013). Drawing on information about spouses, we include couple-level measures of education and race. Both are important because educational differences condition employment choices and race can shape one's ability to enact preferences for more traditional gender roles (Glauber & Goziolko, 2011). *Education categories* include both have a college degree (reference),

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neither has a college degree, wife has a college degree but husband does not, and husband has a college degree but wife does not. *Race* is coded as both white (reference), both non-white, and white/non-white couple. We also control for *breadwinners' daily work hours* since differences in work hours on the diary day among parents likely shape their time availability for other activities and tend to be higher for fathers than mothers (Bianchi et al., 2012).

In addition, we control for at-home spouses' *employment intentions.* We consider at-home respondents and spouses as intending to find work if individuals are: 1) non-workers who have been looking for work during the past four weeks; 2) non-workers who intend to look for work during the next year; or 3) currently unemployed individuals who are either looking for work or on layoff. We also include an indicator of retirement for non-working respondents and spouses. Because health limitations may be an important factor shaping athome fathers' unemployment (Kramer et al., 2013) as well as the ability to engage in domestic work, we incorporate two dichotomous variables (one each for the respondent and spouse) indicating *physical difficulty* defined as difficulty engaging in personal care, having mobility limitations that are not temporary, or having serious difficulty walking/climbing stairs. Individuals who indicate that they have one or more of these conditions receive a "1" on the physical difficulty measure. We control for *family income* distinguishing among < \$25,000, \$25,000-\$49,999, \$50,000-\$74,999, and \$75,000+ (reference).

Since numbers and ages of children in a residence (whether or not they live there) can add to the housework and child care burden, we also include a range of controls aimed at parsing out the effects of children on time in domestic work. These include controls for the *number* of own co-resident children under 18 and the age of the youngest own child in the household as well as the presence of an *infant in the household*, whether the respondent has an own non-residential child, and whether a non-own child under 18 resides in the household. Additional covariates include whether the respondent reported about a weekend (reference) or weekday and the year of data collection where 2008 is the reference. Tables 1 and 2 contain the means for all of the measures used in this analysis (except weekend and year) by whether the ATUS respondent is an at-home or breadwinner mother or father.

Analytic Strategy

The often large number of zeros in time diary data along with the fact that time spent in one activity (like housework) is not independent of time spent in another (like paid work) has led to disagreement about appropriate modeling strategy in time use studies. There is evidence that OLS models produce less biased estimates than Tobit models (Stewart, 2009), even if the models produce qualitatively similar results (Foster & Kalenkoski, 2013). As a result, many contemporary studies successfully employ OLS regression to model time spent in specific activities, like child care (e.g., Raley et al., 2012). This is our approach here. We estimate eight separate OLS equations (see Table 3) and conduct a series of post-hoc significance tests to evaluate differences in time among different sets of parents, comparing time in female-typed housework among at-home mothers and at-home fathers, for example. We use these significance tests to assess evidence to support (or not) our hypotheses. To aid interpretation, we also produce a table of predicted minutes among our parents on weekdays

in each of the eight domestic activities under study (see Table 4). These predicted minutes are calculated by holding all categorical variables (except for work/family arrangement and weekend) at the reference category. All continuous variables are held at the sample mean, except for daily paid work hours, which is set at 0 and 8 hours to estimate minutes on a non-work day and the traditional "full-time" work day.

An additional analytic issue concerns the dependencies across activities in a day that suggest that the assumption of uncorrelated error terms necessary to perform a series of separate OLS regressions may be violated when time across different activities is examined. Indeed, tests of correlated error terms in these data indicate that this assumption is not met here. To investigate whether this problem influenced our findings, we also estimated our models using Seemingly Unrelated Regression (SUR; *sureg* command in STATA). SUR allows us to simultaneously estimate our eight equations while relaxing the assumption of independent error terms. This approach has been used in other studies that estimate multiple models of time spent on related activities (Hook, 2004). Because we do not vary the independent variables in our models across equations, our SUR models reduce to OLS models in practice. Any deviations between our SUR and OLS models occur because of differences in how STATA handles weights across both sets of estimations. The SUR exercise suggests that our substantive conclusions are generally robust to choice of modeling technique (we document two deviations in footnotes; SUR results available upon request).

Missing Data—Our analytic sample (N = 4,633) contains 206 cases (4.4%) with missing income data. We conducted an attrition analysis to examine whether missing data might influence our substantive findings (not shown). This analysis suggests that couples' education is significantly related to missingness. Because education is an important characteristic shaping time in domestic work (especially child care), we use multiple imputation (*mi* command in STATA) to retain these cases in our sample. Multiple imputation is considered one of the best tools to deal with problems of missing data in statistical analyses (Allison, 2009; Schafer & Graham, 2002). We estimated all of our models using the imputed sample (N = 4,633) and the sample where missing income cases are omitted (N = 4,427). Our substantive conclusions do not change across these two sets of analyses. We present results using imputed data here (results with non-imputed data available upon request).

RESULTS

Table 1 documents descriptive statistics for the sample by family type. Fathers tend to be older than mothers, but the age gap is larger among individuals and spouses in genderatypical couples (e.g., stay-at-home father) than among individuals in gender-traditional (e.g., breadwinner father) families. The proportion of individuals who report that they and their spouse are college educated is higher among respondents in gender-traditional than gender-atypical arrangements. Just under 30% of stay-at-home mothers and breadwinner fathers report that they and their spouse both have a college degree. This is true of about 20% of stay-at-home fathers and breadwinner mothers. In addition, the majority of respondents in gender-traditional arrangements report that both they and their spouse are

white, while just over half of individuals in gender-atypical family arrangements report being in mixed race or non-white couples.

Although all breadwinner parents are employed full-time, breadwinner fathers report slightly higher daily work hours (8.30) than mothers (8.02) on days they work. It is also interesting to contrast the work intentions among at-home parents. About twice as many at-home fathers (58%) report that they are looking for or intend to find work compared to 27% of at-home mothers. Similarly, higher proportions of breadwinner mothers are married to spouses who are looking or intend to find work (35%) than breadwinner fathers (17%). More at-home fathers (6%) than at-home mothers (0.3%) report being retired. Similarly, more breadwinner mothers (3%) than fathers (.04%) report being married to a retired spouse. Among at-home fathers, 13% report having one or more physical difficulties compared with 3% of at-home mothers. However, while breadwinner fathers' reports of spouses' difficulty largely match the rates reported by at-home mothers (3%), breadwinner mothers report lower rates of physical difficulty among their spouses (7%). Very few breadwinner parents (1% mothers, 0.3% fathers) report having a physical difficulty.

