



California Center for Population Research
University of California - Los Angeles

Well-Being Penalty for Employed Mothers? Parental Work Arrangements and Maternal Well-Being

**Ann Meier
Kelly Musick
Sarah Flood
Rachel Dunifon**

PWP-CCPR-2014-009

Latest Revised: September 11, 2014

***California Center for Population Research
On-Line Working Paper Series***

Well-Being Penalty for Employed Mothers?
Parental Work Arrangements and Maternal Well-Being

September 11, 2014

Ann Meier
Department of Sociology &
Minnesota Population Center
University of Minnesota
Minneapolis, MN
meierann@umn.edu

Kelly Musick
Policy Analysis and Management &
Cornell Population Center
Cornell University
Ithaca, NY
musick@cornell.edu

Sarah Flood
Minnesota Population Center
University of Minnesota
Minneapolis, MN
floo0017@umn.edu

Rachel Dunifon
Policy Analysis and Management &
Cornell Population Center
Cornell University
Ithaca, NY
red26@cornell.edu

*Direct correspondence to: Ann Meier, 267 19th Ave S., University of Minnesota, Minneapolis, MN 55455; email meierann@umn.edu, phone 612-626-7230; fax 612-624-7020. Earlier versions of this paper were presented at the 2014 Annual Meeting of the Population Association of America and the 2014 Work & Family Researchers Network and the Work, Family & Time (WFT) Workshop at the Minnesota Population Center. We thank WFT workshop participants for useful comments and suggestions, as well as Liana Sayer and Julie Brines for feedback on earlier drafts. We gratefully acknowledge seed grants from the Minnesota Population Center, Cornell Population Center, and Cornell's Institute for Social Sciences.

Well-Being Penalty for Employed Mothers?

Parental Work Arrangements and Maternal Well-Being

Abstract

This study examines linkages between parental work arrangements and mothers' subjective well-being, asking how mothers' market work, the presence of a partner or spouse, and partners' work patterns predict subjective well-being while caring for children. Further, it examines potential mediators of these linkages. In doing so, we contribute to the literature on parental employment and parenting by shedding light on contextual features that influence the moment-to-moment interactions between mothers and their children. We find that mother's long work hours are linked to more fatigue in time with children. Additionally, father's non-employment and long work hours are associated with reductions in maternal well-being while parenting. Not having a partner was strongly associated with mother's subjective well-being in parenting; single mothers were consistently less happy and more sad and stressed in their time with children than were partnered mothers. Finally, looking at a broad range of activities with children, we find that the type of activity matters for subjective well-being in time with kids; playing and socializing are associated with improved well-being, while cleaning and market work are associated with reduced well-being. Most of the parenting activities we assessed, however, reveal the "mixed bag" of parenting—it is meaningful but also stressful. These findings show the value of considering momentary assessments of well-being across a multidimensional set of indicators.

Keywords: parenting, subjective well-being, work-family conflict, time use

Labor force participation rates for mothers with children under age 18 have increased nearly 60% since 1965 (from 45 to 78%), with average hours of market work more than tripling in this same period (Bianchi 2011). At the same time, the demands of parenting have ratcheted up, as the ideal of intensive motherhood implies time and attention requirements to fulfill the “good mother” role (Hays 1996). Consistent with this, mothers have devoted more, not less, time to their children even as they have increased work hours (Bianchi and Milkie 2010). This creates what many call a “second shift” for working mothers (Hochschild 1989). A few studies document the general strain on working mothers by finding high rates of “feeling rushed,” multitasking, and spillover from work to home (e.g. Bianchi et al. 2007; Gassman-Pines 2013; Offer and Schneider 2011), but we know little about how working mothers feel about the mothering they are doing.

In this paper, we examine mothers’ subjective well-being in parenting, broadly conceptualized as time in activities with children. We use multidimensional indicators of well-being tied to specific activities reported in a nationally representative time diary study and linked to information on work and earnings from both partners. This allows for a detailed exploration of the contextual features of mothers’ time with children, including the presence of and work patterns of partners, whether mothers are solo parenting, the kinds of activities they engage in with children, and their restorative time in sleep in leisure. We posit that mothers’ employment may have both negative and positive associations with well-being in parenting. Balancing the dual roles of mother and worker can generate tension, time strain, and deficits in downtime that may spill into interactions with children (Bianchi 2000; Blair-Loy 2003; Nomaguchi et al. 2005). At the same time, employment may provide mothers with a source of identity outside the home, greater confidence and self-worth, and welcome relief from some of the more onerous daily care

tasks, potentially generating greater appreciation and enjoyment in time with children (Parcel and Menaghan 1994; Yetis-Bayraktar et al. 2012; Latshaw and Hale 2013). Further, we expect that any differences between employed and non-employed mothers' experiences of parenting may be explained by the nature of time with children and other contextual features of parenting that shape subjective well-being.

We draw on a new module in the 2010 American Time Use Survey (ATUS), in which respondents report on momentary well-being in three randomly selected activities throughout the day. This module represents an important resource for research on health and well-being. As noted in a recent National Research Council report (2012, p. 7): "To date, much of the research on nonmarket components of health and well-being has been informed by global assessments of positive or negative affect averaged over time that are divorced from measures of time use or context." In a recent study, we used these questions to assess gender differences in subjective well-being in parenting, finding less happiness, more stress, and especially greater fatigue among mothers than fathers in time with children (Authors 2014). In the present study, we focus on the worker-mother interplay to understand how mothers' employment is associated with well-being in parenting and the degree to which the nature of working mothers' time with children and restorative time account for these linkages.

Work, Mothering, and Subjective Well-Being

In the context of contemporary economic uncertainty and rising rates of single-parenthood, maternal employment is more necessary than ever. Indeed, 40% of all households with children include mothers who are either the only or primary breadwinners (Pew Research Center 2013a). As women's educational attainment has increased and attitudes about women's roles have changed, satisfying and challenging careers are increasingly a normative component

of women's life course (Oppenheimer 1994; Goldin 2004). Thus, more mothers are working than previously and are doing so more intensively (Percheski 2008). This shift is not without challenges—primarily working mothers' role conflict between work and mothering.

It is in this context that a wide range of academic studies has sought to examine the implications of maternal employment for child well-being. Such research highlights aspects of maternal employment that may be especially salient for a mother's ability to balance her work and family roles. For example, long work hours are linked to detrimental child outcomes (Brooks-Gunn et al. 2002; Ruhm 2008) and to insufficient sleep among mothers and children (Kalil et al. 2014). Part-time work has been linked to positive outcomes for children (Ruhm 2004, 2008), and this may be due to its association with improved parenting, especially for less-advantaged mothers (Ruhm 2008; Augustine 2014).

Compared to a number of studies examining links between maternal work and child well-being, few studies have taken mothers' own subjective well-being as the object of study. Those that do focus on general affect, not affect in parenting. Aassve and colleagues (2012) find detriments to happiness among employed mothers across Europe, and Bertrand (2013) reports lower mean affect among employed college-educated mothers relative to their non-employed counterparts. Others find lower levels of well-being in dual-earner households compared to traditional male breadwinner families (Pollman-Schult 2014; Nomaguchi et al. 2005). Among less-advantaged households, Roxburgh (2011) finds that parental reports of time pressure predict depression. Finally, Gassman-Pines (2013) finds that, among low-income mothers, both lower-than-average *and* higher-than-average workload days were associated with increased negative and tired mood and decreased positive mood. None of these studies, however, addresses well-being specifically in time with children.

A few studies provide insights into parents' feelings about balancing work and parenting, pointing to a "never enough" feeling and guilt for not spending enough time with children (Daly 2001), even controlling for how much time they actually spend with them (Milkie et al. 2004). A recent Pew Research Center report shows that 56% of employed mothers and 50% of employed fathers report that it is "very" or "somewhat" difficult to balance work and family. Additionally, 37% of mothers and 32% of fathers report "always" feeling rushed; this report was more common among employed parents. Employed mothers were more likely than the non-employed to say that they are doing an "excellent" or "very good" job at parenting (78% vs. 66%), but were less likely to say they are "very happy" (31% vs. 45%; Pew Research Center 2013b).

