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New Fathers? Residential Fathers' Time with Children in Four Countries

Jennifer L. Hook and

School of Social Work, University of Washington, Box 359476, Seattle, WA 98195-9476;

Telephone: (206) 221-0858, Fax: (206) 221-3155

Christina M. Wolfe

Department of Sociology, Penn State University, 211 Oswald Tower, State College, PA 16802;

Telephone: (814) 863-2763, Fax: (814) 863-7216

Jennifer L. Hook: jenhook@u.washington.edu; Christina M. Wolfe: cwolfe@psu.edu

Abstract

We examine variation in employed fathers' time with children ages zero to 14, utilizing time use surveys from the United States (2003), Germany (2001), Norway (2000), and the United Kingdom (2000). We examine levels of father involvement and mechanisms associated involvement on both weekdays ($N = 4,192$) and weekends ($N = 3,024$). We find some evidence of "new fathers" on weekends in all countries. Fathers spend more time on interactive care and more time alone with children on weekends than on weekdays. Only Norwegian fathers, however, increase both their participation in and time spent on physical care. American and British fathers' time with children, however, is more responsive to partners' employment.

Keywords

fathers; time use; childcare; cross-national

Popular and academic interest in fathering and "new fathers" continues to rise in the United States and Europe (see Duyvendak & Stavenuiter, 2004; Marsiglio, Amato, Day, & Lamb, 2000). New fathers are expected to take a greater role in the physical and emotional care of children, and have more egalitarian relationships with their partners. Evidence for this discourse matching the actual practice of fathers, however, is mixed. Although there has been an increase in fathers' time with children in the United States and much of Europe, women disproportionately provide childcare (Gershuny, 2000; Sayer, Bianchi, & Robinson, 2004).

Although this discourse is found across Western countries, there is substantial variation across countries in the amount of time fathers spend with their children. Smith and Williams (2007) find that the percentage of fathers spending substantial amounts of time with their children (defined as 28 hours per week) varies greatly across Europe. It ranges from almost 50% of Danish fathers to nearly 25% of British and German fathers to about 10% of French fathers.

Furthermore, mechanisms associated father involvement may vary across countries. A recent study investigating the relationship between education and parental time found that

Correspondence to: Jennifer L. Hook, jenhook@u.washington.edu.

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the effect of education varies across countries (Sayer, Gauthier, & Furstenberg, 2004). This highlights the need for further research embedding household processes within institutional context so we can better understand what matters under what conditions. In essence, cross-national variation provides an opportunity to better understand involvement.

Although there is little evidence that fathers are now reaching time equity with mothers in any appreciable numbers, Yeung and colleagues (2001) argue that a new father role is evident in the United States on weekends. They find more equality between mothers and fathers on weekends and that predictors of father involvement vary by the day of the week. For example, fathers' weekly work hours were negatively related to time with children on weekdays, but not weekends. They assume that fathers are more involved on weekends because they are less constrained by work. Over one-quarter of American workers, however, work on weekends, similar to levels in some European countries (Gornick & Meyers, 2003).

We seek to answer two primary questions: 1) Do we observe differences in fathers' time with children across countries with divergent national contexts, even after controlling for differences in demographic composition of families? Do we see evidence of new fathers on weekends in all countries? 2) Do mechanisms associated with involvement - particularly time constraints and demands associated with parental work - vary across these countries in predictable ways? We develop hypotheses about why we expect differences across the United States, Germany, Norway, and the United Kingdom in both levels of father involvement and the mechanisms associated with involvement. We use a novel dataset to examine these hypotheses. We harmonize four nationally-representative time diary studies and examine employed, resident fathers in two-parent families. Given Yeung and colleagues' (2001) finding of a substantial weekday/weekend divide in the United States, we compare father's time on weekdays to weekends within each country and across countries. We make an important addition to Yeung and colleagues' model by including whether fathers were working on their diary day-acknowledging that all weekend days are not days without work and vice-versa.

In selecting countries for study, we apply a most similar and a most different systems design (Przeworski & Teune, 1970) to Esping-Andersen's (1990) typology of Western welfare states. He groups states into three categories according to how extensively the government buffers citizens from the harshness of the labor market (i.e., decommodification), and how universal these benefits are (i.e., stratification). In light of critiques from gender scholars (see Orloff, 1996), the typology was expanded to include whether families – versus individuals – are the targeted beneficiaries of support (i.e., the degree of familialism) (Esping-Andersen, 1999). In liberal welfare states the role of the labor market is central. A belief in individual choice and the primacy of the labor market leaves families to make their own (constrained) choices about work and care. In social-democratic countries the state is central. A range of universal policies support individuals and generally direct individuals towards more gender-egalitarian choices about work and care. In conservative countries the role of the family is central. While conservative countries also have an array of “family-supportive” policies, these policies generally support male-breadwinner/female-caregiver families. We select a country from each regime to represent “most different” types – the United States for the liberal, Norway for the social-democratic, and Germany for the conservative regime. We chose these countries because each has high-quality, publicly available data. Because variability exists within regimes (e.g., O'Connor, Orloff, & Shaver, 1999), we add the United Kingdom as a second liberal state to explore this variation.

Time with children has been categorized in a variety of ways. Studies using time diaries typically focus on *primary child care time* (Sayer, Bianchi, et al., 2004; Sayer, Gauthier, et al., 2004), also referred to as *engagement* (Yeung, et al., 2001) or *active* child care (Kitterød

& Pettersen, 2006). This is time spent on clearly defined child-focused activities such as feeding or teaching. Primary time can be broken into sub-categories including *interactive* and *physical* care (Craig, 2006), *intensive* and *routine* care (Dermott, 2008) or even further to activities such as *achievement-related* (Yeung, et al., 2001). Researchers sometimes capture *secondary activities* or what else respondents were doing, typically in single-country studies (e.g., Craig, 2006). We can also consider *accessible* time (Kitterød & Pettersen, 2006; Yeung, et al., 2001) or *being there* (Dermott, 2008), which is the time a parent is with a child whether or not they are performing a child-focused activity. We can further restrict this time to capture when a parent is *alone with children* or in *sole charge* (Craig, 2006; Kitterød & Pettersen, 2006). Although these neat categories are messy in real life (see Dermott, 2008), they help us understand dimensions of fathers' time with children.

We examine two types of engagement time: physical and interactive care. Engagement time is strongly correlated with warmth, closeness, and monitoring, suggesting that it is an indicator of positive father involvement (Pleck & Masciadrelli, 2004). Research finds that fathers tend to do a greater share of interactive care – talk, play, education – than physical care (Craig, 2006). Interactive care is less demanding, less likely to be performed on a fixed schedule (Craig, 2006), and is more valued by parents than physical care (Bittman, Craig, & Folbre, 2004). We also examine the time fathers spend alone with children. During this time fathers are less likely to be in a helper role, more likely to be substituting for mothers, and may be forging stronger relationships with their children because mothers are not mediating (Craig, 2006). Although these categories are widely used, they do not capture all of what fathers do. Fathers may feel highly involved because they provide financially or perceive that they are emotionally connected (Dermott, 2008; Palkovitz, 1997; Townsend, 2002). Although an important topic, we compare absolute levels of fathers' time and not relative measures vis-à-vis mothers.

