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

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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.

RUNNING HEAD: Fathers' Time with Children in Four Countries

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 participate in more egalitarian relationships with their partners. Evidence for the discourse on new fathers matching the practice of actual fathers, however, is mixed. Although there has been an increase in fathers' time with children documented in the United States and in European countries, women disproportionately provide childcare (Gershuny, 2000; Sayer, Bianchi, & Robinson, 2004).

Although the new fathers discourse is found across Western countries, there is a high degree of 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 European countries. It ranges from almost 50% of fathers in Denmark to nearly 25% in the United Kingdom and Germany to about 10% in France and Portugal.

In addition to variation in levels of involvement, there is reason to suspect that mechanisms associated with variation in father involvement also vary across countries. For example, a recent study investigating the relationship between education and parental time found that the effect of education varies across countries (Sayer, Gauthier, & Furstenberg, 2004). This highlights the need for further research embedding these 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 that weekends are characterized by more equality between mothers and fathers and that the determinants of fathers' 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. Although this the case for many men, over one-quarter of workers in the United States work on weekends, and there are similarly high levels in several European countries (Gornick & Meyers, 2003).

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 from these countries and examine employed, resident fathers in two-parent families. Given Yeung and colleagues (2001) finding of a substantial weekday/weekend divide in the emergence of new fatherhood in the United States, we compare father's time on weekdays versus weekends within each country and make comparisons by country for both weekdays and weekends. 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, and how universal and equal these benefits are. Liberal welfare states are characterized by a hands-off approach to employment and family affairs. Individual choice and the primacy of labor market forces shape gender relations

at home and at work. In contrast, social-democratic countries have a range of universal policies that seek to support work-family balance for both men and women. Conservative countries also have an array of "family-supportive" policies, but in general, these policies support male-breadwinner/female-caregiver families. We select a country from each regime to represent the "most different" types – the United States represents the liberal, Norway represents the social-democratic, and Germany represents the conservative regime. We chose these countries because each has high-quality, publicly available data. Because many researchers have noted the great variability that exists within regime (e.g., O'Connor, Orloff, & Shaver, 1999), we add the United Kingdom as a second liberal welfare state to explore variation within the same regime type.

We examine two types of engagement time: physical care and interactive care. Engagement time is strongly correlated with warmth, closeness, and monitoring, providing an indication that it is a good 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. Interactive care is less demanding and less likely to be performed on a fixed schedule (Craig, 2006). It is also more valued by parents than physical care (Bittman, Craig, & Folbre, 2004). We also examine the time fathers spend alone with children, or in "sole charge" (Craig, 2006; Kitterød & Pettersen, 2006). When fathers are alone with their children they are less likely to be in a helper role, more likely to be substituting for mothers' time, and may be forging stronger relationships with their children because mothers are not mediating (Craig, 2006). Although these categories are widely used, this conceptualization of involvement does not capture all of what fathers do. Fathers may feel highly involved without spending a lot of time with their children because they provide for them (Palkovitz, 1997; Townsend, 2002).

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. Given the comparative nature of our research questions, we focus our discussion on forming institutional-level hypotheses (for a review of individual and household factors consult 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 housework or childcare the more time their partner spends on employment and the more children they have.

From a time constraints perspective, the more time men spend at work, the less capability they have to respond to childcare demands (Coverman, 1985). Evidence about the relationship between hours worked and men's time with children, however, is mixed. In the United States Yeung and colleagues (2001) find a negative effect of work hours on fathers' time with children on weekdays, but not weekends. Smith (2004) finds work hours are negatively associated with

spending substantial time on childcare across 14 European countries. In contrast, Kitterød and Pettersen (2006) find that Norwegian fathers' working hours do not affect childcare time. Neither Smith (2004) nor Kitterød and Pettersen (2006) separate weekdays from weekends.

Men's employment practices vary considerably across these countries as shown in Table 1. From a time constraints perspective this variation should be linked to variation in father's time with children. About 30% of men report working over 50 hours per week in the United States, Germany, and the United Kingdom, whereas 20% report long hours in Norway. Over 40% of Norwegian men report working 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. If work hours are negatively associated with fathers' time with children across countries, we should observe convergence in father involvement once we control for cross-national differences in men's employment practices.