The bulk of the literature assessing parents' well-being relies on global assessments, asking, for example, how happy or satisfied people are with their lives in general (Stanca 2012; Aassve et al. 2012; Glass et al. 2014). In contrast, momentary assessments tied to specific activities tend to be more reliable (Kahneman and Krueger 2006; NRC 2012) and may also mitigate threats to validity, for example, minimizing the "filter of memory" (Kahneman and Krueger 2006, p. 22) and the tendency for people to adapt their subjective well-being to changes in life circumstances (e.g., Lucas et al. 2003). The few existing studies on momentary well-being in activities with children have yielded inconsistent results with respect to the well-being ranking of childcare relative to other uses of parents' time (Kahneman et al. 2004; Nelson et al. 2014; Wang 2013). Compos and colleagues (2013) more explicitly link parental work and well-being in parenting, using unique data gathered from home observations of 30 dual-earner couples and their families. They trace parents' emotional tone and expressivity after work, finding that parents report overall positive emotions during this time with a decline for mothers around mealtime. In contrast, Offer (2014) finds that momentary well-being among parents in dual-

earner, middle-class families is positive during family mealtime. This evidence, although mixed, points to the importance of the context of activities in shaping well-being in parenting.

The studies reviewed above point to feelings of global strain regarding work and family. However, except for a handful of studies mostly with small, non-representative samples, existing research does not tell us how employed mothers feel when they are actually parenting. Is the generalized stress evident in parenting, too? Or, with fewer minutes with a child, is each moment more precious? Finally, how do the nature of activities and other contextual features of parenting play into the link between mothers' work and well-being in parenting?

Partner Presence, Partner Work, and Mother's Well-Being

The presence of a spouse or partner could have implications for subjective well-being while parenting. Evidence suggests that nonresident biological fathers spend less time with their children than do resident fathers (Hofferth and Anderson 2003; Kalil et al. 2014), indicating a greater parenting burden for single mothers. Additionally, single mothers spend more of their time with children in "solo" care, without the presence of other adults (Kalil et al. 2014); such time may be more stressful and difficult than time spent with another adult (Folbre et al. 2005). We expect mothers to report greater well-being in parenting if they live with a spouse or partner.

Very few studies have considered how spousal work behaviors influence parents' work-family balance or well-being. Raley et al. (2013) report that wives spend more time in childcare when husbands work long hours. Cha (2010) finds further that wives, especially those with spouses in professional jobs, are more likely to quit their jobs when husbands work 60 or more hours per week. Two studies document that wives' perceptions of their husbands' work-family conflict detrimentally influences their own mental health (Young et al. 2014; Pederson 2014).

Time use data highlights ways in which partner non-work may influence maternal well-being. For example, non-employed, stay-at-home fathers do a disproportionately low share of housework and care work and enjoy a disproportionately high share of leisure compared to non-employed, stay-at-home mothers (Pew Research Center 2013b). Thus, there is evidence that mothers with stay-at-home partners face unique stressors related to the competing demands of being the breadwinner combined with a relative lack of participation in housework and child care among their partners. A key contribution of the current study is to link partner work patterns to mothers' subjective well-being. We expect that both partner's long hours and partner's unemployment will be negatively related to mothers' subjective well-being in parenting.

Mechanisms

Two key pathways through which women's employment may link with subjective well-being in parenting are her restorative time and the nature of her time with children. Regarding restorative time, sleep and leisure are likely "squeezed" by pressures from both parenting and work. According to the National Sleep Foundation (2012), adults need 7 to 9 hours of sleep per night for mental and physical well-being. Lack of sleep is linked to reduced happiness (Smith-Coggins et al. 1994) and increased anger and anxiety (Munakata et al. 2000).

Stress, including job-related conditions, can interfere with sleep (The National Sleep Foundation 2012). A robust literature links maternal employment to mothers' reduced sleep (Bianchi 2000; Kalil et al. 2014). Using nationally representative time-use data, Bianchi (2000) showed that employed mothers get four to five hours per week less sleep than non-employed mothers, as employed mothers appear to cut back on their sleep in order to preserve time for their children. Further, long work hours increase the odds of insufficient sleep (Artazcoz et al. 2007). Recent studies suggest that mothers experience more sleep disruption than fathers because they

respond to caregiving-related sleep interruptions (Burgard and Ailshire 2013), but also due to more “sentient” activity such as strategizing about family management (Venn et al. 2008).

Evidence suggests that employed mothers have fewer leisure hours than non-employed mothers (Bianchi 2000). Moreover, compared to those who were not employed, employed women experienced more fragmented free time and fewer hours of both free time devoted *exclusively* to leisure and free time with no children present (Mattingly and Bianchi 2003). Fathers in dual-earner couples have 4.5 more hours per week of leisure time than mothers (Pew Research Center, 2013b), underscoring the unique leisure deficit faced by employed mothers. Thus, the amount and quality of both sleep and leisure may compromise employed mothers’ restorative time and account for linkages between employment and subjective well-being in parenting.

The second potential mechanism explaining the link between mothers’ employment and subjective well-being in parenting is the nature of time with children. Mothers spend more time with children than fathers across all types of parental work arrangements and all types of child-related activities (Raley et al. 2013). They are typically responsible for the day-to-day, time-inflexible basic care and management tasks related to childcare, and they spend a smaller share of their overall minutes with children in play than do fathers (Sayer 2005; Sayer et al. 2004). With less overall time devoted to childcare among employed versus non-employed mothers combined with a basic set of childcare needs, employed mothers may spend a higher share of their overall time in routine and management tasks (e.g., arranging after school care, extra-curricular activities, etc.), which may in turn be associated with greater parental stress and fatigue (Offer, 2014; Shaw, 2008). We expect that the type of activities mothers do with

children will explain part of the link between maternal work and subjective well-being in parenting.

Finally, mothers are more often the sole parent on duty (Kalil et al. 2014). Alone time with children is potentially taxing and boring (Folbre et al. 2005; Blair-Loy 2003). Those who spend time with children when a spouse is also present are less emotionally and physically constrained (Craig 2006; Craig and Mullan 2011) and can benefit from the co-parent's support (Van Egeren and Hawkins 2004). Assuming regular work schedules, employed mothers may spend more of their time with children during evenings and weekends when fathers are also available, potentially engaging in more shared time with children relative to non-employed mothers. We expect shared parenting time to be associated with positive well-being on balance and to account for some of the link between maternal work and well-being in parenting.

Socio-Demographic Characteristics

Employed mothers look different in many ways from those who are not in the labor force. For example, non-employed mothers are more often married and living with an employed spouse (Pew Research Center 2014). Additionally, non-employed mothers are less educated and have lower household income, have younger children at home, and are more likely to be non-white, than employed mothers (Pew Research Center 2014). Our analyses account for these and other person-level characteristics that are associated with well-being, including mothers' education, age, and race and ethnicity, the number of children and age of youngest child. Activity-level controls include where the activity took place, its duration, and its time of day, as well as the total time spent with children in the diary day prior to the indexed activity.

Summary

The goal of this project is to address three questions. First, how is mothers' market work associated with subjective well-being in time with children? Second, how is the presence of a spouse or partner and the spouse or partner's employment associated with mothers' subjective well-being in time with children? Finally, (how) do various features of parenting time and mothers' restorative time mediate links between employment and well-being in time with children? We investigate the types of activities mothers do with their children, whether a spouse or partner is present in those activities, and the amount and quality of mothers' sleep and leisure.

This research makes five contributions. First, by linking ATUS respondents back to data from the recent Current Population Study (CPS) panel from which they are drawn, we leverage rich mother and partner data on work and earnings, allowing us to examine how both mothers' and partners' employment independently play into mothers' well-being while parenting. Second, we assess mothers' momentary assessments of subjective well-being specifically in parenting, as opposed to overall assessments, thereby moving beyond much of the past work in this area, and broadening to a nationally representative sample the sparse prior work using momentary assessments. Third, we assess multiple dimensions of well-being, including happiness, meaning, sadness, fatigue, and stress. This broader set of items draws on psychological literature that suggests important dimensions of well-being (Russell 2003). Fourth, rich person- and activity-level data allow us to explore key mechanisms that tap the nature of mothers' time with children and other contextual features of parenting that shape subjective well-being.

A final contribution of this work is our treatment of the concept of parenting. We assess all types of activities that mothers report doing with children. Prior work has focused on child-centered activities, such as routine care, play, teaching, and management (e.g. Kalil et al. 2012).

However, activities of these types may be most relevant when children are young and capture only a fraction of parenting time; Offer (2014) estimates only about one-quarter of all time with children is in direct interaction. We argue that parenting objectives (e.g., supervision, life skills development) can be achieved through many types of activities with a child including seemingly mundane tasks such as cleaning and shopping (Folbre et al. 2005). Our treatment of parenting is inclusive of any activity mothers report doing with children.