THEORETICAL FRAMEWORK

Father involvement has been approached from a number of theoretical perspectives, with the general consensus that fathering is multiply determined (Marsiglio, et al., 2000; Parke, 1996). Social constructionists focus on how fatherhood is constructed at the individual, interactional, and institutional levels (Højgaard, 1997). A similar conception comes from the family systems (Parke, 1996) and ecological literatures with a focus on how parents and children are “in an interdependent web of personal, relational, and community influences” (Doherty, Kouneski, & Erickson, 1998: 284). This dovetails with Lamb and colleagues' (1987) four influential factors, which include a father's motivation, skills, social support, and institutional policies and practices. Because our research questions are comparative, we focus our discussion on institutional-level hypotheses (for a review of individual and household factors see Pleck & Masciadrelli, 2004).

We rely on the time constraints perspective as our starting point for considering the role of institutional factors on fathers' time with children. The time constraints, or demand/response capability, approach focuses on individuals' pragmatic allocation of time given availability and demand, predicting that partners distribute workloads toward equilibrium (Blood & Wolfe, 1960; Coverman, 1985). Individuals are hypothesized to do less housework or childcare the more time they spend on employment, and more of this work the more time their partner spends on employment and the more children they have. The approach is gender-neutral; that is, the mechanisms are theoretically applicable to women and men. We focus our discussion on fathers.

From a time constraints perspective, the more time men spend at work, the less capability they have to respond to childcare demands (Coverman, 1985). Research generally finds a

negative association between fathers' work hours and time with children (Hallberg & Klevmarken, 2003 in Sweden; Roeters, van der Lippe, & Kluwer, 2009 in the Netherlands; Smith, 2004 in 14 European countries; Yeung, et al., 2001 in the U.S.). Norway and Denmark, however, are exceptions (Deding & Lausten, 2006; Kitterød & Pettersen, 2006). Furthermore, Yeung and colleagues (2001) find that this association is only robust for weekday time with children. The magnitude of the association is also quite small; "high care" fathers spend only about a half-hour less at work each week than child-free men (Smith Koslowski, 2010).

The more time men's partners spend at work, the greater childcare demands men face (Coverman, 1985).¹ Again, evidence is mixed. U.S. studies find that the association between mothers' employment and father involvement is small and not robust (Pleck & Stueve, 2001). Across 14 European countries, fathers are more likely to spend substantial time in childcare (at least 28 hours per week) if their spouse is employed (Smith, 2004). Whether mothers work full-or part-time, however, is an important distinction. Some argue that women's part-time employment does not pull fathers into family work because it enables women to "do it all" (Stier & Lewin-Epstein, 2000). U.S. studies, however, find that men partnered to women working part-time, not full-time, are more likely to provide childcare during mothers' work hours (see Casper & O'Connell, 1998). Kitterød and Pettersen (2006) report similar findings for Norway. When mothers work full-time families are more likely to use outside care (Folk & Beller, 1993).

National context and hypotheses

From a time constraints perspective, variation in men's employment practices should be linked to variation in father's time with children; practices vary considerably across these countries as shown in Table 1. Only 20% of Norwegian men work over 50 hours per week, compared to about 30% in the other countries. Over 40% of Norwegian men work 39 hours or less compared to only 20% of American men. American and British men are also more likely to work weekends. From the time constraints perspective, we form a simple hypothesis. (H1A) If work hours are negatively associated with fathers' time with children, cross-national differences should converge once we control for men's employment.

Mothers' employment practices also vary considerably across these countries. From a time constraints perspective, this variation should be linked to variation in father's time with children. Norway has the highest participation rate, followed by the United States and United Kingdom. These rates are not adjusted for parental leave; 33% of employed Norwegian mothers with small children are on a leave of absence (Hyggen & Skevik, 2003). Mothers in the United States are the most likely to work full-time. Over twice as many mothers in the United States work full-time than in the United Kingdom or Germany, both of which are categorized by the one-and-a half earner model (Lewis, Campbell, & Huerta, 2008). Again we form a simple hypothesis. (H1B) If mothers' employment is positively associated with fathers' time with children, cross-national differences should converge once we control for women's employment.

Thus far, our hypotheses suppose that fathers, regardless of country, react to availability and demand in similar ways. How fathers utilize their availability and respond to demands, however, is situated in particular contexts. The comparative literature on the gender division of labor highlights the importance of employment practices and family policies for understanding fathers' time on household labor, and how normative expectations about

¹Household employment arrangements, however, may be decided by parents' preferences for time with children (i.e., they are endogenous). For example, although mothers' employment may predict father involvement, father involvement may predict mothers' employment. The contribution of this research is to explore whether associations hold in direction and magnitude across countries.

gender are encoded in both employment and family policies (Gornick & Meyers, 2003; Gregory & Milner, 2007; Moss & Deven, 1999).² Drawing on this literature, we suggest that family policy and cultural context alter the link between employment practices and fathers' time; that is, the mechanism operates differently in different contexts (Hook, 2006, 2010). We summarize key indicators of each country's family policy context identified in this literature in Table 1.

Before considering how family policy and cultural context might influence the association between time constraints and fathers' time with children, we consider the underlying assumptions in this approach. To postulate a link between fathers' available time and time with children supposes that fathers (and mothers) prefer fathers to spend more time with children compared to alternate uses of fathers' or children's time. It also assumes that children are available during fathers' non-work time. Postulating a link between mothers' employment time and fathers' time with children supposes that fathers (and mothers) prefer fathers to spend more time with children when mothers work. Highlighting these assumptions allows us to consider how family policy and cultural context might influence the perception of available alternatives and preferences in different contexts. We expect these perceptions to be related to resources provided (or not provided) by the state and prevailing norms regarding the care of children.

Family policy configurations, circa 2000, differ considerably across these countries. As shown in Table 1, a greater percentage of Norwegian toddlers are cared for by publicly-financed childcare (Gornick & Meyers, 2003). Norwegian parents typically pay fees, but the government directly subsidizes facilities (Kitterød & Pettersen, 2006). There is a cultural belief that pre-schools are beneficial for children's socialization and children should be entitled to care (Borchorst, 2002; Skevik, 2003). For pre-school aged children, Germany, the United Kingdom, and Norway have similar levels of coverage, whereas the United States provides the least.

Publicly-financed childcare facilitates mothers' employment (Pettit & Hook, 2005; Pettit & Hook, 2009), but it is unclear how it influences father involvement. It may facilitate father involvement by promoting dual-earning; any influence would operate through higher levels of women's employment. It may decrease pressure on fathers to be involved, however, because the state is providing care when mothers work (Kitterød & Pettersen, 2006; Windebank, 2001). Thus, the mechanism of maternal employment may operate differently in contexts with high levels of public childcare. (H2A) We expect a weaker link between mothers' employment and fathers' time with children where public care is high. Furthermore, fathers' may be less likely to translate their own non-work time into time with children because children are less available.