From a time constraints perspective, the more time men's partners spend at work, the greater childcare demands men face (Coverman, 1985). Again, evidence is mixed. In the United States , the absolute increase in men's involvement associated with mothers' employment is small and not robust (Pleck & Stueve, 2001). In Europe, Smith (2004) found that fathers in 14 countries are more likely to spend substantial time in childcare if their spouse is employed. She does not distinguish full- from part-time employment. Some researchers argue that women's part-time employment does not pull fathers into family work because it is a strategy that enables women to combine work and family, without pressuring fathers to be more involved (Stier & Lewin-Epstein, 2000). A number of U.S. studies, however, have found 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). In Norway, Kitterød and Pettersen (2006) find that

fathers do more childcare when their partners work only limited part-time hours (1-19 hours).

Mothers' employment practices vary considerably across these countries as well. From a time constraints perspective this variation should be linked to variation in father's time with children. While mothers' employment is fairly high in both the United States and United Kingdom, Norway stands out for its high participation rate. These rates are not adjusted for parental leave; although 74% of partnered mothers with children under age three are employed, 33% are on a leave of absence (Hyggen & Skevik, 2003). Although mothers in the United States are not the most likely to be employed, they 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. Here we again form a straightforward hypothesis: if mothers' employment is positively associated with fathers' time with children across countries, we should observe convergence in father involvement once we control for cross-national differences in women's employment practices.

[INSERT TABLE 1 ABOUT HERE.]

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. There is some evidence from the studies reviewed above that the associations between employment practices and men's time with children might vary by country. 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 gender are encoded in both employment and family policies (Gornick & Meyers, 2003; Gregory & Milner, 2007; Moss & Deven, 1999).[2]

[2] Although, 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

Drawing on this literature, we suggest that family policy and cultural context alters 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.

Postulating 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' time or of children's time. It also assumes that children are available to be with their fathers during his non-work time. Postulating a link between mothers' time at work and fathers' time with children supposes that fathers (and mothers) prefer fathers to spend more time with children when mothers work. These assumptions may appear obvious but highlighting them allows us to consider how family policy and cultural context might influence the perception of available alternatives and preferences, complicating a time constraints approach.

Family policy configurations differ considerably across these countries. As shown in Table 1, a greater percentage of Norwegian toddlers are cared for by publicly-financed childcare than in the other countries (Gornick & Meyers, 2003). Parents typically pay fees for publicly-financed care, but the government directly subsidizes childcare facilities (Kitterød & Pettersen, 2006). There is a general 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 and the United Kingdom have similar levels to Norway, whereas the United States provides less care than the other countries.

Publicly-financed childcare facilitates mothers' employment (Pettit & Hook, 2005; Pettit

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and culture (that is, changes in policy may change what is normative or vice-versa). The potential for policy and culture to be in opposition makes it important to consider both, and highlights how the same policy could have different outcomes in different cultural contexts (Pfau-Effinger, 2000). Note that a focus on institutional context does not assume that individual fathers lack agency, only that existing institutional features may influence fathering practices at a given time.

& Hook, 2009), but it is unclear how it influences father involvement. It may facilitate father involvement by promoting dual-earning; any influence of childcare 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). This suggests that the mechanism of maternal employment may operate differently in contexts with high levels of public childcare. We hypothesize that there is a weaker link between mothers' employment and fathers' time with children in countries where public care is high, such as Norway. Furthermore, fathers' may be less likely to translate their own non-work time into time with children because children may be 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 the mother and four for the father. 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. For some, this cash-for-care program may operate as an extended parental leave. Although fathers may not be pressured to care because of external child care provisions, paternity leave and aggressive gender equality reforms may be associated with fathers' greater childcare time. We hypothesize that paternity 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 mothers' employment, because fathers are expected to care regardless of their individual situation (Kitterød and Pettersen 2006).