Incomes also vary by family type. Smaller proportions of both at-home fathers and breadwinner mothers report family incomes of \$75,000 or higher (30% and 28%, respectively) compared with at-home mothers (37%) and breadwinner fathers (37%). Athome father and breadwinner mother households have fewer children in the home than athome mother and breadwinner father households (1.7 vs. 2.1). Further, the children in athome father and breadwinner mother households are older, on average, than those in athome mother and breadwinner father households. While infants are rare in most families, slightly more at-home mothers (3%) and breadwinner fathers (4%) report having an infant at home when compared with at-home fathers (2%) or breadwinner mothers (1%). The presence of non-residential children is also relatively rare across family types, and few parents report having a non-residential child or a child not their own in the home on the diary day. Overall, the patterns in Table 1 indicate that households with an at-home father or breadwinner mother have similar demographic profiles as do households with an at-home mother or breadwinner father. However there are clear demographic contrasts in the racial/ ethnic makeup of couples, in educational levels, in income, and in rates of physical difficulty among other things across individuals in gender-atypical versus gender-traditional workfamily arrangements.

Table 2 lists the proportion of parents engaging in a range of housework or child care tasks at all on a diary day as well as the mean minutes per day by family type. The descriptive patterns suggest that housework is traditionally gendered such that at-home mothers do more housework than at-home fathers and breadwinner mothers do more housework than breadwinner fathers. These descriptive patterns support the gender constraints hypotheses (H4a and H5) as opposed to the time availability and relative earnings hypotheses (H2 and H3). The descriptive data also show that at-home parents do more housework than breadwinner parents, which is consistent with expectations of time availability and relative resources (H1). Fathers do more male-typed housework than mothers while mothers do more female-typed housework than fathers when similarly-situated (e.g., at-home) parents are compared. Overall, the amount of time spent in female-typed tasks tends to be greater than

in male-typed tasks and higher proportions of mothers compared to similarly positioned fathers engage in any housework on diary day. The descriptive patterns in housework time appear to highlight the importance of gender over time availability or bargaining power linked to high relative or absolute earnings in shaping time in housework in these families.

In terms of child care time, patterns are traditionally gendered in that at-home mothers spend significantly more time in child care tasks than at-home fathers (about 66 minutes more per day), which is consistent with gendered parenting expectations that favor mothers. However, the small time differences among breadwinner parents are not significant, which is not what we would expect if gendered parenting expectations were pushing mothers into greater levels of child care than fathers. Table 2 also illustrates that at-home parents spend more time engaged in secondary child care (being available for a child while primarily performing another activity) and in overall time with children than breadwinner parents. Again, this pattern supports both time availability and relative resources explanations. We do see significant differences in the time spent on these activities across at-home parents. At-home mothers spend more time on secondary child care (115 minutes more per day) and in overall time with children (140 minutes more per day) than at-home fathers while breadwinner parents are similar in time spent on these activities. These descriptive results provide a somewhat mixed picture. Time availability or relative resources matter, since at-home parents clearly do more child care than breadwinner parents (H1). Similarly, we see no differences among breadwinners in the descriptive child care pattern, which supports a time availability/relative resources explanation (H2) over a gendered constraints explanation (H4a). However, gender differences within at-home parents persist, as at-home mothers spend more time on child care than at-home fathers, which supports the hypothesis that emphasizes the role of gender (H5) over time availability and resource differences (H3).

OLS Results: Housework

Our regression results build on previous work to highlight greater nuance in the relationship between work/family role and housework time. If time availability and earnings-based bargaining power shape housework time, we would expect to see that breadwinner parents consistently do less housework than at-home parents (H1), controlling for a number of demographic and other differences that separate these individuals. This *is* what we see when comparing fathers. The regression results document that at-home fathers do more female-typed housework (B=35.81***) than breadwinner fathers (see Table 3) on breadwinner fathers' non-work days. Table 4, which provides differences in predicted minutes in specific housework time among fathers are larger on days breadwinner fathers work. We do not detect differences in time spent on male-typed or gender-neutral housework among fathers on breadwinners' non-work days, but post-hoc tests (not shown) indicate that at-home fathers do more of both types of housework than breadwinner fathers on days breadwinners work (p < 0.001).

We see different patterns when we compare mothers. Because breadwinner fathers are the comparison group in Table 3, we identify time differences among at-home and breadwinner mothers on breadwinner mothers' non-work days by looking at the difference between at-

home and breadwinner mothers' regression coefficients. To assess whether these differences are statistically significant requires additional *post-hoc* tests, which we conduct and report. For example, the estimated time difference in female-typed housework among at-home and breadwinner mothers on non-work days is about ten minutes (120.48 - 109.96 = 10; also seeTable 4). Post-hoc significance tests indicate that, on breadwinner mothers' non-work days, their time in female- and male-typed housework is indistinguishable from at-home mothers', although at-home mothers spend more time in gender-neutral housework (9 minutes, p < 10.05) than breadwinner mothers.¹ However, on days breadwinner mothers work, they do significantly less (p < 0.001) of all types of housework than at-home mothers. Thus, we see one indication that time availability and earnings shape housework time in different ways for breadwinner mothers versus fathers. Work hours constrain breadwinner mothers' housework time on days they work in all types of housework, but on days they do not work, they look just like at-home mothers with respect to time in female- and male-typed housework. However, paid employment is associated with less housework involvement among breadwinner fathers when compared to at-home fathers, even on days breadwinner fathers are not working. Overall, the expectation that breadwinner parents consistently do less housework than at-home parents rooted in time availability and relative resource explanations (H1) is supported for fathers but only partially supported for mothers.