Empirical evidence suggests that as women have taken on the co-provider role, they have also increased the intensity with which they parent. Theoretical advances suggest that this is the “cultural contradiction of modern motherhood.” Women should work, but they must also be more present than ever to actively cultivate the development of successful children (Hays 1996). The goal of this study is to examine how mothers fare in this project of raising children, especially in the context of their employment and work conditions.

Data, Measures, and Methods

We use data from the 2010 American Time Use Surveys (Hofferth et al. 2013). The ATUS is a time diary study of a nationally representative sample of Americans. ATUS respondents report on their activities over a 24-hour period from 4:00 a.m. of a specified day until 4:00 a.m. of the following day, indicating the type of activity, as well as where, when, and with whom it occurred.¹ Responses are recorded using Computer Assisted Telephone Interview procedures. Activities are coded using a six-digit, three-tier coding system, and over 400 activity categories are represented by the classification. Data are collected every day of the week, including holidays, with weekends oversampled. 50% of diaries are about weekend days (25% each), and 50% are about weekdays (10% each day).

¹ Information on where and with whom the activities occurred is available for all activities except for personal care and sleeping.

ATUS sample members are drawn from CPS respondents. One individual aged 15 or older per former CPS participating household is invited to participate in the ATUS during the two to five months following their exit from the CPS. ATUS time diaries can be linked to data from the CPS, which provides information on all household members (allowing us to assess own *and partner* work and earnings). The 2010 ATUS had a response rate of 57% (ATUS 2013, p. 14).² Critical to our analysis, the 2010 ATUS included a new well-being module. All ATUS respondents were eligible for participation in the module, and there was minimal nonresponse (ATUS 2013). Participants reported how they felt in three randomly selected activities of at least five minutes in duration. Approximately 13,000 men and women ages 15-85 completed the well-being module, for a total of about 39,000 activities. Sleeping, grooming, and personal activities as well as activities where the respondent didn't know or refused to report what they were doing were not eligible for selection. As noted above, well-being assessments tied specifically to activities tend to be more reliable (Kahneman and Krueger 2006; NRC 2012) and valid (e.g., Lucas et al. 2003). Further, Kahneman et al. (2004) find little difference in assessments attained via 24-hour recall (like those we use here) and those assessed in real-time via beeper methodology. The analysis that we present below is weighted, accounting for the oversample of weekends and other aspects of the ATUS sample design; weighting also accounts for differences between activities in the fraction of time in eligible activities and the probability of having an eligible activity selected (ATUS 2011, pp. 4-5).

² Some studies have shown that respondents in the ATUS differ from non-respondents on reports of pro-social behaviors (e.g. Abraham et al. 2009). Those who volunteer, for example, are also more likely to respond to surveys like the ATUS leading to inflated national estimates of volunteering. Abraham et al. (2009) found that while non-response can have a significant effect on the univariate distribution of pro-social activities, it does not appear to affect inferences about the respondent characteristics that are associated with those activities.

Approach

To assess mothers' well-being in time with children in the context of her and her partner's employment arrangements and relative earnings, we limit our sample to the parenting activities of mothers 21-55 with children under age 18 in the household. In all, the well-being sample of the ATUS includes 7,195 women; 2,735 are ages 21-55 and have a child under 18 in the household. Of mothers in our age range, we were unable to determine for 369 cases whether the mother or her spouse/partner was the primary earner, a key indicator for our analysis; we therefore excluded them. Finally, we excluded another 470 cases (20% overall or 13% among non-employed women and 23% among employed women) for whom there were no activities with children among the three randomly selected for inclusion in the well-being module. Note that although for a fifth of mothers there was no activity with children in the well-being module, less than 6% overall (4% non-employed and 7% employed) reported no activities with children throughout the diary day. This leaves us with 1,896 women reporting 3,853 activities with children. Thirty percent of our sample is with children during one of the well-being module activities, 37% is with children during two activities, and 33% is with children during all three selected activities.

We use methods that account for the multilevel nature of our data, in which activities at level one are nested within individuals at level two (Allison 2009). Our outcomes—multiple dimensions of well-being—are scored 0-6 and treated as quantitative variables. We rely on random effect models (also called multilevel or mixed models in the literature, estimated using *xtreg*, *robust re* in Stata for quantitative response variables). The basic model can be written:

$$y_{ij} = \gamma_{00} + \gamma_1 X_{ij} + \gamma_2 Z_j + v_{0j}$$

for activity i and individual j where v_{0j} is a person-specific random error term representing

unobserved characteristics of individual j and assumed independent of X 's (activity-level covariates) and Z 's (person-level covariates).

Random effect models yield a weighted average of within- and between-level estimates, with the advantage of providing estimates for characteristics that are invariant across activities. Thus, we can assess the association between well-being in various activities with children, accounting for characteristics of *individuals* that structure the day to day (employment and earnings, sleep and leisure), as well as the micro-level context of women's daily *activities*, namely, the type of parenting activity and whether or not they were with a spouse or partner.

Subjective Well-Being

Our outcome measures tap five indicators of subjective well-being. For each of three sampled activities, ATUS respondents were asked: 1) How *meaningful* did you consider what you were doing? 2) How *happy* did you feel during this time? 3) How *sad* did you feel during this time? 4) How *stressed* did you feel during this time? 5) How *tired* did you feel during this time? For each of these questions, response options ranged from 0 (e.g., not at all meaningful, not stressed at all) to 6 (e.g., very meaningful, very stressed).

Several properties of this set of items make it attractive for assessing subjective well-being. Russell's (1980) circumplex model of core affect suggests two important dimensions: positive/negative and arousal. By crossing the two dimensions, four types of core emotions result: positive low arousal (e.g. contentment), positive high arousal (e.g. happiness), negative low arousal (e.g. sadness), and negative high arousal (e.g. stress). Three of these types are in the ATUS subjective well-being module: happiness, sadness and stress. The ATUS module does not include a positive, low arousal indicator, but psychometric research indicates that positive emotions highly correlate with each other, minimizing the need for multiple indicators (Kaptein

et al. 2013). Negative emotions are often not highly correlated. Therefore, an additional negative emotion, tired (negative, low arousal), is included. Finally, “meaning” is considered a eudaimonic measure—one that captures purpose. In their National Research Council report on subjective well-being, Stone and Mackie (2013) argue that at least one eudaimonic measure be included in assessments of well-being because these measures often cross the positive-negative dimension. For example, one can find pleasure but little meaning in an activity like watching TV or meaning but little pleasure in an activity like reading the same book repeatedly to a child. Taken together, meaning, happiness, sadness, fatigue and stress provide a useful set of affect measures through which we can assess well-being in parenting.

Mother and Partner Employment

As noted earlier, we link ATUS respondents to CPS data to measure own and partner’s employment and earnings. To assess *mothers’ employment status* we differentiate no market work, part-time work (<35 weekly hours), full-time work (35-49 weekly hours), and more than full-time work or long work hours (50+ weekly hours). We create an analogous measure of *spouse/partner’s employment status*, though this measure includes a category for *no spouse/partner* (i.e. single mother). Finally, we calculate the ratio of mother to spouse/partner earnings and create an indicator for whether the *mother is the primary earner*.

Mechanisms

Sleep and Leisure. We include two indicators of sleep and three indicators of leisure. *Total hours of sleep* is a continuous variable that registers the number of hours mothers report sleeping in the prior 24-hour period. *Disrupted sleep* is a dichotomous indicator for three or more sleep episodes. *Total hours of leisure* is measured analogous to total hours of sleep, above. *Episodes of leisure* is a count variable—it may index interrupted leisure (as is likely in sleep),

though it may also indicate distinct leisure activities. Finally, *total hours of leisure with children only* indicates how many hours of a mother's leisure is potentially "contaminated" by child-related responsibilities with no other adult present.

Contextual Features of Activities. As noted, we depart from prior literature in measuring time in parenting activities by including *any* activity that mothers report doing with their children. Guided by the activity coding in Aguiar and Hurst (2007) and Kahneman and colleagues (2004), we define the categories of activities that parents could be doing with their children as: *market-work*, *carework* (excluding childcare, to be addressed separately), *cooking*, *cleaning*, *shopping*, *other non-market work*, *television watching*, *socializing*, *education/religious events* and *eating*. To tap the various types of childcare assessed in past work, we follow closely the coding strategy of Kalil and colleagues (2012) to include categories for *basic* childcare, *playing* with children, *teaching* children, and *managing* children's activities and schedules for a total of 14 activity groups. Finally, we use a series of "who with" questions to assess whether or not the respondent engaged in the parenting activity with a spouse/partner.