In contrast to the gender equality reforms of Norway, Germany (circa 2000) provides family policy that reinforces a traditional division of labor. It offers parents up to three years of extended leave, which is taken by most German mothers. The average duration is nearly three

years in the former West and two years in the former East. Table 1 reports that 56% of German mothers are employed, but only 15% of mothers with children below the age of four are employed in the West (Ostner, Schmitt, Reif, & Turba, 2004). The sample size necessitates analyzing Germany as a whole, but cultural divides persist in preferences for at-home maternal care (Ostner, 2002). Because of the 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. Therefore, 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. 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. Fathers in the United States and the United Kingdom may respond more strongly to individual pushes and pulls, such as partners' employment. German fathers may spend less time and be less responsive given the strong preference for at-home, maternal care backed by generous parental leave. Norway presents an interesting case combining high levels of women's

employment and strong gender equality efforts - expected to increase fathers' childcare - with high levels of publicly-financed childcare, which may dampen this increase.

We control for several other characteristics that my 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 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 households containing children over the age of 14 or additional adults because the British dataset includes time spent with a partner in the same category as time spent with other household members (this eliminates a small percentage of households, for example, about 7% of coupled households in the United States).

We restrict the sample to partnered and employed fathers residing with children under the age of fourteen (social, not necessarily biological, fathers). 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. The resulting sample sizes are listed in Table 2. Note that in Germany and Norway respondents may provide two cases to a regression, particularly on weekdays, because studies gathered multiple diary days. Also, note that we have the most statistical power in the United States and Germany, less in the United Kingdom, and the least in Norway.

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 diary and recall methods of data collection (Harvey, 1993). An advantage of national time diary studies is that respondents are not primed for specific topics, so social desirability bias is minimized (Pleck & Stueve, 2001). This is useful for cross-national research where cultural differences might influence responses to survey questions. In sum, the data are well-suited to this project because the data are largely robust to variation, lack strong desirability bias, and contain detailed measures of involvement.

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 is in "sole charge" or has full responsibility of the child (Craig, 2006; Kitterød & Pettersen, 2006).

Physical and interactive care time are calculated from primary activity reports only. The European surveys included secondary activities, but the ATUS did not. The ATUS does ask if a child under age 13 was in the respondent's care during each activity, but this measure in not comparable to reporting secondary activities. Thus, the results presented are underestimates as childcare is often multitasked, and some childcare tasks are not captured as childcare. For example, making lunch for a child is recorded as cooking not childcare (Budig & Folbre, 2004). 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. Some of these activities were shifted to secondary activities when women were allowed to report them as such. She did not find a similar pattern for men.

There is an additional concern that interactive care may be especially sensitive to diary design and examples provided. Interactive care, including talking with children, may be more nebulous than physical care and more likely to occur simultaneously with other activities. Thus, how people choose to record it may be more variable. 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).

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

Control variables are shown in Table 2. Age is measured continuously. 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 high-level of education. The number of children is a continuous variable, top-coded at 12, counting children under the age of 15. 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. Boy is coded to one if at least one of the household children is male.

Work characteristics are weekly work hours, whether the respondent reported 50 or more hours per week, and whether the respondent worked on the diary day. Work hours measures the

usual hours of work, top-coded at 50 hours for comparability. We tested these measures for potential colinearity. The correlation between having the day off and the measures of work hours is low (neither over .13). Removing having the day off from the models does not change the estimates for weekly work hours or working over 50 hours. We also tested dummy coding, distinguishing respondents working less than 40 hours per week, 40 hours, between 41 and 49 hours, and 50 or more. Results are consistent with the models we employ.

There is concern that using fathers' weekly work hours and whether fathers worked on their diary day creates endogeneity bias because work time 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 how to allocate 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. In essence, 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. In the United States if respondents reported that their hours vary, we code them to part-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. Almost no respondents, in any country, report being a full-time worker while reporting fewer than 35 hours. Conversely, very few report being a part-time worker while reporting 35 hours or more. We were concerned that using these categories, instead of usual weekly hours, could obscure substantial variation between countries. We examined mothers of young children, comparing reported weekly hours and self-reported employment status. We found that the

means and medians are highly comparable. The median for full-time workers ranges from 38 (in the Norway and the United Kingdom) to 40 (in the United States and Germany). The median for part-time workers ranges from 19 (in Norway) to 20 (in the other countries). The means are similar ranging from 19 to 21 for part-timers and 37 to 41 for full-timers.