Time availability and resource-based bargaining are expected to work in the same way when we compare male and female at-home parents (none of whom are working for pay, see H3) and male and female breadwinner parents (who are all employed full-time, see H2). Despite our expectations of no differences among similarly-situated mothers and fathers, this is not what we observe. We compare housework time among breadwinner parents directly by looking at the regression coefficients displayed in Table 3. The significant coefficients for breadwinner mothers indicate that breadwinner mothers do more female-typed housework ($B=109.96^{***}$) and less male-typed ($B=-29.71^{***}$) and gender-neutral ($B=-11.71^{**}$) housework than breadwinner fathers on non-work days, contrary to H2. Additional post-hoc tests reveal that differences in female-typed housework and male-typed housework are also significant (p < 0.001) when breadwinner mothers and fathers work eight hours; this is not the case, however, for gender-neutral housework. Predicted minutes illustrating these patterns on non-work and work days are displayed in Table 4.

There is also evidence of a significant interaction between type of work/family arrangement and breadwinners' daily work hours (Breadwinner Mother X Daily Work Hours; See Figures 1a - c). This interaction indicates that the gap in female-typed housework or male-typed housework shrinks as breadwinners work more hours and is more responsive to work hours for breadwinners engaging in gender-normative tasks. The overall pattern documents strong gender-normative tendencies around housework for breadwinners. Breadwinner mothers do more female-typed housework than similarly-situated fathers, even when daily work hours are high. Similarly, breadwinner fathers do more male-typed housework than breadwinner mothers, even when daily work hours are high. However, the predicted time differences in

¹The SUR models (estimated without imputed data) suggest that mothers' housework time is indistinguishable across *all* types of housework tasks (female-, male-, gender-neutral) on breadwinner mothers' non-work days. The OLS models consistently show (with or without imputed data) that at-home mothers do more gender-neutral housework on breadwinner mothers' non-work days.

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female-typed housework appear to be much larger than they are for male-typed or genderneutral tasks, suggesting that these trends may result in a higher overall housework time for breadwinner mothers than fathers, even on work days. Thus, these patterns provide support for explanations that emphasize the role that gender plays in constraining counter-normative domestic behaviors (H4a and b), although they also point to general reductions in housework time that appear linked to time availability for all parents (H2).

We also see evidence of gender-based housework specialization among at-home parents. Athome mothers do more female-typed housework than at-home fathers (p < 0.001), while athome fathers do more male-typed (p < 0.001) and gender-neutral (p < 0.05) housework than at-home mothers. Supplemental analyses (not shown) examining differences in total housework time indicate that at-home mothers spend more time on housework overall than at-home fathers (p < 0.01). These patterns provide further support for the expectation that gender constrains or enables housework involvement among similarly-situated parents (H5) more than time availability and earnings-based bargaining power explanations in shaping housework time (H3).

While the respondents in our sample are not married to one another, they are likely married to at-home and breadwinner parents similar to those in our sample. Our last hypothesis (H6) focuses on comparisons among gender-atypical parents (at-home fathers/breadwinner mothers) and gender-traditional parents (at-home mothers/breadwinner fathers). Among parents in gender-atypical arrangements, at-home fathers do more male-typed (p < 0.001) and gender-neutral (p < 0.01) housework than breadwinner mothers, regardless of breadwinner mothers' time in paid work. However, differences in time spent in female-typed housework vary greatly by breadwinner mothers' paid work time. On breadwinner mothers' non-work days, these mothers spend substantially more time engaged in female-typed housework than at-home fathers (163-89=74 minutes, p < 0.001; see Table 4). However, on days breadwinner mothers work, at-home fathers do an estimated 33 more minutes of female-typed housework than breadwinner mothers (p < 0.01). Among breadwinner fathers and at-home mothers, we see similar patterns in terms of gender-normative housework. On non-work days, breadwinner fathers spend substantially more time engaged in male-typed housework activities than at-home mothers (B = -24.64; p < 0.001, see Table 3; 40-15=25 minutes; see Table 4). This gap shrinks to non-significance on days these fathers work. However, at-home mothers do substantially more female-typed housework than breadwinner fathers on fathers' non-work days ($B = 120.48^{***}$; see Table 3). This gap widens on days breadwinner fathers work at least 8 hours (see Table 4).

Overall, these results highlight the importance of gendered housework specialization that is not eliminated by time availability or resource-based bargaining processes. They also suggest a link between gender and housework that is evident when we compare parents' housework time on breadwinner parents' non-work and work days. When everyone's time availability is high, breadwinner fathers do less than at-home fathers while both breadwinner and stay-at-home mothers engage in similar housework. However, when breadwinners' time availability is constrained, these patterns suggest time gaps in non-normative tasks may shrink across family types.

OLS Results: Child Care

Our results generally support the hypothesis that breadwinner parents spend less time on child care than at-home parents, as time-availability and resource-based bargaining would suggest (H1). Among fathers, at-home fathers spend significantly more time engaged in children's physical care (18 minutes) and education or other care (19 minutes, see Tables 3 & 4) than breadwinner fathers on breadwinners' non-work days. Differences among fathers in child care time are larger on days breadwinner fathers work. All these differences are significant (p < .05). Similarly, at-home mothers spend more time playing with children, in education/other tasks, and more time with children overall on breadwinner mothers' non-work days.² These time gaps are evident across all areas of child care (p < 0.05) on days breadwinner parents work. Consistent with time-availability and resourced-based bargaining (H1), breadwinner parents spend less time caring for children than at-home parents, even on days breadwinner parents do not work.

However, while at-home parents spend more time engaged in child care than breadwinner parents, we also observe differences in child care time among similarly-situated mothers and fathers, contrary to time availability or resource explanations (H2). On non-work days, breadwinner mothers spend more time than breadwinner fathers engaged in children's physical care (19 minutes; see Table 4) and educational and other care tasks (16 minutes). These differences are not large on non-work days, and are smaller (though still significant) when we compare breadwinner parents working an 8-hour day. By contrast, differences in overall time with children (p < 0.01) and secondary child care (p < 0.001) are markedly bigger among breadwinner parents on work days, with breadwinner mothers spending substantially more time in these ways than fathers. Playtime, however, is similar among breadwinner parents on work days.