Activity-Level Controls

Several other activity level variables serve as controls. Respondents are asked: "Where were you while you were [ACTIVITY]?" (ATUS 2012, p. 24). We code whether the activity took place in public or at work (versus at home). We also account for activity duration, how much time mothers report with children (in any activity) prior to the indexed activity, and time of day: 4 to 9am, 9am to 2pm, 2 to 5pm, 5 to 9pm, and 9pm to 4am.

Person-Level Controls

We include person-level controls for things that could confound the association between subjective well-being in parenting and employment status. These include: whether the

respondent has a college degree, whether she is currently enrolled in school, age, race/ethnicity (non-Hispanic White, non-Hispanic Black, Hispanic, other), number of children (one, two or more), and age of youngest child (under six, 6-12, and 13-18). We also control for the season of the diary report (winter, spring, summer, fall) and whether it was reported on a weekend day.

Results

In what follows, we describe results from Tables 1 and 2. These results highlight patterns of mothers' activities with children and their subjective well-being while engaged in these activities, how these patterns vary by employment status, and how our proposed mechanisms vary by employment status and subjective well-being in parenting.

Table 1 shows relatively small and mostly non-significant bivariate differences in subjective well-being in activities with children by maternal employment. Of time with children, non-employed mothers report nearly equal parts in television watching, socializing, eating, and basic childcare (12 to 14%). Employed mothers have a similar distribution on these measures, though they spend a bit less of their parenting time in basic childcare (11%) and more in eating and socializing (15% each). Both employed and non-employed mothers spend non-trivial proportions of parenting time in cooking, cleaning, shopping, playing (non-employed mothers) and childcare management (employed mothers). Overall, employed mothers spend a higher proportion of parenting time in leisure-type activities with children (like socializing, shopping, and eating) and a lower proportion in childcare (basic, play and teaching); as expected, they spend more of their time in management tasks related to childcare. Employed mothers spend 30% of their childcare activities with spouses compared to 28% among non-employed mothers. Taken together, we see only modest differences in how employed and non-employed mothers allocate their time with children.

<Table 1 about here>

At the person level, about 30% of employed mothers work less than 35 hours per week, about 60% work 35-49 hours, and 10% work 50 or more hours per week. Employed mothers are more likely to be with partners who are not employed (10% vs. none among our sample of non-employed mothers), and they are less likely to be with partners working over 50 hours (14% vs. 19% among partners of non-employed mothers). Among both employed and non-employed mothers, about 25% are currently living without a partner in the household. Of the employed mothers with a partner at home, 36% are the primary earners for their families.

Employed mothers get approximately 30 minutes less sleep a night, on average, than non-employed mothers, but interrupted sleep is slightly less common among employed mothers (19 versus 25%). Employed mothers report less total leisure than non-employed mothers—they experience about 1.5 hours less leisure and nearly one fewer leisure episode in the 24-hour reporting period. Employed mothers also experience less leisure time alone with children than non-employed mothers (1.5 versus 2 hours), such that employed and non-employed mothers share about the same percentage of their leisure time with children: 27 and 29% of employed and non-employed mothers' leisure time, respectively.

Table 2 shows generalized linear models (GLM) with random effects predicting each of the five well-being indicators across two models. Model 1 includes mother's work status, partner's work status, mother's union status, and an indicator for a primary earner wife. Model 2 adds all person- and activity-level mediators (shown) and controls (shown in Appendix Table 2). Model 1 indicates that only fatigue is predicted by mother's employment status, and only in the case of mothers who work long hours compared to the reference category of non-employed mothers. The coefficient on long work hours is reduced by 20% but remains marginally

statistically significant (at $p < 0.10$) with the inclusion of key person- and activity-level mediators and controls (Model 2); increased fatigue in time with children among mothers who work long hours may be accounted for, in part, by the quantity and quality of their sleep and leisure and the nature of the parenting activities they are doing.

<Table 2 about here>

Mothers' well-being in time with children is somewhat more affected by whether or not she is partnered and her spouse or partner's work status. Single mothers, net of their own employment status, are less happy and experience more stress in time with children than partnered mothers. Sleep, leisure, or the type of parenting activity does not mediate these associations. Single mothers also appear more sad and fatigued in time with children, but these associations are reduced by more than half by our set of mediators in Model 2, rendering the associations only marginally significant (sadness; $p < 0.10$) or non-significant (fatigue).

Partnered mothers report less meaning in time with children if their spouse works long hours and this is only partially mediated by our hypothesized mediators. Partnered mothers also report less happiness and more sadness and fatigue in time with children if their spouse is not employed compared to working full-time. Again, the inclusion of our set of person- and activity-level mediators does not eliminate the significant association between partner's non-employment and mother's reduced happiness and increased sadness and fatigue in time with children, though coefficients on happiness and fatigue are only marginally significant ($p < 0.10$). Partner's part-time work is associated with increased meaning in mother's activities with children, but this association does not hold up to the inclusion of sleep, leisure, the mix of activities mothers engage in with children, solo parenting, and controls for sociodemographic characteristics.

Mother's role as the primary earner is not significantly associated with her subjective well-being in time with children as measured by any of the five indicators.

Features of mother's sleep, leisure, and the context of the activities she shares with children are associated with various indicators of her well-being in parenting net of employment status and other controls. As expected, increases in total hours of sleep are associated with reduced stress and fatigue, and interrupted sleep, net of total hours, is associated with reduced happiness and increased sadness, stress, and fatigue in parenting. Total hours of leisure and number of leisure episodes are only marginally associated with mother's well-being in time with children, although in the expected direction—more leisure hours or episodes are associated with less sadness, stress, or fatigue. However, net of total hours of leisure and number of episodes, the number of leisure hours with children only is associated with elevated sadness among mothers.

The types of activities engaged in with children greatly shape a mother's well-being while mothering. Recall that we included a broad range of activities, reasoning that parenting happens in many activity contexts. It is important to recognize that television watching (our reference activity) is associated with overall high levels of well-being—high happiness, low sadness, stress, and fatigue, but also low meaning—so a non-significant difference from television watching indicates an activity is associated with quite positive well-being. These models indicate that the parenting activities that are associated with the uniformly highest well-being (as good or better than television watching) are play and socializing.³ For example, net of other factors, playing with children is associated with a 0.6 point increase in happiness, a 1.5 point increase in meaning, and a 0.35 point decrease in fatigue. Conversely, those associated with the uniformly lowest well-being are cleaning and market-work with children. For example,

³ At the activity-level where Ns are more than double the person-level Ns, we focus our discussion on associations significant at the $p < 0.05$ level.

cleaning with children is associated with between 0.33 and 0.67 point increases in sadness, stress, and fatigue and a similarly sized decrease in happiness. Mothers find no more meaning in cleaning with their children than in watching television with them (a low meaning activity).

Beyond the extremes, however, time in most activities with children is a “mixed bag.” For example, mothers report more meaning, but also higher stress with children in cooking, shopping, eating, other non-market work (e.g. errands and chores), education and religious activities, and basic care, teaching, and management activities focused on children. It should be noted, however, that all of the “childcare” activities (basic care, play, teaching, and management) are associated with elevated meaning compared to most other activities with children, suggesting that activities focused on children elicit more meaning than those where children are present, but perhaps not the sole focus. Finally, mother’s well-being is improved across four of five indicators when her spouse or partner is also present—she is happier, finds more meaning and is less sad and stressed in time with children.

Conclusion and Discussion

The goal of this study was to examine the linkages between parental employment and mothers’ subjective well-being while parenting. We examined how mothers’ market work predicts subjective well-being while caring for children and asked if and how the presence of a spouse or partner and partners’ market work predicts mothers’ subjective well-being in parenting. Next, we examined which features of caring for children and mothers’ restorative time might mediate the linkages between work and well-being in time with children. Finally, we considered the association of these features, themselves, with subjective well-being in parenting.

Five unique features of our study reveal new insights. First, by using the ATUS linked to its parent survey, the CPS, we were able to leverage reliable data on mother’s and partner’s

employment status and earnings. This allowed us to assess the independent association between mother's and partner's work on her well-being in parenting. In doing so, we revealed that mothers who work long hours suffer greater fatigue in parenting, and this was only partially explained by their own restorative time and the nature of their parenting activities.