Norwegian parental leave policy, however, is designed to facilitate father involvement. Norway offers parents 42 weeks of fully-paid leave, with nine weeks reserved for mothers and four for fathers. Fathers' take-up rates are 85% (Skevik, 2003). Norway also provides a cash payment to parents who do not use public childcare for children ages one to two, whether or not both parents are employed. This cash-for-care program may operate as an extended parental leave. Although fathers may not be pressured to care because of the availability of publicly-financed care, paternity leave and aggressive gender equality reforms may be associated with fathers' greater childcare time. (H2B) We hypothesize that paternity

²Although, gendered expectations may be encoded in policy, policy may be enacted that conflicts with these expectations, but typically serves some national interest. This highlights the recursive relationship between policies and culture. The potential for opposition makes it important to consider both and how the same policy could have different outcomes in different cultural contexts (Pfau-Effinger, 2000).

leave and equality reforms are associated with greater levels of involvement in Norway, but fathers' time may be less responsive to micro-level mechanisms, such as mothers' employment, because fathers are expected to care regardless of their individual situation (Kitterød & Pettersen, 2006).

In contrast to Norway, family policy in Germany circa 2000 reinforced a traditional division of labor (parental leave laws were revised in 2007). It offered parents up to three years of leave, taken almost exclusively by mothers. The average duration was nearly three years in the former West and two years in the former East (although cultural divides persist, our sample size requires analyzing Germany as a whole). Table 1 reports that 56% of German mothers are employed, but in the former West only 15% of those with children under four were employed (Ostner, Schmitt, Reif, & Turba, 2004). (H3) Because of strong cultural support for at-home maternal care backed by extensive policy support during the first three years, we expect Germany to be a laggard in fathers' time with children and fathers' time to be less responsive to micro-level mechanisms.

In contrast to Germany and Norway, the United States and the United Kingdom offer little in the way of work-family support. Maternal employment and the care of small children are contested terrain. The lack of family policy support leaves families to patch together individual solutions. These solutions may involve fathers taking lesser responsibility for care, such as working extensive over-time to support at-home maternal care, or fathers taking greater responsibility for care, such as working non-overlapping shifts with their partner in order to tag-team care. (H4) We expect more variability within these countries, evidenced by more responsiveness to micro-level mechanisms (Windebank, 2001).

In summary, we expect some convergence when we control for individual characteristics, such as men's hours of work and partners' employment status (H1A and H1B). However, we expect that these mechanisms will vary by context. Specifically, time constraints such as partners' employment, will be more relevant in contexts with less compelling policy and cultural supports for particular arrangements, such as the United States and the United Kingdom (H4). German fathers may spend less time and be less responsive given the strong preference for at-home, maternal care backed by generous parental leave (H3). We have conflicting expectations for levels in Norway, which combines high levels of women's employment and strong gender equality efforts - expected to increase fathers' childcare (H2B) - with high levels of publicly-financed childcare, which may dampen this increase (H2A). We do expect, however, that Norwegian fathers will be less responsive to micro-level mechanisms (H2A and H2B).

We control for several other characteristics that may influence fathers' motivation, skill-set, or demands for child care. Age may tap potential energy and interpersonal resources (Parke, 1996). More educated parents may be more knowledgeable about the importance of involvement, especially in academic-related activities. The more children in the household and the younger the children are, the greater the demands are on fathers (Yeung, et al., 2001). Some studies also suggest that fathers are more involved with boys than with girls (Pleck & Masciadrelli, 2004).

METHOD

Data

The data used to explore our hypotheses are from four time use surveys conducted in the early 2000s. In time use studies respondents are asked to either keep a paper diary of their activities or are asked by interviewers to reconstruct their previous day. In most diaries respondents record what they were doing in their own words (primary activity), what else

they were doing (secondary activity), who they were doing it with, where they were doing it, and what time they started and stopped the activity. Staff then code the activities using a standard activity lexicon. For the United States, we use the American Time Use Survey (ATUS) 2003 conducted by the Bureau of Labor Statistics. Respondents reconstructed the previous day using computer assisted telephone interviewing. Only one adult in the household constructed a diary and only main activities were recorded. The other three datasets followed the Harmonised European Time Use Survey guidelines with some small variations. In contrast to the ATUS, the others used paper diaries that respondents completed throughout the day. The diaries contained 10-minute time slots and provided space to record secondary activities. Germany's Time Use Survey 2001–2002, conducted by the Federal Statistical Office, collected diaries from all household members for three days. Norway's Time Use Survey 2000–2001, conducted by Statistics Norway, collected diaries for two days from one adult. The United Kingdom's National Survey of Time Use 2000–2001, conducted by a research company commissioned by the Office for National Statistics, collected diaries from all household members for two days.

We harmonized the datasets in several steps. After the Norwegian and German datasets were translated into English, we selected time use categories of interest and developed a template for harmonizing variables across the four surveys (executed by a programmer at the Population Research Institute). We then harmonized demographic and other variables across the surveys. The final dataset excludes a small percentage of households containing children over the age of 14 or additional adults (e.g. 7% of U.S. households) because the British dataset includes time spent with a partner in the same category as time spent with other household members. Documentation and syntax files are available on the Interuniversity Consortium for Political and Social Research (ICPSR) web site (<http://dx.doi.org/10.3886/ICPSR30021>).

We restrict the sample to partnered and employed fathers residing with children under the age of fourteen (social, not necessarily biological, fathers).³ Ninety-one percent of fathers are employed ($N = 7,279$ diaries). We delete 63 cases with missing data, omitting 0.9% of the sample, resulting in 7,216 diaries. The deleted cases show no concerning differences from the full sample. Sample sizes are listed in Table 2. We have the largest samples, and thus the most statistical power, in the United States and Germany, less in the United Kingdom, and the least in Norway. In Germany and Norway respondents may provide two cases to a regression, particularly on weekdays, because studies gathered multiple diary days. In multivariate analyses we cluster standard errors by person to account for non-independence.

The time-diary format is widely recognized as the most valid and reliable measure of time use and is generally robust to variations in data collection, facilitating cross-national comparison (Harvey, 1993; Juster, 1985; Marini & Shelton, 1993; Robinson, 1985). Studies show great similarity between paper diaries and recall methods (Harvey, 1993). An advantage of these studies is that respondents are not primed for specific topics, so social desirability bias is minimized (Pleck & Stueve, 2001), which is particularly important in cross-national research where cultural differences might influence responses to survey questions.

³We do not know if a man is a biological- or step-father. Children are more likely to be living with a step-parent in the United States and the United Kingdom than in Germany or Norway (UNICEF, 2007). If step-fathers spend less time with children than biological fathers (Pleck & Masciadrelli, 2004), we would underestimate American and British fathers' time compared to German and Norwegian fathers.

Measures

Dependent variables are created from fathers' diary accounts of their activities and who else was present during their activities. *Physical care* includes time spent on feeding, bathing, dressing, supervising, transporting, and accompanying a child (as a primary activity). *Interactive care* includes time spent on talking, reading, teaching, and playing (as a primary activity). *Time alone with children* is the time that the parent is the only adult physically with a child, regardless of activity. It is when the parent has full responsibility for the child.

Physical and interactive care time are calculated from primary activity reports only. Secondary childcare measures in the ATUS are not comparable to the European surveys. Thus, our results underestimate time as childcare is often multitasked (Budig & Folbre, 2004). Interactive care may be especially sensitive to diary design because it is more nebulous than physical care and more likely to occur simultaneously with other activities. Fathers may report talking with children as a main activity, as a secondary activity, or may not report the activity at all, assuming that it is captured by reporting who was present during the activity (Kitterød, personal communication). Another concern about the ATUS's lack of secondary activities is that whether people can report secondary activities may affect their reporting of main activities. Kitterød (2001) found that Norwegian women reported more primary childcare time when they were not allowed to record secondary activities. She did not find a similar pattern for men.