There is also evidence of an interaction effect that shapes time engaged in secondary child care at different levels of daily work time among breadwinner parents (see Figure 2). All breadwinner parents reduce time in secondary care for each additional hour spent at work. At each level of daily work hours, though, breadwinner mothers engage in more secondary care than breadwinner fathers. Further, unlike the pattern for housework, the gap in secondary time is larger with longer work hours. Together, these results indicate that time availability and resourced-based bargaining are shaping time in child care in different ways for breadwinner mothers versus breadwinner fathers, which is more consistent with expectations that gender constrains employment influences on child care time (H4a and H4b). Similar to patterns among breadwinner fathers and mothers, at-home mothers spend significantly more time engaged in all child care tasks than at-home fathers, which does not support strict time availability or resource-based bargaining explanations (H3) but does support gender-based explanations (H5). While statistically significant daily gaps in play time (9 minutes; see Table 4), physical care (15 minutes), and education/other tasks (12 minutes) are not large, differences in overall time with children (at-home mothers do 85

 $^{^{2}}$ The SUR models (estimated without imputed data) indicate that at-home mothers spend more time in physical care tasks than breadwinner mothers on breadwinner mothers' non-work days. The OLS models (with or without imputed data) consistently provide a p-value greater than 0.05 but less than 0.10 for this test. Thus, the direction of the difference is consistent, but the size and significance varies by estimation strategy.

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minutes more, on average) and in secondary child care (60 minutes more) are substantial. In sum, among similarly-situated parents, mothers spend more time engaged in child care than fathers, consistent with explanations that point to the role gender plays in enabling or constraining involvement with children (H5).

When we compare time in child care among gender-atypical parents (at-home fathers/ breadwinner mothers) and gender-traditional parents (at-home mothers/breadwinner fathers) we see patterns that provide partial support for explanations that emphasize the importance of gender enabling/constraint (H6). Comparing gender-traditional mothers and fathers, the patterns are clear. At-home mothers spend more time in every type of child care task than breadwinner fathers, regardless of whether breadwinner fathers are working or not (see Tables 3 & 4). However, patterns for parents in gender-atypical arrangements vary by breadwinner mothers' work time. On breadwinner mothers' non-work days, we do not detect any significant differences in child care time. Both breadwinner mothers and at-home fathers appear to spend relatively equal amounts of time on a range of child care tasks on non-work days, which is different from patterns for parents in gender-traditional arrangements. However, on days breadwinner mothers work, child care divisions mirror those of individuals in gender-traditional arrangements, with the at-home parent (fathers, in this case) doing significantly more of all types of child care than the breadwinner parent.

DISCUSSION

Our comparison of individuals in gender-atypical and gender-normative work/family arrangements highlights some of the nuanced ways in which time availability, resourcebased bargaining, and gender shape parents' domestic work. First, our results document important linkages between gender and parents' housework time. There is evidence of gender specialization in housework tasks; mothers tend to do more female-typed housework and fathers tend to do more male-typed housework, regardless of work status. However, gendered housework engagement is not impervious to structural constraints. Breadwinners do less gender-normative housework on work days, and gaps among breadwinner mothers and fathers shrink as daily work hours increase, suggesting that time availability plays a role in reducing gender differences in housework among similarly-situated parents. Our comparisons also suggest that at-home parents may do more gender non-normative household tasks on days their spouses work, although we cannot directly test this with individual-level data.

It is this variation in housework on breadwinner parents' non-work and work days and the gender of the breadwinning parent that might be important in reconciling some of the mixed findings about how housework is divided among heterosexual couples in which women are high earners. Comparisons of at-home fathers' and breadwinner mothers' housework time show a tendency for breadwinner mothers to do more female-typed housework than at-home fathers on non-work days but less on work days. Similarly, breadwinner fathers do more male-typed housework than at-home mothers on non-work days but less on work days. However, most of our estimates indicate that time in female-typed tasks, especially for mothers, is an important driver of overall housework time. As a result, it may be counternormative behavior by at-home fathers around these female-typed tasks (rather than similar

counter-normative behavior by at-home mothers around male-typed tasks) that shapes conclusions about how time availability, relative resources, and gender influence parents' housework time. In gender-atypical families, differences in housework time may depend on whether or not breadwinner mothers are working, while gender-traditional at-home mothers appear to do more housework whether breadwinner fathers are working or not. Thus, similar tendencies among working parents to do fewer gender-normative housework tasks on work days appear to be present across individuals. Yet, the potential to disrupt gendered housework patterns may be greater in gender-atypical couples than in gender-traditional couples because reductions in the size of female-typed housework gaps may have the greatest impact in terms of reducing differences in overall housework time. However, it may be difficult to consistently detect this pattern in analyses using measures of overall housework time and when analyses do not clearly account for variation on work- versus nonwork days across men and women.

It is worth emphasizing that patterns on non-work days underscore the enduring power of gender-normative housework behavior. While all breadwinner parents appear to do more housework on their non-work days, at-home fathers do more female-typed housework than breadwinner fathers on breadwinner fathers' non-work days, while the housework time of athome and breadwinner mothers across most types of housework is indistinguishable on these days. That similarly-situated working parents have such different patterns suggests that mothers and fathers likely feel different housework pressures, in spite of similar structural positioning as full-time workers and high relative earners. When time availability is high, breadwinner mothers may act on these feelings or react to these pressures while breadwinner fathers do not. This is consistent with previous research that notes that women find greater meaning in housework compared to men (Wang, 2013) and that mothers feel socially accountable for the appearance of their home (Doucet, 2006). Qualitative research on gender-atypical couples also suggests that these couples engage in a "domestic handoff" on breadwinner mothers' non-work days (Latshaw & Hale, 2015). While the reasons for this handoff vary from allowing mothers to feel in control of domestic tasks to providing fathers a break from domestic work, these qualitative data support our time use findings that show that breadwinner women do more housework than at-home fathers on their days off. Further, research on contemporary breadwinner father/at-home mother families indicates that the general pattern in these families is that mothers take care of all household and domestic needs to support fathers' full-time work (Kaufman, 2013). This qualitative finding is certainly well-supported by the patterns in our analysis for individuals in gender-traditional couples.