Another insight afforded by our combination of data from the ATUS and CPS data is that the existence and employment status of partners is crucial to mother's well-being in parenting. Partner's employment patterns are linked to mother's subjective well-being in time with children, and these linkages appear most strongly along the "extremes" of partner work experiences. When partners do not work, mothers report less happiness and more sadness and fatigue in time with children, and when partners work long hours, mothers report less meaning in time with children. This suggests that in addition to her own long hours increasing fatigue in time with children, her partner's work may further play into her affect in parenting. The strains felt when partners do not work is suggested by Latshaw and Hale (2013), who illustrate how stay-at-home husbands hand off parenting duties when wives cross the threshold to home, and it is confirmed with time diary data indicating the disparate time spent in leisure among stay-at-home fathers compared to stay-at-home mothers (Pew Research Center 2013b). Perhaps this dynamic leads to stress with implications for how mothers feel when spending time with their children. Our finding related to partners' long work hours echoes Cha (2010), who found that mothers were more likely to quit their jobs when fathers work very long hours. Perhaps the reduced meaning we observe among such mothers in their interactions with children is a precursor to such an outcome.

Single parenthood exhibited stronger linkages to well-being while parenting than did either mothers' or fathers' work. Single mothers were consistently less happy and more sad and

stressed in their time with children than were partnered mothers. This suggests that the presence of a partner is more important to mothers' subjective well-being while parenting than parental work arrangements, potentially offering resources that relieve some of the pressure of parental responsibility. Indeed, our results show that spending time with kids with a partner present is uniformly beneficial for mothers' subjective well-being in time with children. As noted by Kalil et al. (2014), solo time with children may carry particular strains; the lack of a partner may color single mothers' time with children.

A second unique feature of our study—momentary assessments of subjective well-being with nationally representative data—allows us to extend knowledge on parenting and well-being beyond global assessments divorced from the context of parenting or momentary assessments of with small, select samples from a particular place (e.g. Kahneman's et al.'s 2004 study of 909 employed mothers in Texas) or of a particular family type (Offer's 2014 study of middle-class dual-earner couples). These momentary assessments afford the ability to assess variation in well-being by the context of referent activities. We find that the type of activity mothers do with their children is strongly associated with their well-being. Further, parenting with a spouse or partner is associated with a boost in well-being.

This leads to a third unique feature of this study. We conceptualize parenting much more broadly than many past studies that focus on “childcare” defined in four categories: basic or routine care, play, teaching, and management. Like Folbre and colleagues (2005), we reason that parenting happens in many contexts, not just those focused directly on care of children. Further, the typical measures of childcare are more appropriate for capturing parenting activity among parents of young children but less appropriate for the sorts of parenting characteristic of those with older children. Indeed, our descriptive analysis shows that mothers spend nearly as much or

more of their time with children watching television, socializing and eating, respectively, than they do in basic childcare. Were we to restrict parenting to only basic or routine care, play, teaching, and management, we would miss nearly three-quarters of the activities mothers do with children in our sample (see Appendix Table 1). Moreover, we find important associations between well-being in parenting and many of the types of activities in our broadened set. For example, we learn that socializing with children present is a particularly positive experience. We also learn something about the well-being of mothers while engaged in the typical set of childcare activities compared to our broader set—basic care, play, and teaching are all especially meaningful. This indicates that child-focused activities that require direct interaction with children are the source of greatest meaning in parenting.

If we focused only on meaning, however, we would miss the finding that some of these child-focused activities are also associated with elevated stress. A fourth contribution of our study is our multidimensional consideration of well-being. As noted, many past studies focus on global assessments of one or a few dimensions. Happiness and satisfaction are among the most common dimensions. However, we find many interesting associations with sadness, fatigue, stress, and meaning, as well. Indeed, many of our parenting activities are associated with several indicators, and often in different directions than might be anticipated. For example, mothers report increased meaning but also more stress while with children in cooking, shopping, other non-market work (e.g. errands), education and religious activities, eating, basic care, teaching and management care. This confirms the particular importance of including a eudaimonic measure like “meaning” in assessments of well-being (Stone and Mackie 2013). Much of the “mixed bag” of parenting would be missed if we considered just one dimension of well-being.

A final contribution of our study is the rich set of measures afforded by the ATUS to assess the nature and context of parenting. Few other studies allow for such detailed accounting of restorative time in sleep and leisure. With these measures we learn that restorative time has strong associations with well-being in parenting, and it can partially account for the association between mother's long work hours and fatigue in parenting. Longer sleep duration reduces stress and fatigue in time with children, while interrupted sleep reduces happiness and increases sadness, stress and fatigue in such time. Leisure did not play a strong role in determining subjective well-being in time with kids, yet the few marginally significant associations with sadness, stress and fatigue all indicate more leisure is better for subjective well-being. This highlights the need to consider further ways in which restorative time may influence parenting behaviors. As discussed above, we created a fairly detailed set of 14 activities that could be done with children. Each activity had some association with at least one of the well-being indicators. Moreover, information about solo versus co-parenting allows us to confirm that mothers typically have elevated well-being while parenting alongside a spouse or partner. Therefore, the rich set of measures captured in the ATUS allows us to contribute to the literature by shedding light on contextual features that influence the moment-to-moment interactions between mothers and their children.

Taken together, then, this paper contributes to our understanding of the linkages between mothers' status as workers, presence of a partner and that partner's work experiences, and subjective well-being while parenting. Despite large bodies of research documenting competing time pressures on mothers both at work and at home, as well as evidence linking maternal employment experiences to both parenting behavior and child well-being, no previous studies have examined the linkages between employment experiences (including mothers' own and that

of her partner) and subjective well-being during parenting. Doing so enhances our knowledge of how conflicting demands in the domains of work and family may play out in the most essential domains of parenting—the moment-to-moment interactions between parents and children.

References

- Aassve, A., Goisis, A., & Sironi, M. (2012). *Happiness and childbearing across Europe*, 108(1), 65-86.
- Abraham, K. G., Helms, S., & Presser, S.. (2009). How social processes distort measurement: The impact of survey nonresponse on estimates of volunteer work in the United States. *American Journal of Sociology*, 114(4), 1129-1164.
- Aguiar, M., & Hurst, E. (2007). Measuring trends in leisure: The allocation of time over five decades. *The Quarterly Journal of Economics*, 122 (3), 969-1006, doi: 10.1162/qjec.122.3.969
- Allison, P. D. (2009). *Fixed effects regression models*. Newbury Park, CA: Sage.
- Artazcoz, L., Cortès, I., Borrell, C., Escribà-Agüir, V., & Cascant, L. (2007). Gender perspective in the analysis of the relationship between long work hours, health and health-related behavior. *Scandinavian Journal of Work, Environment, and Health*, 33(5), 344-350.
- Augustine, J.M. (2014). Mothers' employment, education and parenting. *Work and Occupations*, 41(2), 2237-270.
- ATUS. (June 2012). American Time Use Survey Questionnaire 2003-2010. Available at https://www.atusdata.org/atus/linked_docs/tuquestionnaire0310.pdf (accessed on 7/22/14).
- ATUS. (March 2013). *User's guide*. <http://www.bls.gov/tus/atususersguide.pdf>. Accessed 21 March 2013.
- Bertrand, M. (2013). Work on women's work is never done: Career, family and the well-being of college educated women. *American Economic Review: Papers and Proceedings*, 103(3), 244-250.
- Bianchi, S. M. (2000). Maternal employment and time with children: Dramatic change or surprising continuity? *Demography*, 37(4), 401-414.
- Bianchi, Suzanne. (2011). Change and time allocation in American Families. *ANNALS of the American Academy of Political and Social Science*, 638, 21-44.
- Bianchi, S., & Milkie, M. (2010). Work and family research in the first decade of the 21st century. *Journal of Marriage and Family*, 72, 705-725.
- Bianchi, S., Robinson, J., & Milkie, M.. (2007). *Changing rhythms of American family life*. New York: Russell Sage Foundation.
- Blair-Loy, M. (2003). *Competing devotions: Career and family among women executives*. Cambridge, MA: Harvard University Press.