Although these reporting issues are concerning, errors can be lessened by considering patterns across multiple measures - both activity reports (physical and interactive care) and who the respondent was with (alone time). Additionally, we make several within country comparisons - between weekdays and weekends - which are less sensitive to these issues.

Control variables are shown in Table 2. *Age* is measured continuously and centered at 35. Education is coded using the International Standard Classification of Education (ISCED). Respondents with post-secondary, non-tertiary education (level 4) or above are coded as having a *college degree*. The number of children is measured with two dummy variables indicating households with *two children* and households with *three or more children*; the reference category is one child. We include dummy variables to indicate if the youngest household child is *under the age of 6* or *age 10 to 14*; the reference category is age 6 to 9. *Male child* is coded to one if at least one of the household children is male.

We measure work characteristics in several ways. Our sample includes employed fathers (those reporting any usual weekly work hours). We include usual *weekly work hours* as a continuous covariate, centered at 40 hours, capturing fathers' average workload (top-coded at 50 hours for comparability). We include a dummy variable to indicate the father reported *50 hours or more* per week. We tested dummy coding weekly hours; results are consistent with our final models. Fathers' report their activities for one diary day, so we use the daily report to calculate whether fathers worked any amount of time on that day. We include a dummy variable indicating the father had the *day off*. The correlations between *day off* and the other work covariates are low and removing *day off* from the models does not change the estimates for other work covariates. We do not capture work shift or flexible work in our measures.⁴

⁴We are unable to analyze fathers' work shift because we would have to limit the analysis to fathers working on their diary day, generating a sample size too small to analyze by weekday/weekend. There is mixed evidence as to whether fathers with non-standard schedules spend more time with children than other fathers. If non-standard shifts increase fathers' time with children, we would overestimate American and British fathers' time compared to German and Norwegian fathers because there are slightly higher rates of non-standard work in the former (Presser, 2003; Statistics Norway, 2008).

There is concern that using *weekly work hours* and *day off* creates endogeneity bias because work and child care time are jointly determined. While we do not claim that all fathers' decisions about how to allocate work time are made prior to their decisions about child care time, we do argue that for the majority of fathers their regular work hours and schedule are set by employers prior to their daily decisions of how much time to spend with their children. That is, there is more stability in men's weekly work hours than in their daily time with children.

Partners' work characteristics are measured by respondents' reports of their partners' employment status. We include dummy variables for *full-time* and *part-time* work; non-employed partners are the reference category. These categories do not obscure substantial variation between countries. Among mothers, the median for full-time workers ranges from 38 to 40 hours and for part-time workers from 19 to 20 hours (the ranges are similar for means). In the United States, 49 fathers (2.5 percent) reported that their partners' work hours vary. Based on a bounds analysis we retain these fathers and code their partners as full-time. In Norway, respondents report work hours instead of employment status. We use 35 hours as the distinction between part- and full-time because comparisons show 35 hours is the most comparable cut-off.

We do not include whether the father is cohabiting with the mother (in contrast to marriage) because only 2.3% of fathers in the American sample and 3.6% in the German sample report cohabiting. Single country analyses in Norway (32.3% cohabiting) and the United Kingdom (13.8%) show no associations between cohabitation and our dependent variables.

We do not include household income in our final models because income cannot be included across the surveys in a comparable way and because the extent of missing data on income necessitates using multiple imputation, limiting our ability to test coefficients across models. We did, however, conduct sensitivity analyses including household income in multiply imputed models (50 imputations using Markov chain Monte Carlo (MCMC) method in Stata 11). We included a dummy variable marking the top 20 to 40% of households. Household income did not alter our results in direction or statistical significance. Several coefficients changed magnitude by a minute or two per day.

Analyses

The multivariate analyses focus on discerning differences across countries in the effects of covariates on fathers' time use. We began by performing seemingly unrelated estimation, which rejects a common model across countries. Thus we present separate models for each country and test for the equality of coefficients across models. All analyses are weighted using original survey weights, which account for sampling design, day of the week, and non-response.

Most time use variables have a significant amount of zeros, creating an irregular distribution. These zeros arise from either a mismatch between the observation window (one day) and the period of interest (routine time use) or from respondents never engaging in an activity (Stewart, 2009). In the case of fathers' time with children, we assume that zeros arise from this mismatch and not from a group of fathers who never interact with their children.

Because of the frequency of zeros, multivariate analyses of time use data are contested terrain. Many researchers fear that OLS estimates will be biased because models will violate normality assumptions. Instead they employ Tobit models for censored data, which assume that we do not observe the dependent variable over its full range (e.g., Kitterød & Pettersen, 2006; Sayer, Bianchi, et al., 2004; Yeung, et al., 2001). As applied to time use data, the

Tobit specification assumes that some zero values are real and that some zero values represent negative values that were not observed. The theoretical underpinnings of the Tobit do not fit time use variables which are bounded between zero and twenty-four hours per day.

Recent empirical work demonstrates that OLS is preferred over Tobit and two-part models. Stewart (2009) finds that marginal effects from Tobit models are biased, increasingly so as the proportion of zeros increases. A two-part model performs similar to OLS, but OLS is preferred if a covariate predicts performance and time spent. Stewart concludes, “OLS estimates are unbiased and robust to a number of assumptions about the relationship between the variables in the model and the probability of doing an activity” (p. 12). Gershuny and Egerton (2006) find further support for using OLS over Tobit. We use OLS for the multivariate analysis.

RESULTS

Descriptive Results

Overall fathers spend more time caring for and being with their children on weekends than on weekdays. There are several notable exceptions. Table 3 shows the mean amount of time fathers spend on physical care, interactive care, and time alone with children, by country. It also shows the composition of the mean – the percent of fathers participating in the activity and the average amount of time among participating fathers (mean = participation × time). The means are not adjusted for the differences in demographic composition noted in Table 2.

We observe the smallest difference between weekdays and weekends for physical care. Only in Norway is there evidence of a greater propensity to physically care for children on the weekend. There is no difference in the United Kingdom or Germany, and a decreased propensity in the United States. Among those participating, fathers in the United States and Norway, and to a lesser extent Germany, spend more time on physical care on weekends than on weekdays, whereas fathers in the United Kingdom do not. Overall, only Norwegian fathers show an increase in mean time on physical care on weekends. Fathers in all countries spend more time on interactive care and more time alone with children on weekends. American fathers’ participation rates, however, decline on weekends for both activities. While this is an intriguing finding, we are reluctant to interpret this difference without adjusting for control variables, particularly because American fathers surveyed on weekdays are an entirely distinct group from fathers surveyed on weekends (the ATUS only surveyed respondents on one day). In the other countries many or all respondents were surveyed on one weekday and on one weekend day.