Other scholars have argued that processes shaping mothers' and fathers' time in child care are different from those shaping time in housework (Sullivan, 2013). Our results underscore these points and demonstrate that linkages among time availability, resource-based bargaining, and gender appear somewhat different in the child care context than they are in the housework context when comparing individuals in gender-atypical and gender-traditional families. Our child care patterns highlight the clear role of time availability in shaping working parents' engagement in their children's care (Connelly & Kimmel, 2009; Raley et al., 2012). At-home parents consistently spend more time in different types of child care activities than breadwinner parents on days breadwinner parents work. It is also generally

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true that the gap in at-home versus breadwinner parents' child care time shrinks on days breadwinner parents are not working. Thus, both breadwinner mothers and fathers respond to work constraints in similar ways. They provide less care to children on days they work, relying on at-home parents for this care, and they step up involvement with children on their days off. These overall patterns are consistent with previous research that documents similar attitudes about the value of time with children across mothers and fathers (Connelly & Kimmel, 2015; Raley et al., 2012).

However, there are nuances in our comparisons of parents' child care time that point to the potential importance of gendered processes in shaping parents' engagement with their children. First, while the gap in time spent on child care tasks generally shrinks across individuals in both family types (gender-atypical and gender-traditional) when we compare mothers and fathers in the same family type on breadwinner parents' work and non-work days, our findings point to more equal time investments on breadwinner parents' days off among parents in gender-atypical arrangements. Time in child care tasks across categories is indistinguishable among mothers and fathers in gender-atypical arrangements on days breadwinner wives are not working. Among individuals in gender-traditional arrangements, the child care gap among mothers and fathers is smaller on fathers' non-work days, but athome mothers still do more of some tasks (physical care, educational and other tasks). So, while breadwinner fathers' involvement in child care is higher on non-work days, they do not increase it with the same intensity breadwinner mothers do, particularly in the areas of children's physical care or educational and other tasks.

Qualitative research examining contemporary breadwinner mothers' attitudes and experiences underscores that these mothers feel pressure to spend time with children that may be exacerbated by at-home fathers' heavy engagement in child care (Chesley, 2011; Chesley, forthcoming). Research also indicates that breadwinner mothers perceive more social judgement about their time with children than they think breadwinner fathers feel or experience (Chesley, forthcoming). Both of these mechanisms could create greater pressures for breadwinner mothers, but not necessarily for breadwinner fathers, to increase their involvement with children when they are not working. Similarly, contemporary research on at-home fathers indicates that these fathers' greater involvement in their children's care generally can mean that children are more likely to turn to them first, even on days their mothers are available (Chesley, 2011). Overall, the time at-home fathers spend caring for and cultivating relationships with their children coupled with the preferences and pressures breadwinner mothers may feel to remain highly involved in their children's care may lead to more equal childcare involvement in these families, even with big disparities in paid work involvement.

As a whole, we suspect patterns in child care time across parents in gender-atypical versus gender-traditional family types highlight the importance of widely-held, gendered parenting norms that still place greater pressure on mothers (whether working or not) than fathers to be heavily involved in the care of their children (Johnston & Swanson, 2007; Chesley, forthcoming). While there is evidence that norms favoring greater child care involvement on the part of fathers are emerging, pressures on fathers still appear more limited relative to those shaping mothers' involvement (Kaufman, 2013). This may be particularly true for

fathers in gender-traditional arrangements, where breadwinners are more likely to emphasize (or feel pressured to) trade off time with children in favor of paid employment than fathers in dual-earner or at-home arrangements (Kaufman, 2013). Thus, gendered dynamics around work and parenting may create a different set of constraints for breadwinner mothers and fathers, with mothers feeling more pressure to be involved with children and fathers feeling more pressure to favor employment over time with children. Further, the clear expectation that at-home mothers are "in charge" of all things domestic in gender-traditional families (Kaufman, 2013) may not translate when the at-home parent is a man (Latshaw & Hale, 2015).

Finally, we emphasize that our descriptive results point to different demographic profiles of gender-atypical and gender-traditional families. These different demographic profiles suggest that it is families which are at greater risk for economic and social disadvantage that are in the gender-atypical (rather than the gender-traditional) group. Overall, these demographic patterns are consistent with previous studies that suggest that many families fall into gender-atypical work-family arrangements due, especially, to men's job instability rather than out of a strong desire to fulfill gender-egalitarian ideals (Chesley, 2011; Chesley, forthcoming; Drago et al., 2005; Winslow-Bowe, 2006). Gender theorists point to periods of economic or social disruption as sites for gender change (Deutsch, 2007; West & Zimmerman, 1987; West & Zimmerman, 2009). The tenuous commitment to a gender-atypical family structure suggested by some previous studies (Chesley, 2011; Drago et al., 2005; Winslow-Bowe, 2000) and the large proportion of at-home fathers relative to mothers who report intentions to work in our research underscore that gender-atypical family structures are likely short-term adaptations to economic challenge in many cases.

In spite of this, we think our findings point to areas of potential disruption of gendered patterns that may reduce the influence of gender in shaping involvement in domestic work. First, parents in gender-atypical couples appear positioned to disrupt some gendered domestic patterns on days breadwinner wives work. While we know little about the potential for shifts in these circumstances, it may be that at-home fathers respond to breadwinner wives' employment by stepping up their involvement in tasks that are not gender-normative for them (e.g., female-typed housework) on breadwinner mothers' work days. Since it is "female" tasks that tend to make up the bulk of housework time for mothers, if this is happening, it could be evidence of positive change in the gendered division of domestic work. Additionally, while our findings document that gender continues to shape aspects of child care time in these families, employment is linked to smaller gender gaps in child care time among breadwinners when we compare them on both non-work and work days. When time availability is constrained, the influence of gender on child care time may be weakened. To the extent that both structural and cultural changes lead to more parents in genderatypical work/family arrangements, these exposures may position individuals to engage in more gender-flexible domestic behaviors. Engaging in more gender-flexible behaviors may also lead to the adoption of more gender-flexible attitudes (Chesley, 2011; Kramer & Kramer, 2015).