- Brooks-Gunn, J., Han, W. J., & Waldfogel, J. (2002). The effects of early maternal employment on child cognitive development, *Demography*, 39(2), 369–392.
- Burgard, S., & Ailshire, J. (2013). Gender and time for sleep among U.S. adults. *American Sociological Review*, 78(1), 51-69.
- Campos, B., Wang, S., Plaksina, T., Repetti, R., Schoebi, D., Ochs, E., & Beck, M. (2013). Positive and negative emotion in the daily life of dual-earner couples with children. *Journal of Family Psychology*, 27(1), 76-85.
- Cha, Y. (2010). Reinforcing separate spheres: The effect of spousal overwork on men's and women's employment in dual-earner households. *American Sociological Review*, 75(2), 303-329.
- Craig, L. (2006). Does father care mean fathers share? A comparison of how mothers and fathers in intact families spend time with children. *Gender and Society*, 20 (2): 259-281
- Craig, L. & Mullan, K. (2011). How mothers and fathers share childcare: a cross-national time-use comparison. *American Sociological Review* 76 (6): 834-861
- Daly, K. J. 2001. Deconstructing family time: From ideology to lived experience. *Journal of Marriage and Family*, 63, 283-294.
- Folbre, N., Yoon, J., Finnoff, K., and Fuligni, A.S. (2005). By what measure? Family time devoted to children in the United States. *Demography*, 42(2), 373-390.
- Gassman-Pines, A. (2013). Daily spillover of low-income mothers' perceived workload to mood and mother-child interactions. *Journal of Marriage and Family*, 75: 1304-1318, doi:10.1111/jomf.12068
- Glass, J., Simon, R. & Andersson, M. (2014) Parenthood and Happiness: Effects of Work-Family Reconciliation Policies in 22 OECD Countries. Under review
- Goldin, C. (2004). The long road to the fast track: Career and family. *The Annals of the American Academy of Political and Social Science*, 596, 20-35.
- Hays, S. (1996). *The cultural contradictions of motherhood*. Yale University Press.
- Hochschild, A. (1989). *The second shift*. New York: Viking Penguin.
- Hofferth, S., & Anderson, K.G. (2003). Are all dads equal? Biology versus marriage as basis for paternal investment. *Journal of Marriage and Family*, 65, 213-232.
- Hofferth, S., Flood, S. M., & Sobek, M. (2013). American time use survey data extract system (Version 2.4) [Machine-readable database]. College Park, Maryland: Maryland Population

Research Center, University of Maryland, & Minneapolis, Minnesota: Minnesota Population Center, University of Minnesota.

Kahneman, D., & Krueger, A.B. Developments in the measurement of subjective well-being. *The Journal of Economic Perspectives*, 20(1), 3-24.

Kahneman, D., Krueger, A.B., Schkade, D.A., Schwarz, N. & Stone, A.A. (2004). A survey method for characterizing daily life experiences: The day reconstruction method. *Science*, 306(5702), 1776-1780, doi: 10.1126/science.1103572

Kalil, A., Dunifon, R., Crosby, D., & Su, J. (2014). Work hours, work schedules and sleep duration among mothers and their young children, *Journal of Marriage and Family*, under revision.

Kalil, A., Ryan, R., & Chor, E. (2014). Time investments in children across family structures. *Annals of the American Academy of Political and Social Science*, forthcoming.

Kalil, A., Ryan, R., & Corey, M. (2012). Diverging destinies: Maternal education and the developmental gradient in time with children. *Demography*, 49, 1361-1383.

Kapteyn, A., J. Lee, C. Tassot, H. Vonkova, and G. Zamarro. (2013). *Dimensions of subjective well-being (CESR working paper series, paper n. 2013-05)*. Playa Vista, CA: Dornsife Center for Economic and Social Research.

Latshaw, B. A. & Hale, S. I. (2013, May). The domestic handoff – A mixed methods assessment of fathers' time-use in female breadwinner families. Paper presented at the 2013 meetings of the Population Association of America, New Orleans, LA.

Lucas, R. E., Clark, A. E., Georgellis, Y., & Diener, E. (2004). Unemployment Alters the Set Point for Life Satisfaction. *Psychological Science* 15(1): 8-13.

Mattingly, M., & Bianchi, S. (2003). Gender differences in the quantity and quality of free time: The U.S. experience. *Social Forces*, 81(3), 999-1030.

Milkie, M. A., Mattingly, M. J., Nomaguchi, K., Bianchi, S. M., & Robinson, J. P. (2004, August). The time squeeze: Parental statuses and feelings about time with children. *Journal of Marriage and Family*, 66, 739-61.

Munkata, M., Ichii, S., Nunokawa, T., Saito, Y., Ito, N., Fukudo, S, & Yoshinaga, K. (2001). Influence of night shift work on psychologic state and cardiovascular and neuroendocrine responses in healthy nurses. *Hypertension Research*, 24(1), 25-31.

National Research Council. (2012). *The subjective well-being module of the American time use survey: Assessment for its continuation*. Panel on Measuring Subjective Well-Being in a Policy-Relevant Framework. Committee on National Statistics, Division of Behavioral and Social Sciences and Education. Washington, DC: The National Academies Press.

National Sleep Foundation. *How much sleep do we really need?*
<http://www.sleepfoundation.org/article/how-sleep-works/how-much-sleep-do-we-really-need>. Accessed 3 May 2012.

Nelson, S.K., Kushlev, K., & Lyubomirsky, S. (2014). The pains and pleasures of parenting: When, why and how is parenthood associated with more or less well-being? *Psychological Bulletin*, *140*(3), 846-895.

Nomaguchi, K.M., Milkie, M.A., and Bianchi, S.M. (2005). Time strains and psychological well-being: Do dual-earner mothers and fathers differ? *Journal of Family Issues*, *26*(6), 756-792.

Offer, S. (2014). Time with children and employed parents' emotional well-being. *Social Science Research*, *47*, 192-203.

Oppenheimer, V. K. (1994). Women's rising employment and the future of the family in industrial societies. *Population and Development Review*, *20*(2), 293-342.

Parcel, T.L. and Menaghan, E.G. (1994). Early parental work, family social capital, and early childhood outcomes. *American Journal of Sociology*, *99*(4), 972-1009.

Pedersen, D. (2014). Spillover and crossover of work-to-family conflict and the health behaviors of dual-earner parents with young children. *Sociological Focus*, *47*, 45-60.

Percheski, C. (2008). Opting out? Professional women's employment rates. *American Sociological Review*, *73*(3), 497-517.

Pew Research Center. (2013a). *Breadwinner moms*. www.pewresearch.org.

Pew Research Center. (2013b). Modern parenthood: Roles of moms and dads converge as they balance work and family. www.pewresearch.org.

Pew Research Center, (2014). After decades of decline, a rise in stay-at-home mothers. http://www.pewsocialtrends.org/files/2014/04/Moms-At-Home_04-08-2014.pdf.

Pollman-Schult, M. (2014). Parenthood and life satisfaction: Why don't children make people happy? *Journal of Marriage and Family*, *76*, 319-336.

Roxburgh, S. (2011). Parental time pressures and depression among married dual-earner families. *Journal of Family Issues*, *33*(8), 1027-1053.

Ruhm, C. (2008). Maternal employment and adolescent development. *Labour Economics*, *15*, 958-983.

Ruhm, C. J. (2004). Parental employment and child cognitive development. *Journal of Human Resources*. *39*(1), 156-192.