Consistent with expectations, German fathers lag and Norwegian fathers lead in physical care time. Sixty-three percent of Norwegian fathers participate in physical care on weekdays, as do 72% on weekends; participants spend about 1 hour on weekdays and 1-1/3 hours on weekends. In contrast, only about 45% of German fathers engage in physical care on weekdays or weekends, spending about 45 to 55 minutes. In the United States and the United Kingdom, about 55% of fathers do some physical care on weekdays, and those fathers spend about an hour. The figures are the same on the weekend for British fathers, while American fathers drop their participation to 47%, but increase their time to 1-1/2 hours.

Norwegian fathers are not the leader on interactive care. Weekday participation and time spent are very similar across countries, with the exception of American fathers who spend about 1-1/4 hours on weekdays compared to about 45 minutes in the other countries. On weekends, the participation of American fathers lags behind German and British fathers by

about 10 percentage points, but American fathers spend 1-3/4 hours compared to 1-1/4 hours in the other countries.

Focusing on the time fathers spend alone with their children, Norwegian fathers again lead in participation on weekdays at 77%, with American and German fathers around 60% and British fathers at only 44%. Among fathers spending time alone with their children, however, British and American fathers show the greatest time (2-1/4 hours and almost two hours, respectively). Norwegian fathers report just over 1-1/2 hours and German fathers are closer to 1-1/4 hours. We observe a similar pattern on weekends. Norwegian fathers show high participation and time. German fathers show the least time, but have higher participation than both American and British fathers.⁵

In all four countries, fathers are clearly more involved with their children on weekends than on weekdays, although not in physical care. Overall, the results for physical care and time alone with children are consistent with expectations drawn from the welfare state literature – Norway is a leader and Germany is a laggard (based on mean minutes in Table 3). For interactive care, however, Norwegian fathers spend the least time. This suggests more equality in the types of care Norwegian fathers and mothers provide. If we look at physical care as a percentage of men's total childcare time (physical plus interactive) it ranges from 57% in Germany to 75% in Norway on weekdays, and from 42% in Germany to 72% in Norway on weekends. These country differences could arise from differences in household demographics, absolute levels of involvement, or variations in how mechanisms associated with fathers' time operate.

We began by adjusting means for the demographic composition of households, expecting convergence once we adjusted for men's and women's employment practices and other demographic characteristics (results not shown). Our simple hypotheses (H1A and H1B) that levels would converge was not supported. This suggests more complex sources of cross-national variation in absolute levels of involvement or mechanisms associated with involvement.

Multivariate Results

Table 4 shows the results for physical childcare time, for weekdays and weekends. Associations between fathers' time and covariates vary considerably across countries. In the discussion of results, we focus on men's own work characteristics and partners' employment as our variables of primary interest. Men's hours of work show no statistically significant association with fathers' physical care time on weekdays or weekends, with the exception of the United Kingdom on weekends. For every additional hour of work during the week, British fathers appear to spend almost a minute less on physical child care on the weekend. However, this relationship is non-linear, so for fathers working over 50 hours, we add back 12 minutes.

Whether men have the diary day off from work is associated with more time spent in physical care on weekdays in the United States, Germany, and the United Kingdom and on weekends in the United States and United Kingdom. The magnitude is greatest for British fathers who spend over 40 minutes more on physical care if they have a weekday off. In the other cases, the increase is about 15 minutes. The finding that American fathers spend more time on physical care on weekends if they had the day off from work suggests that Yeung and colleagues' (2001) estimates for American fathers' weekend time may actually underestimate the difference between weekdays and weekends for fathers who only work

⁵We do not analyze all the time men spend with children. Alone time ranges from 23% of fathers' time with children on weekdays in the United Kingdom to 35% in the United States, and from 19% of time on weekends in the United Kingdom to 27% in Norway.

weekdays. The difference may be sizeable as 35% of American fathers worked on the weekend.

Partners' full-time work status is only significant in the United States on weekdays; fathers show about 20 minutes more of physical care if their partner is employed full-time. British fathers spend almost 20 minutes more on physical care if their partner is employed part-time. In both countries, partners' employment status is only relevant on weekdays. German and Norwegian fathers show no statistically significant effects for partners' employment. These results are consistent with hypotheses H2 through H4, predicting more responsiveness in the United States and the United Kingdom than in Norway and Germany.

Table 5 present results for interactive care. We observe minimal associations between fathers' interactive care and own employment characteristics or partners' employment, and no differences across countries or by day of the week. This is not surprising given the near uniformity in fathers' time shown in Table 3. Whether men have the diary day off from work is associated with more time spent on interactive care on weekdays in Norway, Germany, and the United Kingdom and on weekends in the Germany and United Kingdom.

Table 6 shows the results for time spent alone with children. Men's hours of work show no statistically significant association with fathers' time alone with children, except for Norwegian fathers working over 50 hours per week who spend almost an hour less with children on weekends; this association, however, needs to be considered in the context of the positive association with hours of work (i.e., $1.20 \times 50 = 60$ minutes – 56 minutes = 4 minutes).

Men with their diary day off from work spent more time alone with children in all cases, except for Norway on weekends. Again, the magnitude is greatest for British fathers who spend 1-3/4 hours more of alone time with children if they have a weekday off. In the other countries, the increase is about an hour. On weekends, British fathers spend about an hour more, American fathers spend an additional 1/2 hour, and German fathers spend 1/4 hour more alone with children. Again, these results are consistent with hypotheses H2 through H4, predicting more responsiveness in the United States and the United Kingdom.

Again, partners' full-time work status is only significant in the United States and on weekdays; fathers spend about 45 minutes more alone with children if their partner is employed full-time. British fathers spend about 50 minutes more on weekdays if their partner is employed part-time. Fathers partnered to women working part-time are the largest group of British fathers at 56%. German and Norwegian fathers show no statistically significant associations with partners' employment. Again, these results are consistent with hypotheses H2 through H4.

We briefly comment on control variables. Older fathers in the United States spend more time on physical care, and older American and German fathers spend more time alone on with children on weekends. Consistent with Sayer, Gauthier, and Furstenberg (2004) we find a positive association between a college degree and paternal time in Germany (for physical care) and no association in Norway. Our results for American and British fathers are consistent with their results for Canada, where they find the largest educational divide in fathers' time with children. Consistent with Sayer and colleagues we believe these results suggest that family-supportive policies reduce constraints on fathers, reducing the educational divide. It is also consistent with our general finding that American and British fathers are more responsive to individual mechanisms. Having more than one child reduces interactive care (where statistically significant), but increases time alone with children. It also increases physical care time in the United States and Norway. The presence of a male child is associated with greater paternal time only in the United States for interactive care

and time alone with children, and in Germany for time alone with children. This is consistent with U.S. studies that find an association between child gender and fathers' play and companionship (particularly sports and leisure), but not personal care (Lundberg, Wulff Pablonia, & Ward-Batts, 2007; Yeung, et al., 2001).

Multivariate results suggest differences across countries in fathers' time with children, and in relevant mechanisms depending on the country, activity, and day of the week. Even when controlling for demographic composition and employment, Norwegian fathers show the most time in both physical care and time alone with children on weekdays and on weekends. American and British fathers show greater time than German fathers, but they stand out for being more responsive to partners' employment than either German or Norwegian fathers.