This study has several limitations that must be acknowledged in interpreting our results. First, the cross-sectional, one respondent per household design of the ATUS limits our ability to understand how gender and employment processes operate *within* couples under changing circumstances. Such an analysis would require longitudinal, couple-level data with information about time allocations in the context of changing work-family arrangements. We are not able to distinguish whether individuals with more egalitarian ideals about gender are more likely to choose gender-atypical arrangements or whether being in gender-atypical arrangements leads to more egalitarian behavior, although previous research (e.g., Drago et. al, 2005) and the demographic profiles evident in this study suggest that individuals with more gender-egalitarian ideals are not more likely to wind up in gender atypical-work family arrangements.

Second, while the ATUS allows us to document differences and similarities in behavior among at-home and breadwinner parents, we are unable to distinguish between choice and constraint. We cannot know, for example, whether breadwinner mothers use housework as a way to maintain some control over the traditionally women's sphere or whether they do large amounts of housework because their at-home husband is not doing it. A third limitation concerns the inability to statistically control for two potentially important variables in our models: 1) outsourcing of housework/caring services and 2) at-home parents' spouses' daily work hours. Although limited current research suggests outsourcing housework or child care makes little difference in time use estimates (Sullivan & Gershuny, 2013), the influence of outsourcing on unpaid workloads still requires further investigation. In addition, patterns in our results clearly show that at-home parents' time in domestic work often depends on whether breadwinner parents are working or not. This means some of the differences we identify among at-home parents could be due to differences in their spouses' daily work hours. Unfortunately, we do not have this information in our data but we hope future research can include it.

Even with these limitations, this study makes valuable contributions to the scientific literature about the ways in which time availability, earnings-based bargaining, and gender shape time in domestic work. Our comparisons of parents in couples at the extremes—those with one non-working parent and one full-time employed parent—point to the importance of distinguishing among gender-normative tasks and accounting for differences in domestic engagement on work and non-work days for mothers and fathers. Our comparisons also provide a basis for assessing the significance of growing numbers of parents in work-family roles that are not gender-normative. The patterns we find *do* indicate a possibility for disruption of some gendered domestic behaviors among individuals in gender-atypical arrangements. As the numbers of men and women in these arrangements grow, future research could focus on the potential for exposure to gender-atypical experiences to promote a broader conception of work and family responsibilities that is necessary for greater equality.

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Figure 1.

a. Predicted Minutes of Female-Typed Housework for Breadwinner Mothers and Fathers by Variation in Daily Work Hours

b. Predicted Minutes of Male-Typed Housework for Breadwinner Mothers and Fathers by Variation in Daily Work Hours

c. Predicted Minutes of Gender-Neutral Housework for Breadwinner Mothers and Fathers by Variation in Daily Work Hours



Figure 2.

Predicted Minutes of Secondary Child care for Breadwinner Mothers and Fathers by Variation in Daily Work Hours

Table 1

Means/Percentages of Selected Demographic Characteristics of At-Home Parents and Breadwinner Parents (N=4,633)

	At-Home	Father	At-Home	Mother	Breadwinne	er Father	Breadwinne	r Mother
Age (in Years)								
Mother	39.35	ab	36.84	ac	37.13	pq	38.71	cd
SD	8.11		8.30		7.93		8.17	
Father	43.59	ab	39.53	ac	39.30	pq	41.67	cd
SD	10.26		8.69		8.16		66.6	
Couple-level Education (%)								
Both college	20.17	ab	29.41	ac	27.48	pq	20.50	cd
Neither college	52.09		53.97		56.06		57.48	
Mother college, father no college	22.88	ab	5.51	ac	6.64	pq	18.79	cd
Father college, mother no college	4.86	ab	11.11	ac	9.83	pq	3.24	cd
Couple-level Race (%)								
Both White	44.68	ab	54.76	а	55.15	p	49.85	
Both non-White	43.74		37.66		36.76		39.03	
White/Non-White	11.58		7.58		8.10		11.11	
Respondent's Diary Day Work Hours	1		1		6.17	p	5.94	с
SD					4.37		4.13	
Respondent's Diary Day Work Hours (conditional on doing any)	:		1		8.30	p	8.02	с
SD					2.87		2.28	
Intention to Find Work (%)								
Neither	41.61	ab	72.95	ac	82.99	pq	64.85	cd
Husband	58.39	ab	1		I		35.15	cd
Wife	1		27.05	ac	17.01	pq	1	
Retired (%)								
Respondent	6.14	ab	0.33	ac	0.00	q	0.00	с

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	At-Home	Eather	At-Home	Mother	Breadwinn	er Father	Breadwinne	r Mother
Spouse	0.00		00.0	c	0.04	р	3.00	cd
Physical Difficulty (%)								
Respondent	13.11	ab	2.80	а	0.26	p	1.27	
Spouse	0.00	ab	0.54	ac	2.86	pq	7.36	cd
Family Income (%)								
<\$25,000	11.89		16.34		15.31		18.44	
\$25,000-49,999	32.54	ab	28.33	а	28.79	q	28.50	
\$50,000-74,999	25.43	ab	18.03	ac	19.26	pq	25.01	cd
\$75,000+	30.14	ab	37.30	ac	36.64	pq	28.05	cd
Number of Children Under 18	1.72	ab	2.12	ac	2.13	pq	1.78	cd
SD	0.77		1.08		1.03		0.88	
Age of Youngest Child Under 18	8.00	ab	5.78	ac	5.93	pq	7.85	cd
SD	5.10		5.23		4.86		5.34	
Infant (<6 months) in household (%)	2.27		3.22	c	3.73	p	0.69	cd
Has non-residential child under 18 (%)	2.13		0.67		1.62	p	0.41	p
Has non-own child under 18 in household (%)	4.33		4.56		3.30		3.91	
N=	326		1953		1954		400	
Source: Authors' calculations using the 2008-2012 American Tirr	e Use Survey	(ATUS).	Means and I	bercentage	es are weighte	d.		
$^{a}_{=}$ At-home Fathers different than At-home Mothers (p<.05).								

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 $\overset{d}{=} B {\rm readwinner}$ Fathers different than Breadwinner Mothers (p<:05).

b =At-home Fathers different than Breadwinner Fathers (p<.05). c =At-home Mothers different than Breadwinner Mothers (p<.05).