- Russell, J. A. (1980). A circumplex model of affect. *Journal of Personality and Social Psychology*, 39, 1161-1178.
- Russell, J. A. (2003). Core affect and the psychological construction of emotion. *Psychological Review*, 110(1), 145-172.
- Sayer, L.C. (2005). Gender, time and inequality: Trends in women's and men's paid work, unpaid work and free time. *Social Forces*, 84(1), 285-303.
- Sayer, L.C. Bianchi, S.M., and J.P. Robinson. (2004). Are parents investing less in children? Trends in mothers' and fathers' time with children. *American Journal of Sociology*, 110, 1-43.
- Senior, J. (2014). *All joy and no fun: The paradox of modern parenthood*. New York: Harper Collins.
- Shaw, S.M., (2008). Family leisure and changing ideologies of parenthood. *Sociological Compass* 2 (2), 688–703.
- Smith-Coggins, Rosekind, R., Hurd, S., & Buccino, K. (1994). Relationship of day vs. night sleep to physician performance and mood. *Annals of Emergency Medicine*, 24(5), 928-934.
- Stanca, L. (2012). Suffer the little children: Measuring the effect of parenthood on well-being worldwide. *Journal of Economic Behavior and Organization* 81: 742-750.
- Stone, A., & Mackie, C. (2013). *Subjective well-being: Measuring happiness, suffering, and other dimensions of experience*. National Research Council Report. Washington, DC: National Academies Press.
- Van Egeren, L., & Hawkins, D. (2004). Coming to terms with co-parenting: Implications of definition and measurement. *Journal of Adult Development* 11 (3): 165–78.
- Venn, S., Arber, S., Meadows, R., & Hislop, J. (2008) The Fourth Shift: Exploring the Gendered Nature of Sleep Disruption among Couples with Children. *British Journal of Sociology* 59:79–97.
- Wang, W. (2013). Parents' Time with Kids More Rewarding than Paid Work – and More Exhausting. Pew Research Center. October 8, 2013.
- Yetis-Bayraktar, A., Budig, M. J., & Tomaskovic-Devey, D. (2013). From the shop floor to the kitchen floor: Maternal occupational complexity and children's reading and math skills. *Work and Occupations*, 40, 37–64.
- Young, M., Schieman, S., & Milkie, M. (2014). Spouse's work-to-family conflict, family stressors, and mental health among dual-earner mothers and fathers. *Society and Mental Health*, 4(1), 1-20.

Table 1. Weighted Means/Percentages of Selected Person- and Activity-level Characteristics of Mothers Participating in Activities with Children by Employment

	Not Employed	Employed
Activity-level		
Subjective Well-Being		
Happiness	4.66	4.65
Meaningfulness	4.72	4.80
Sadness	0.62	0.44
Stress	1.52	1.44
Fatigue	2.51	2.67
Type		
Market work	1.14	4.96
Carework (excluding childcare)	3.90	0.52
Cooking	6.71	6.05
Cleaning	7.10	6.53
Shopping	6.57	7.13
Other Non-Market Work	2.71	2.27
Television Watching	14.44	14.24
Socializing	12.05	14.89
Education/Religion	3.22	3.78
Eating (also self care and using services)	12.43	15.28
Basic Childcare	12.69	10.73
Play Childcare	8.10	4.49 *
Teaching Childcare	4.14	3.10
Management Childcare	4.79	6.04
Location		
Public	29.43	38.51 *
Home	68.09	60.16 *
Work	2.49	1.33
With		
Spouse/Partner	27.55	30.23
Activity Duration (in minutes)	103.44	108.56
Cumulative Time with Children	5.71	5.11 *
Time of Day		
4-9am	10.04	9.85
9am-2pm	29.26	26.00
2-5pm	25.75	21.06
5-9pm	27.97	36.29 *
9pm-4am	6.98	6.80
N (activities)	1502	2351
Person-level		
Age (in Years)	35.13	36.61 *
Race		
Non-Hispanic White	52.95	68.63 *
Non-Hispanic Black	15.34	9.15 *
Hispanic	22.77	15.64 *
Other	8.94	6.59

Table 1 continued on the next page

Table 1 continued from the prior page

	Not Employed	Employed
Person-level (continued)		
Education		
College Graduate	28.63	38.35 *
Enrolled in School ¹	10.06	6.39 *
Employment Status		
Not Employed	100.00	0.00
Part Time (<35)	0.00	29.36 *
Full Time (35-49)	0.00	60.74 *
Long Hours (50+)	0.00	9.90 *
Partner in Household	74.79	74.17
Spouse Employment Status		
Not Employed	0.00	10.04 *
Part Time (<35)	8.79	4.53 *
Full Time (35-49)	46.64	45.79
Long Hours (50+)	19.36	13.81 *
Single Parent	25.21	25.83
Mother Primary Earner		
No	100.00	64.06 *
Yes	0.00	35.94 *
Number of children in the HH		
1	35.08	40.40
2	36.37	42.40 *
3+	28.55	17.20 *
Age of Youngest Child		
<6 years	60.08	49.66 *
6-12 years	27.95	34.21 *
13+ years	11.97	16.13
Weekend diary day	28.56	31.18
Season of diary day		
winter	23.18	22.98
spring	25.62	24.55
summer	23.23	24.29
fall	27.97	28.18
Sleep		
Hours	8.97	8.42 *
3+ Episodes	24.67	19.07 *
Leisure		
Hours	6.96	5.47 *
Number of Episodes	8.00	7.23 *
Hours with Children	2.01	1.46 *
Family Income		
<\$25,000	29.90	13.49 *
\$25,000-\$74,999	49.00	60.26 *
>\$75,000	18.13	23.24 *
Missing	2.96	3.01
N (persons)	695	1201

¹ Percentage is only for women to age 49.

* Mean/% for employed vs. non-employed significantly different (p<.05).

Table 2: GLM models with random effects of mother's subjective well-being in time with children by own and partner work status, union status, sleep and leisure, and key activity context

	Happiness		Meaning		Sadness		Stress		Fatigue	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Person-Level										
Respondent's Work										
No Work (omitted)	--	--	--	--	--	--	--	--	--	--
<35 Hours	-0.136	-0.120	0.020	0.061	-0.114	-0.083	0.055	-0.012	0.156	0.161
35-50 Hours	0.041	0.111	-0.008	0.080	-0.121+	-0.104	-0.043	-0.131	0.141	0.092
50+ Hours	-0.066	-0.005	-0.206	-0.092	-0.163	-0.095	0.258	0.093	0.450*	0.360+
Spouse's Work										
No Work	-0.186	-0.269+	0.082	-0.056	0.384**	0.298*	0.266	0.276	0.419+	0.399+
<35 Hours	0.118	0.002	0.262+	0.211	0.139	0.073	-0.171	-0.084	-0.242	-0.181
35-50 Hours (omitted)	--	--	--	--	--	--	--	--	--	--
50+ Hours	-0.099	-0.024	-0.271**	-0.220*	-0.034	-0.034	0.084	0.014	0.078	0.038
Single Parent	-0.317***	-0.257**	-0.014	-0.103	0.327***	0.145+	0.344***	0.349**	0.204*	0.054
Wife Primary Earner	0.006	0.008	-0.058	-0.058	-0.074	-0.070	-0.017	0.044	-0.172	-0.220
Sleep										
Total Hours		-0.014		-0.027		-0.007		-0.067**		-0.086***
3+ Episodes		-0.219**		-0.014		0.226**		0.190+		0.303**
Leisure										
Total Hours		-0.020		-0.023		0.002		-0.026+		-0.018
Number of Episodes		0.003		0.011		-0.014+		0.000		-0.020+
Total Hours with Children Only		-0.013		0.005		0.035*		0.017		-0.014
Activity-Level										
With Spouse		0.201***		0.176*		-0.108*		-0.212**		-0.084
Time with Child Prior to Activity		-0.000		-0.028**		-0.021*		-0.023+		0.023+

Table 2 continued on the next page

Table 2 continued from the prior page

Activity Type	Happiness		Meaning		Sadness		Stress		Fatigue	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Market work		-0.479*		0.407		0.145		0.796**		-0.305
Carework (excluding childcare)		0.173		0.090		0.750**		0.498+		-0.388
Cooking		-0.202+		0.586***		0.101		0.391**		0.022
Cleaning		-0.663***		-0.243		0.326**		0.556***		0.375*
Shopping		-0.055		0.347*		0.212*		0.602***		-0.151
Other Non-Market Work		-0.251		0.595**		0.460**		0.801***		-0.061
Television Watching (omitted)		--		--		--		--		--
Socializing		0.199+		0.713***		0.151+		0.175		-0.238+
Education/Religion		0.264		0.997***		0.375*		0.433*		-0.362+
Eating (also self-care and using services)		0.178+		0.871***		0.119		0.366**		-0.154
Basic Childcare		0.162		1.257***		0.124		0.362**		-0.014
Play Childcare		0.613***		1.488***		-0.087		-0.189		-0.348*
Teaching Childcare		0.262+		1.391***		-0.038		0.381*		-0.116
Management Childcare		-0.029		0.927***		0.252*		0.515**		-0.278+
Constant	4.696***	5.279***	4.791***	4.371***	0.464***	-0.020	1.349***	1.169**	2.400***	3.451***
sigma_u	1.072	1.040	1.136	1.096	0.955	0.937	1.318	1.291	1.440	1.392
sigma_e	1.119	1.096	1.273	1.216	0.840	0.835	1.235	1.223	1.350	1.277
rho	0.478	0.474	0.443	0.448	0.563	0.557	0.533	0.527	0.532	0.543
N Observations (Activities)	3846	3846	3843	3843	3853	3853	3853	3853	3853	3853
N Observations (Women)	1894	1894	1892	1892	1896	1896	1896	1896	1896	1896

*** p<0.001, ** p<0.01, * p<0.05, + p<0.10

^aactivity-level controls included but not shown: activity duration, time of day, where activity took place; person-level controls included but not shown: season, weekend, age, race/ethnicity, college graduate, school enrollment, family income, age of youngest child in HH, number of children in HH.