DISCUSSION

In these four countries weekends do appear to be an opportunity for fathers to engage in "new fatherhood" – to an extent. We find that fathers are more engaged in interactive care and spend more time alone with children on weekends than weekdays. They do not, however, spend more time on physical care, except in Norway. Time together on weekends is important because fathers' engagement and time alone with children foster warmth, closeness, monitoring, and stronger relationships (Craig, 2006; Pleck & Masciadrelli, 2004).

Not all fathers, however, have weekends free from work. On their weekend diary day, 20 to 34% of employed fathers reported working. American and British fathers, those most likely to work weekends, spend less time on physical care and less time alone with their children on weekend-workdays. This is consistent with research from the United Kingdom and Australia showing that when fathers work on the weekends they spend less time with children on these days (Barnes, Bryson, & Smith, 2006; Bittman, 2005). Evidence suggests that fathers are not able to make up this lost weekend time on weekdays (Barnes, et al., 2006; Bittman, 2005; La Valle, Arthur, Millward, Scott, & Clayden, 2002). Although they may be able to make up some of this lost time with younger children (Baxter, 2009) and key interactional activities may not be affected (Presser, 2003). These findings have been used to advocate for stronger employment regulation protecting families from weekend work (Bittman, 2005; La Valle, et al., 2002).

Similarly, not all weekdays are workdays; 13 to 16% of employed fathers reported not working on their weekday diary day. British fathers with a weekday off were especially likely to spend more time on physical care and alone with children. This is consistent with findings that atypical schedules and at-home care are common in Britain (Lewis, et al., 2008; Warren, 2003).

While it may be surprising from a time constraints perspective that fathers' weekly work hours make little difference in their time with children, these findings are consistent with recent work showing that the dichotomy between "good provider" and "active carer" is inaccurate (Dermott, 2005; Smith Koslowski, 2010). Additionally, fathers in our sample show very little variation in work hours. Few fathers work reduced hours that may facilitate more time with children; less than five percent work fewer than 40 hours.

As hypothesized, Norwegian and German fathers appear less responsive to their own work characteristics – having the day off - and their partners' employment than American and British fathers. For physical care and time alone with children, American fathers spend substantially more time on weekdays if their partner works full-time, and British fathers spend more time if their partner works part-time. This suggests that in the Norwegian and German contexts, fathers are less likely to adjust their time with children because of their partners' work. Fathers' time may be less responsive to mechanisms in Norway because

fathers are expected to care regardless of individual situation (Kitterød and Pettersen, 2006). Fathers' time may be less responsive in Germany because of the strong cultural support for at-home maternal care backed by extensive policy support during the first three years.

Windebank (2001) found a similar responsiveness for British fathers. In her comparison to French fathers, she found that British fathers were more involved in care, yet France is more "family-friendly" with extensive public care for small children. She suggests that fathers may not increase their childcare when given the opportunity, but do so instead when they "are forced out of financial necessity or lack of alternatives" (p. 287–8). The case of Norway provides a counterpoint. Public childcare is also extensive, and most fathers are not facing severe financial constraints or lack of alternatives. Yet, we find that Norwegian fathers spend more time caring for their children than British fathers. Norway's strong gender equality norms and policies, such as paternity leave, appear to support men's caring even with high levels of state care.

Our work suggests that certain contexts do facilitate father-child time. We observe lower levels in Germany, higher levels in Norway, and substantial variation among fathers within the United States and the United Kingdom. In countries that provide consistent support for families we observe less variability across fathers. In countries with little support for families children's time with fathers is more heavily associated with household employment and fathers' characteristics. If a policy aim is to decrease inequities in father-child time across families, then cohesive policy supports appear key. If a policy aim is facilitating fathers' time with children, then a policy package similar to Norway's is a promising direction. Our results for Norway may allay fears that high levels of non-household care equate to less time with fathers (e.g. Windebank, 2001). We suspect that other aspects of Norway's policy context protect fathers' time with children (e.g. paternity leave). In Norway we also see greater participation in the physical care of children, suggesting that the Norwegian context facilitates greater involvement in more than the most desirable tasks and on more than just weekends.

Our conclusions are based on a cross-sectional comparison across four countries. While the results are consistent with our expectations, there may be alternate explanations for our findings. Future work will need to further validate, complicate, or disconfirm our conclusions. Our results are consistent with a growing body of multilevel analyses that suggests similar policy levers (e.g. child care) are associated with cross-national variation in women's employment (Pettit & Hook, 2009), men's housework (Hook, 2006), and task segregation in housework (Hook, 2010). Future work should further investigate how context influences both the opportunities and demands for fathers to spend time with their children.

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Table 1

Summary of institutional context around 2000

National Characteristics	US	UK	NO	GE
Employed men working 50+ hours, (%) ^b	27	32	20	29
Employed men working 39 hours or less, (%) ^b	19	31	42	29
Workers with weekend shifts, (%) ^c	28	25	15 ^e	19
Mothers (2+ children) employed, (%) ^a	65	62	78	56
Employed mothers (2+ children) working 30 hours or less, (%) ^a	24	63	41	60
Children ages 1 to 2 in publicly-financed childcare, (%) ^d	6	2	37	5
Children ages 3 to 5 in publicly-financed childcare, (%) ^d	53	77	78	77
Paid maternity leave (fully-paid), weeks ^d	0	5	38 ^f	14
Paid paternity leave, weeks ^d	0	0	4	0
Extended leave (paid or unpaid), weeks ^d	12	13	52	156 ^g

Notes:

^a Organization for Economic Cooperation and Development, 2002 (refers to children under age 15, year 2000, except 1999 for the U.S.).^b Fagan, 2002 (refers to year 1998); Jacobs & Gerson, 2004 for U.S. (refers to year 2000)^c Gornick & Meyers, 2003 (refers to year 1997); Hyggen & Skevik, 2003 for Norway (refers to year 1999).^d Gornick & Meyers, 2003 (refers to year 2000 except for child care for under 3s in the U.K. which refers to 1995).^e Represents all irregular hours, both weekends and evening/night work.^f Nine weeks reserved exclusively for the mother, the remainder may be shared.^g This is a family entitlement; the others are an individual entitlement.

Table 2

Independent Variables: Descriptive Statistics, Weighted (N=7,216 diaries)

Variable	American TUS 2003		Norwegian TUS 2000		German TUS 2001		British TUS 2000	
	Mean or %	SD	Mean or %	SD	Mean or %	SD	Mean or %	SD
<i>Individual and work characteristics</i>								
Age of respondent in years	36.86	(.20)	36.45	(.41)	39.55	(.22)	36.89	(.29)
College degree (1 = yes)	48%		37%		53%		30%	
Hours of work per week	42.64	(.15)	40.10	(.43)	41.39	(.20)	43.67	(.33)
Works 50 hours or more (1 = yes)	26%		15%		21%		41%	
Dayoff (1 = yes)	28%		34%		36%		31%	
on a weekday	13%		14%		15%		16%	
on a weekend	66%		74%		80%		71%	
<i>Partners' employment status</i>								
Employed full-time	40%		37%		13%		29%	
Employed part-time	22%		46%		51%		57%	
Not employed (reference)	38%		17%		35%		14%	
<i>Children's characteristics</i>								
Number of children								
One child (reference)	29%		29%		29%		39%	
Two children	46%		47%		50%		45%	
Three or more children	25%		24%		21%		16%	
Age of youngest child								
Less than 6	60%		69%		46%		63%	
6 to 9 (reference)	24%		20%		22%		21%	
10 to 14	16%		12%		33%		16%	
Male child present (1 = yes)	73%		72%		68%		66%	
<i>N - Total Diaries</i>								
<i>N - Individuals</i>	1,972		631		3,366		1,247	
<i>N - Weekday - Diaries</i>	1,972		317		1,123		628	
<i>- Individuals</i>	960		426		2,181		625	
<i>N - Weekend - Diaries</i>	960		268		1,120		625	
<i>- Individuals</i>	1,012		205		1,185		622	

Variable	American TUS 2003		Norwegian TUS 2000		German TUS 2001		British TUS 2000	
	Mean or %	SD	Mean or %	SD	Mean or %	SD	Mean or %	SD
- <i>Individuals</i>	1,012		158		1,121		622	

Note: TUS = Time Use Survey; SD = Standard deviation.