Table 2

Time Use Patterns of At-Home Parents and Breadwinner Parents (N=4,633), Minutes per Day

	At-Hoi	ne Father	•	At-Hon	ne Mothe	L	Breadwi	nner Fath	ler	Breadwin	nner Motl	ıer
	Mean/%	SD		Mean/%	SD		Mean/%	SD		Mean/%	SD	
Housework												
Total	178.56	169.97	ab	216.12	155.86	ac	62.08	98.20	pq	106.84	114.29	cd
% Doing Activity on Diary Day	87.63			96.76			60.51			85.86		
Female-typed	102.45	118.65	ab	182.63	141.45	ac	27.29	54.14	pq	92.48	109.41	cd
% Doing Activity on Diary Day	79.10			94.58			40.60			79.22		
Male-typed	42.18	89.74	ab	11.51	48.67	ac	19.78	61.96	pq	3.80	29.91	cd
% Doing Activity on Diary Day	27.15			12.04			16.32			4.79		
Gender-neutral	33.93	85.55	q	21.98	56.74	c	15.02	49.65	pq	10.55	29.88	cd
% Doing Activity on Diary Day	36.48			38.07			25.72			28.90		
Childcare												
Total	87.76	110.70	ab	153.29	144.31	ac	48.15	79.97	q	56.83	83.76	с
% Doing Activity on Diary Day	66.85			83.86			52.67			68.55		
Play	18.22	54.16	а	36.25	76.81	ac	17.46	49.13	p	9.59	33.71	cd
% Doing Activity on Diary Day	14.15			29.66			18.14			13.43		
Physical care	34.56	67.32	ab	60.74	83.03	ac	15.90	43.94	pq	23.56	51.17	cd
% Doing Activity on Diary Day	48.46			69.59			31.52			48.65		
Education and other activities with household children	34.98	61.33	ab	56.30	86.87	ac	14.79	36.73	pq	23.67	50.99	cd
% Doing Activity on Diary Day	47.30			61.52			31.38			52.38		
Secondary childcare	307.48	265.76	ab	422.25	271.80	ac	227.49	250.07	q	248.47	258.64	с
% Doing Activity on Diary Day	70.48			85.48			69.61			72.31		
With child(ren)	369.43	248.49	ab	509.11	242.45	ac	264.91	232.38	q	267.94	230.28	c
% Doing Activity on Diary Day	90.88			16.76			89.00			92.54		
Paid Work	0.00	0.00	q	0.00	0.00	c	370.02	262.22	q	356.21	247.64	c
% Doing Activity on Diary Day	0.00			0.00			74.30			74.03		

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Source: Authors' calculations using the 2008-2012 American Time Use Survey (ATUS). Means are weighted.

Note: Time use does not sum to 1440 minutes (24 hours) for respondents because not all activities are examined considered; activities not examined are care of non-household members; education; consumer purchases; professional, personal, household, and government services and civic obligations.

 a^{a} =At-home Fathers different than At-home Mothers (p<.05).

b=At-home Fathers different than Breadwinner Fathers (p<.05).

c=At-home Mothers different than Breadwinner Mothers (p<.05).

d = Bteadwinner Fathers different than Breadwinner Mothers (p<.05).

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Table 3

OLS Coefficients for Minutes Spent in Housework and Child care on the ATUS Diary Day, 2008-2012 (N=4,633).

		Honework				Child can		
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	Female-Typed	Male-Typed	Gender-Neutral	Playing	Physical Care	Education & Other	With Children	Secondary Child care
Work/Family Arrangement								
Breadwinner father (reference)								
At-home father	35.81 ***	6.61	11.80	-3.46	17.54 **	18.72^{***}	- 17.05	- 21.65
	(10.46)	(8.06)	(66.L)	(5.10)	(6.57)	(5.45)	(20.34)	(21.90)
At-home mother	120.48^{***}	24.64 ***	-3.17	7.35*	32.14 ***	30.78 ***	68.10^{***}	39.14 **
	(5.57)	(4.09)	(3.57)	(3.64)	(5.01)	(3.10)	(12.14)	(13.20)
Breadwinner mother	109.96^{***}	29.71 ***	11.71^{**}	-6.23	18.96	15.93 *	13.70	9.67
	(12.06)	(4.74)	(4.31)	(4.45)	(8.25)	(6.19)	(22.31)	(24.22)
Breadwinner parents' daily work hours	-5.19***	-2.70 ***	-1.98	-1.83 ***	-2.37 ***	-2.38***	-30.10^{***}	-25.06 ***
	(0.46)	(0.42)	(0.39)	(0.33)	(0.55)	(0.25)	(1.31)	(1.44)
Breadwinner mother X Daily work hours	-8.22	2.19 ***	1.07^{*}	0.56	-0.71	-0.85	2.25	8.33 **
	(1.42)	(0.52)	(0.52)	(0.53)	(0.93)	(0.74)	(2.72)	(3.12)
Age								
Mother	-0.66	-0.09	0.87	0.02	0.24	0.31	-0.76	0.22
	(0.51)	(0.23)	(0.32)	(0.24)	(0.24)	(0.26)	(0.88)	(0.91)
Father	1.18^{*}	0.54 *	-0.25	-0.09	-0.62 **	-0.03	0.46	0.72
	(0.48)	(0.25)	(0.21)	(0.16)	(0.21)	(0.21)	(0.76)	(0.75)
Couple-level Education								
Both college (reference)								
Neither college	12.20^{**}	7.05*	1.78	-9.14 ***	-7.68**	-10.80^{***}	-0.81	24.33 *
	(4.74)	(2.77)	(2.70)	(2.63)	(2.48)	(3.07)	(8.98)	(10.23)
Mother college, father no college	-4.79	-1.23	2.20	-1.60	3.59	-4.31	27.69*	14.54
	(6.27)	(2.90)	(4.32)	(3.57)	(4.95)	(3.55)	(13.44)	(13.66)
Father college, mother no college	4.34	9.97*	0.79	-1.60	-5.05	-11.52**	-26.44 *	-8.06
	(6.93)	(4.86)	(3.18)	(3.80)	(3.23)	(3.51)	(11.91)	(13.63)