Appendix Table 1. Weighted Means/Percentages of Selected
 Person- and Activity-level Characteristics of Mothers
 Participating in Activities with Children

Activity-level	
Subjective Well-Being	
Happiness	4.65
Meaningfulness	4.76
Sadness	0.52
Stress	1.47
Fatigue	2.60
Type	
Market work	3.24
Carework (excluding childcare)	2.04
Cooking	6.34
Cleaning	6.78
Shopping	6.88
Other Non-Market Work	2.47
Television Watching	14.33
Socializing	13.61
Education/Religion	3.53
Eating (also self care and using services)	14.00
Basic Childcare	11.62
Play Childcare	6.12
Teaching Childcare	3.57
Management Childcare	5.47
Location	
Public	34.41
Home	63.74
Work	1.85
With	
Spouse/Partner	29.02
Activity Duration (in minutes)	106.25
Time of Day	
4-9am	9.94
9am-2pm	27.47
2-5pm	23.18
5-9pm	32.53
9pm-4am	6.88
N (activities)	3853
Person-level	
Age (in Years)	36.03
Race	
Non-Hispanic White	62.50
Non-Hispanic Black	11.57
Hispanic	18.43
Other	7.51

Appendix Table 1 continues on next page

Appendix Table 1 continued from previous page

Person-level (continued)	
Education	
College Graduate	34.55
Enrolled in School ¹	7.83
Employment Status	
Not Employed	39.11
Part Time (<35)	17.88
Full Time (35-49)	36.98
Long Hours (50+)	6.03
Partner in Household	74.41
Spouse Employment Status	
Not Employed	6.12
Part Time (<35)	6.20
Full Time (35-49)	46.12
Long Hours (50+)	15.98
Single Parent	25.59
Mother Primary Earner	
No	78.19
Yes	21.81
Number of children in the HH	
1	38.32
2	40.04
3+	21.64
Age of Youngest Child	
<6 years	53.73
6-12 years	31.76
13+ years	14.50
Weekend diary day	30.15
Season of diary day	
winter	23.06
spring	24.97
summer	23.87
fall	28.10
Sleep	
Hours	8.64
3+ Episodes	21.26
Leisure	
Hours	6.06
Number of Episodes	7.53
Hours with Children	1.67
Family Income	
<\$25,000	19.91
\$25,000-\$74,999	55.86
>\$75,000	21.24
Missing	2.99
N (persons)	1896

¹ Percentage is only for women to age 49.

Appendix Table 2: Full GLM Models with random effects of mothers' subjective well-being in time with children by own & partner work status, union status, own sleep & leisure, and activity context

	Happiness	Meaning	Sadness	Stress	Fatigue
Person-Level					
Respondent's Work					
No Work (omitted)	--	--	--	--	--
<35 Hours	-0.120	0.061	-0.083	-0.012	0.161
35-50 Hours	0.111	0.080	-0.104	-0.131	0.092
50+ Hours	-0.005	-0.092	-0.095	0.093	0.360+
Spouse's Work					
No Work	-0.269+	-0.056	0.298*	0.276	0.399+
<35 Hours	0.002	0.211	0.073	-0.084	-0.181
35-50 Hours (omitted)	--	--	--	--	--
50+ Hours	-0.024	-0.220*	-0.034	0.014	0.038
Single Parent	-0.257**	-0.103	0.145+	0.349**	0.054
Wife Primary Earner	0.008	-0.058	-0.070	0.044	-0.220
Sleep					
Total Hours	-0.014	-0.027	-0.007	-0.067**	-0.086***
3+ Episodes	-0.219**	-0.014	0.226**	0.190+	0.303**
Leisure					
Total Hours	-0.020	-0.023	0.002	-0.026+	-0.018
Number of Episodes	0.003	0.011	-0.014+	0.000	-0.020+
Total Hours with Children Only	-0.013	0.005	0.035*	0.017	-0.014
Activity-Level					
With Spouse	0.201***	0.176*	-0.108*	-0.212**	-0.084
Time with Child Prior to Activity	-0.000	-0.028**	-0.021*	-0.023+	0.023+
Activity Type					
Market work	-0.479*	0.407	0.145	0.796**	-0.305
Carework (excluding childcare)	0.173	0.090	0.750**	0.498+	-0.388
Cooking	-0.202+	0.586***	0.101	0.391**	0.022
Cleaning	-0.663***	-0.243	0.326**	0.556***	0.375*
Shopping	-0.055	0.347*	0.212*	0.602***	-0.151
Other Non-Market Work	-0.251	0.595**	0.460**	0.801***	-0.061
Television Watching (omitted)	--	--	--	--	--
Socializing	0.199+	0.713***	0.151+	0.175	-0.238+
Education/Religion	0.264	0.997***	0.375*	0.433*	-0.362+
Eating (also self-care and using serv	0.178+	0.871***	0.119	0.366**	-0.154
Basic Childcare	0.162	1.257***	0.124	0.362**	-0.014
Play Childcare	0.613***	1.488***	-0.087	-0.189	-0.348*
Teaching Childcare	0.262+	1.391***	-0.038	0.381*	-0.116
Management Childcare	-0.029	0.927***	0.252*	0.515**	-0.278+

Appendix Table 2 continues on next page

Appendix Table 2 continued from previous page

Age	-0.008	-0.000	0.013*	0.007	-0.001
Race					
Non-Hispanic White (omitted)	--	--	--	--	--
Non-Hispanic Black	-0.175	0.182	0.021	-0.211	-0.033
Hispanic	0.100	0.198*	0.289**	0.112	-0.251*
Other	0.341**	0.337*	-0.019	-0.196	-0.516***
College Graduate	-0.102	-0.191*	-0.073	0.045	-0.034
In School	-0.006	0.110	-0.131	0.230	0.461**
Age of Youngest Child					
<6 (omitted)	--	--	--	--	--
6-12	-0.063	-0.073	-0.032	-0.007	-0.002
13-18	-0.018	-0.008	-0.082	-0.003	-0.086
Number of Children					
1 (omitted)	--	--	--	--	--
2	-0.097	0.072	0.061	0.207*	-0.022
3+	-0.009	0.162+	-0.047	0.323**	-0.136
Season					
Winter (omitted)	--	--	--	--	--
Spring	-0.108	-0.090	0.151*	0.063	0.094
Summer	-0.201*	-0.177+	0.010	0.052	-0.030
Fall	-0.029	-0.004	0.046	0.066	0.012
Weekend	0.078	0.035	0.034	-0.064	-0.082
Minutes in Activity	0.001**	0.002***	0.000	0.001	-0.001
Time of Day					
4-9am (omitted)	--	--	--	--	--
9am-2pm	0.204*	0.022	-0.037	-0.010	-0.184+
2-5pm	0.035	-0.009	0.028	0.206+	0.181
5-9pm	0.121	0.161	0.078	0.123	0.579***
9pm-4am	0.214	0.193	-0.034	0.063	1.155***
Location					
Public (omitted)	--	--	--	--	--
Home	-0.017	0.037	0.081	0.096	0.186*
Work	0.415	-0.119	0.560	-0.104	-0.132
Income					
<\$25,000 (omitted)	--	--	--	--	--
\$25,000-\$74,999	-0.215*	-0.247*	-0.136	0.081	-0.099
>\$75,000	-0.208+	-0.259+	-0.072	0.126	-0.254
Missing	-0.323+	-0.234	0.063	0.173	0.032
Constant	5.279***	4.371***	-0.020	1.169**	3.451***
sigma_u	1.040	1.096	0.937	1.291	1.392
sigma_e	1.096	1.216	0.835	1.223	1.277
rho	0.474	0.448	0.557	0.527	0.543
N Observations (Activities)	3846	3843	3853	3853	3853
N Observations (Women)	1894	1892	1896	1896	1896

*** p<0.001, ** p<0.01, * p<0.05, + p<0.