Table 3

Descriptive Statistics on Fathers' Physical Care, Interactive Care, and Time Alone with Children, by Country and Day-of-the-Week, Weighted (N=7,216 diaries)

	U.S.	Norway	Germany	U.K.
<u>PHYSICAL CARE</u>				
Weekdays				
Mean minutes	36 ^G	39 ^G	21 ^B	34
Standard deviation	(2.0)	(3.0)	(1.1)	(2.7)
Participation rate	56% ^{N, G}	63% ^{G, B}	46% ^B	54%
Minutes spent by participants	65	63	45 ^{U, N, B}	62
Weekends				
Mean minutes	43 ^{N, G, B}	60 ^{G, B}	23 ^B	33
Standard deviation	(3.6)	(6.2)	(1.6)	(2.2)
Participation rate	47% ^{N, B}	72% ^{G, B}	44% ^B	54%
Minutes spent by participants	92 ^{G, B}	83 ^{G, B}	53	61
Mean Difference (weekends - weekdays)	7	21 [*]	3	0
<u>INTERACTIVE CARE</u>				
Weekdays				
Mean minutes	26 ^{N, G, B}	13	16	16
Standard deviation	(1.8)	(1.6)	(1.1)	(1.3)
Participation rate	36%	32%	35%	35%
Minutes spent by participants	73 ^{N, G, B}	42	46	46
Weekends				
Mean minutes	33	24	32	28
Standard deviation	(2.3)	(4.5)	(2.1)	(2.3)
Participation rate	31% ^{G, B}	35%	43%	41%
Minutes spent by participants	106 ^{N, G, B}	69	75	69
Mean Difference (weekends - weekdays)	7 [*]	10 [*]	16 [*]	12 [*]
<u>TIME ALONE WITH CHILDREN</u>				
Weekdays				
Mean minutes	69 ^G	74 ^G	52	60
Standard deviation	(3.8)	(4.5)	(2.3)	(5.8)
Participation rate	60% ^{N, B}	77% ^{G, B}	64% ^B	44%
Minutes spent by participants	116	97	81 ^{U, N, B}	136 ^N
Weekends				
Mean minutes	96 ^{N, G}	119 ^{G, B}	82	88

	U.S.	Norway	Germany	U.K.
Standard deviation	(5.0)	(10.1)	(3.6)	(6.2)
Participation rate	53% ^{N, G}	79% ^{G, B}	71% ^B	53%
Minutes spent by participants	180	151	116 ^{U, N, B}	165
Mean Difference (weekends - weekdays)	26 [*]	45 [*]	30 [*]	27 [*]

Note:

* indicates that the means for weekday and weekends are statistically different ($p < .05$). Upper-case letters denote that a coefficient is statistically different (at the $p < .05$ level) from the comparison country (U= United States, N = Norway, G=Germany, B= United Kingdom).

Table 4

Linear Regression Predicting Minutes Spent on Physical Childcare, Weighted

	WEEKDAYS											
	United States			Norway			Germany			United Kingdom		
	B	SE		B	SE		B	SE		B	SE	
Age	.77	.31	*	.38	.42		.10	.21		1.10	.62	
College degree	12.95	3.99	**	3.85	5.85		6.88	2.12	**	2.69	5.89	
Two children	12.93	4.12	**	9.73	5.59		2.11	2.47		5.31	4.66	
Three+ children	12.54	5.19	*	21.25	8.42	*	-2.66	3.23		-3.44	7.81	
Youngest child < 6	11.18	4.90	*	27.34	6.38	***	11.14	3.12	***	17.47	7.25	*
Youngest child 10-14	-11.16	5.41	*	-6.84	8.12		-12.60	2.66	***	-26.01	5.91	***
Male child present	1.72	3.69		1.09	6.34		-.34	2.58		-2.34	5.04	
Work hours (weekly)	-.28	.56		-.11	.47		-.56	.30		-.26	.38	
Works over 50 hours	2.19	6.88		-3.72	8.44		5.10	4.10		-.62	6.59	
Partner full-time	19.99	4.73	***	11.13	8.24		.28	3.27		4.15	6.28	
Partner part-time	3.84	4.32		7.07	7.21		-2.94	2.58		17.88	6.41	**
Dayoff	16.02	7.55	*	13.03	10.01		11.30	3.75	**	40.48	8.57	***
Constant	-1.59	6.97		-.63	11.41		14.47	4.93	**	1.62	11.08	
R ²	.07			.12			.10			.16		
N	960			426			2,181			625		

	WEEKENDS											
	United States			Norway			Germany			United Kingdom		
	B	SE		B	SE		B	SE		B	SE	
Age	1.43	.45	**	-1.16	1.03		-.26	.30		-.46	.41	
College degree	10.42	6.74		21.40	12.04		6.33	3.16	*	7.58	4.76	
Two children	21.49	6.87	**	19.48	12.59		2.24	3.50		8.80	4.68	
Three+ children	11.72	7.36		34.35	18.66		-1.32	3.99		-1.53	6.36	
Youngest child < 6	38.10	8.41	***	50.35	11.90	***	15.15	4.26	***	32.23	4.28	***
Youngest child 10-14	-15.29	7.01	*	6.30	16.21		-12.55	4.01	**	3.52	4.44	
Male child present	1.33	6.09		-14.92	14.97		-1.53	3.23		-2.84	4.75	
Work hours (weekly)	1.77	1.13		-.63	.64		-1.07	.57		-.86	.43	*

	WEEKENDS											
	-14.07	13.91		-1.56	18.75	10.24	6.67		12.27	5.92	*	
Works over 50 hours	-1.64	8.35		-11.13	19.70	-6.14	3.88		-8.38	6.12		
Partner full-time	4.99	8.96		2.12	19.40	-.64	3.59		2.86	5.85		W
Partner part-time	15.99	6.42	*	7.05	15.64	5.20	3.79		16.55	4.39	***	
Dayoff	-18.05	9.89		6.58	28.95	16.14	6.78	*	-1.40	8.40		G,W
Constant	.07			.15		.11			.15			
R ²												
N	1,012			205		1,185			622			

Note:

- [†] p < .10,
- * p < .05,
- ** p < .01
- *** p < .001.

Upper-case letters denote that a coefficient is statistically different (at the p<=.05 level) from the comparison country (U= United States, N = Norway, G=Germany, B= United Kingdom) or from the weekday estimate (W). The reference category is: 35 years old, no college degree, one daughter aged 6 to 9, working 40 hours per week, partner not employed, and reported working on the diary day.