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		Housework				Child care	0	
	Female-Typed	Male-Typed	Gender-Neutral	Playing	Physical Care	Education & Other	With Children	Secondary Child care
Couple-level Race								
Both white (reference)								
Both non-white	11.98^{**}	-8.57 ***	-12.51 ***	-9.32 ***	0.33	-1.26	3.03	8.01
	(4.11)	(2.45)	(2.25)	(2.08)	(2.75)	(2.32)	(7.86)	(8.27)
Mixed race	3.55	-13.10^{***}	-3.28	-0.02	1.91	1.52	1.21	-10.97
	(6.35)	(2.27)	(2.96)	(3.80)	(3.47)	(3.67)	(10.93)	(11.67)
Family Income								
<\$25,000	9.42	2.40	-2.69	4.65	-2.13	-6.81	2.79	-7.61
	(6.76)	(4.12)	(3.73)	(3.65)	(4.05)	(3.56)	(12.62)	(14.02)
\$25,000-49,999	8.53	-1.51	-3.47	2.60	-2.59	-4.27	1.82	8.53
	(5.78)	(3.31)	(2.66)	(3.07)	(2.87)	(3.09)	(10.01)	(11.33)
\$50,000-74,999	-0.86	-2.78	-0.76	5.31	4.06	0.20	6.77	-9.53
	(5.12)	(2.87)	(3.06)	(2.92)	(3.44)	(3.13)	(9.32)	(10.12)
\$75,000+ (reference)								
Physical Difficulty								
Respondent	-38.46 *	-29.51 ***	-13.45 *	1.82	1.44	1.90	-39.15	-67.51*
	(15.26)	(4.70)	(5.98)	(8.35)	(6.25)	(10.76)	(30.40)	(29.51)
Spouse	3.03	-5.75	-1.64	-0.98	26.94	0.58	-13.14	-0.09
	(9.50)	(5.19)	(4.68)	(4.78)	(14.04)	(5.44)	(24.21)	(22.37)
Age of youngest child	1.15^{*}	0.58	-0.32	-3.76***	-4.02	0.16	-15.04 ***	-21.18***
	(0.57)	(0.34)	(0.28)	(0.28)	(0.30)	(0.30)	(1.01)	(1.04)
Number of children under 18	4.27*	0.20	-0.94	-6.87 ***	-0.25	12.00^{***}	13.40^{***}	12.15**
	(1.90)	(0.94)	(0.95)	(1.08)	(1.35)	(1.43)	(3.84)	(4.20)
Unemployed/Looking/Intends to find work								
Respondent	17.27 *	1.30	-3.21	-5.98	-2.98	-13.79	-39.40 **	-8.11
	(8.25)	(3.58)	(3.28)	(3.95)	(3.84)	(4.07)	(12.37)	(13.73)
Spouse	5.92	1.13	2.11	-4.95	2.08	-2.10	-3.50	-4.84

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Child care

	Female-Typed	Male-Typed	Gender-Neutral	Playing	Physical Care	Education & Other	With Children	Secondary Child care
Respondent	11.70	18.11	-12.00	7.70	-3.00	-25.57*	-134.32 ***	-22.83
	(33.76)	(31.22)	(10.88)	(10.43)	(06.9)	(10.21)	(36.85)	(44.20)
Spouse	-26.17	-8.87	3.90	0.06	12.21	33.90	32.13	-11.76
	(17.99)	(0.05)	(7.62)	(5.04)	(7.45)	(18.16)	(36.82)	(62.98)
Infant (<6 months) in household	9.23	0.30	-2.05	-13.51 *	66.04^{***}	-7.57	32.06	-49.19 *
	(11.63)	(4.40)	(4.39)	(6.23)	(11.89)	(4.55)	(17.96)	(19.30)
Has non-residential child under 18	-15.04	-10.90^{*}	-7.44	10.00	-1.90	11.70	-4.27	-47.26
	(11.91)	(5.11)	(5.90)	(14.15)	(0.60)	(9.25)	(29.68)	(25.70)
Has non-own child under 18 in household	3.43	-2.69	-8.00 ***	6.21	12.05	-2.89	-32.35	-3.61
	(18.56)	(4.28)	(2.25)	(13.54)	(14.48)	(5.07)	(23.48)	(31.41)
Weekday	24.12 ***	-3.82	0.85	1.29	19.93^{***}	20.45 ***	-63.67 ***	-116.47 ***
	(4.38)	(2.52)	(2.32)	(2.36)	(3.02)	(2.24)	(8.29)	(9.13)
Year								
2008 (reference)								
2009	-2.33	-6.01	-2.66	5.39	-10.25	-1.83	5.37	13.34
	(6.77)	(5.73)	(4.95)	(3.70)	(6.08)	(4.21)	(12.05)	(13.36)
2010	-1.48	-0.44	-5.97	8.40^{*}	-10.11	-2.66	-2.23	-7.96
	(6.68)	(5.83)	(4.92)	(3.75)	(5.42)	(4.11)	(12.23)	(13.05)
2011	-7.63	-3.04	0.80	5.64	-14.00^{**}	-3.97	0.94	16.42
	(6.73)	(5.95)	(5.24)	(3.66)	(5.40)	(4.17)	(12.13)	(13.16)
2012	-1.23	-5.33	-5.36	7.60	-10.32	-6.34	6.56	7.58
	(7.32)	(5.88)	(4.74)	(4.29)	(5.63)	(4.25)	(12.65)	(13.93)
Constant	-9.60	20.98 **	16.55	68.84 ***	66.90 ***	-8.06	563.35 ***	511.08***
	(14.81)	(7.94)	(7.03)	(7.68)	(10.04)	(7.52)	(28.33)	(30.29)
* p<.05;								
p<0:								

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*** *p*<.001. Author Manachiness. Note: Standard errors are in parentheses.

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		Housework				Childcar	e	
	Female-Typed	Male-Typed	Gender-Neutral	Playing	Physical Care	Education & Other	With Children	Secondary Childcare
At-home father	89	46	48	26	63	67	407	304
At-home mother	173	15	33	37	78	79	493	365
Breadwinner mother								
0 hours paid work	163	10	24	23	64	64	438	335
8 hours paid work	56	9	17	13	40	38	215	202
Breadwinner father								
0 hours paid work	53	40	36	30	45	48	425	326
8 hours paid work	11	18	20	15	26	29	184	125

iours for at-home parents and either 0 or 8 hours for breadwinner parents.