Table 5

Linear Regression Predicting Minutes Spent on Interactive Care, Weighted

	WEEKDAYS									
	United States		Norway		Germany		United Kingdom			
	B	SE	B	SE	B	SE	B	SE		
Age	-.41	.27	-.14	.21	.02	.15		.40	.23	
College degree	1.34	3.49	-.97	3.15	3.42	2.16		-1.51	2.64	
Two children	-.98	4.37	4.09	3.66	-3.06	2.37		-2.08	3.01	
Three+ children	-1.48	5.34	1.47	5.03	-7.38	3.66	*	-9.42	3.28	
Youngest child < 6	11.43	4.05	7.48	3.35	*	2.44	***	8.17	3.14	
Youngest child 10-14	-7.95	3.56	-.08	4.17	-5.64	1.59	***	-9.10	3.58	
Male child present	8.08	3.82	*	4.39	3.49	3.06	2.03	.65	2.91	
Work hours (weekly)	-.31	.61	-.15	.30	-.35	.20		-.55	.27	
Works over 50 hours	4.33	6.97		5.90	5.39	-2.67	2.55	5.04	3.66	
Partner full-time	5.51	4.00	-1.04	4.72	-70	3.14		.38	3.55	
Partner part-time	8.83	4.65	1.68	4.59	-3.91	2.47		5.47	3.43	
Dayoff	7.77	7.55	16.34	7.78	*	11.06	3.75	**	14.67	
Constant	11.86	5.28	*	.86	6.93	12.21	3.71	**	6.46	
R ²	.04		.07		.11			.10		
N	960		426		2,181			625		

	WEEKENDS											
Age	.65	.41		.36	1.23		.11	.33		-.09	.31	
College degree	15.33	4.88	**	1.86	9.26		4.38	4.25		14.80	5.74	*
Two children	6.16	4.87		-6.39	8.21		-6.61	4.92		-7.68	5.54	
Three+ children	3.67	6.67		-12.94	14.57		-15.33	6.17	*	U	6.06	*
Youngest child < 6	34.23	5.45	***	25.88	15.84		27.46	4.77	***	W	20.86	4.57
Youngest child 10-14	-6.05	4.76		-12.03	10.44		-14.13	3.61	***	W	-7.90	7.35
Male child present	-1.18	5.00		5.66	7.34		4.11	4.02			7.02	4.74
Work hours (weekly)	.00	.47		.56	.31		.03	.37			-.23	.26

	WEEKENDS									
Works over 50 hours	1.28	6.84	-17.36	9.90	4.36	6.30		4.73	5.13	
Partner full-time	-3.93	5.06	-12.71	10.42	-2.97	7.38		-16.49	9.64	
Partner part-time	3.09	6.17	4.70	11.06	-10.53	4.38 *		-8.02	9.26	
Dayoff	5.30	4.56	3.78	8.45	9.17	4.35 *		11.31	3.93	**
Constant	-4.73	7.22	8.49	20.65	21.49	8.17 **	U	13.76	9.89	
R ²	.08		.07		.14			.12		
N	1,012		205		1,185			622		

Note:

⁺ p < .10,

^{*} p < .05,

^{**} p < .01

^{***} p < .001.

Upper-case letters denote that a coefficient is statistically different (at the p<=.05 level) from the comparison country (U= United States, N = Norway, G=Germany, B= United Kingdom) or from the weekday estimate (W). The reference category is: 35 years old, no college degree, one daughter aged 6 to 9, working 40 hours per week, partner not employed, and reported working on the diary day.

Table 6

Linear Regression Predicting Minutes Spent Alone with Children, Weighted

	WEEKDAYS											
	United States			Norway			Germany			United Kingdom		
	B	SE		B	SE		B	SE		B	SE	
Age	.62	.63		.23	.63		.01	.40		2.18	1.26	
College degree	7.84	7.45		-8.44	8.47		5.38	4.27		-4.40	10.45	
Two children	14.45	9.24		24.34	9.91	*	10.62	4.96	*	25.04	10.78	*
Three+ children	19.71	11.15		33.07	13.78	*	11.68	7.40		12.55	13.58	
Youngest child < 6	27.56	8.86	**	28.58	10.37	**	12.95	6.14	*	23.22	12.82	
Youngest child 10-14	-8.84	10.06		16.16	17.43		-21.57	5.06	***	-31.15	12.22	*
Male child present	25.57	7.99	**	4.76	10.64	G	1.16	5.12		1.35	10.45	
Work hours (weekly)	-32	1.06		-33	.88		-.63	.37		-.58	1.22	
Works over 50 hours	1.88	12.44		-8.91	14.83		5.00	6.59		.47	14.80	
Partner full-time	44.80	9.13	***	14.24	11.77	N, G, B	14.04	7.34		14.36	10.90	
Partner part-time	10.49	8.79		9.80	12.45		7.44	4.95		47.47	11.77	***
Dayoff	55.34	18.66	**	55.96	16.46	***	58.45	9.56	***	103.43	23.57	***
Constant	-10.71	12.74		16.50	16.61		27.00	9.90	**	-22.95	21.76	
R ²	.09			.10			.12			.16		
N	960			426			2,181			625		

	WEEKENDS											
	United States			Norway			Germany			United Kingdom		
	B	SE		B	SE		B	SE		B	SE	
Age	2.12	.73	***	1.86			2.29	.69	***	-1.46	.89	
College degree	16.09	10.18		2.87	19.54		8.07	7.37		29.74	14.83	*
Two children	15.23	10.29		26.32	21.93		8.25	7.80		45.60	14.74	**
Three+ children	41.81	15.01	***	54.57	28.43		6.03	10.99		43.14	18.73	*
Youngest child < 6	22.83	13.87		61.72	25.54	*	36.06	9.46	***	30.99	14.08	*
Youngest child 10-14	-31.24	14.63	*	44.75	45.07		-29.35	8.67	***	31.57	22.06	W
Male child present	15.82	10.14		5.01	23.76		22.79	6.81	***	3.40	13.29	
Work hours (weekly)	1.93	1.55		1.20	.88		-.61	.66		1.06	.84	

	WEEKENDS											
Works over 50 hours	-10.66	19.57		-56.13	27.44	*	G	11.18	11.07		-11.19	16.24
Partner full-time	-9.20	11.23		-8.54	30.53		W	5.34	10.71		-.37	17.49
Partner part-time	13.76	13.26		22.38	30.53			-.48	8.12		30.11	15.46
Dayoff	29.18	9.78	**	-22.78	24.44		N	16.42	7.87	*	51.70	12.21
Constant	15.96	16.92		59.05	48.31			12.92	14.90		-18.87	23.89
R ²	.06			.09				.07			.07	
N	1,012			205				1,185			622	

Note:

+ p < .10,

* p < .05,

** p < .01

*** p < .001.

Upper-case letters denote that a coefficient is statistically different (at the p<=.05 level) from the comparison country (U= United States, N = Norway, G=Germany, B= United Kingdom) or from the weekday estimate (W). The reference category is: 35 years old, no college degree, one daughter aged 6 to 9, working 40 hours per week, partner not employed, and reported working on the diary day.