We do not include whether the father is cohabiting with the mother (in contrast to marriage). This is a practical decision as only 2.3% of fathers in the American sample and 3.6% in the German sample report cohabiting. The numbers in Norway and the United Kingdom are higher at 32.3% and 13.8%, respectively. Single country analyses in Norway and the United Kingdom show no associations between cohabitation and our dependent variables.

[INSERT TABLE 2 ABOUT HERE.]

There are three primary limitations of the data and measures. First, the dependent variables are limited to measures of behavior. Although ideal, there are no measures of how these behaviors correspond to outcomes of child well-being. Research indicates, however, that engagement time is positively associated with child well-being (Pleck & Masciadrelli, 2004).

Second, comparable analyses of four countries require the exclusion of some independent variables of interest. Variables are the lowest common denominator available in all datasets. We are unable to distinguish if a man is a biological- or step-father. Children living with two parents are more likely to be living with a step-parent in the United States (13%) and the United Kingdom (12%) than in Germany (8%) or Norway (5%) (Engstler & Menning, 2004; Hyggen & Skevik, 2002; Kreider & Fields, 2005; Office for National Statistics, 2005). If step-fathers spend less time with children than biological fathers (Pleck & Masciadrelli, 2004), we would underestimate fathers' time in the United States and the United Kingdom in comparison to Germany and Norway. We are also unable to analyze fathers' work shift. To do so would

necessitate limiting the analysis to only fathers working on their diary day, generating a sample size which would be too small to include work shift by day of the week. There is mixed evidence as to whether fathers with non-standard schedules spend more time with children than other fathers. Some of this variation is linked to age of the child. If non-standard shifts increase fathers' time with children, we would overestimate fathers' time in the United States and the United Kingdom in comparison to Germany and Norway because there are slightly higher rates of non-standard work in the former (Presser, 2003; Statistics Norway, 2008).

Third, the data are cross-sectional, and thus, we do not conclude that relationships are causal. 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.

Analyses

The multivariate analyses focus on discerning differences across countries in the effects of variables on fathers' time use. We began by modeling fathers' involvement in each country. We performed 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 the weights provided in each dataset, which account for sampling design, day of the week, and non-response. We cluster standard errors by person to account for multiple diaries per person (non-independence).

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 Eggerton (2006) find further support for using OLS over Tobit. Unlike Tobit, OLS coefficients sum to zero and the intercepts sum to 24 hours if identical regressions are performed on an exhaustive list of time use categories, and coefficients are stable whether generated from a single diary day or a weekly average (Gerhsuny & Egerton, 2006). We use OLS for the multivariate analysis.

RESULTS

Descriptive Results

With few exceptions, fathers spend more time caring for and being with their children on weekends than on weekdays. Table 3 shows the percent of fathers engaging in physical care,

engaging in interactive care, and spending time alone with children, by country. It also shows the average amount of time fathers spend on these activities among those engaging in the activity. Fathers in the United States, Germany, and Norway spend more time on physical care on weekends than on weekdays (although in the United States fathers decrease their participation rate slightly, whereas Norwegian fathers increase their rate). Fathers' time on physical care does not vary from weekdays to weekends in the United Kingdom. Fathers in all countries spend more time on interactive care and more time alone with children on weekends (again American fathers' participation rate dips slightly on weekends, whereas German and British fathers increase their participation rates).

Comparing means across countries, Norwegian fathers post the greatest involvement in physical care on weekdays (63%) and on weekends (72%). Among those engaged in physical care, Norwegian fathers spend about 1 hour on weekdays and 1-1/3 hours on weekends. Germany lags in participation and time; only about 45% of 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.

With regard to interactive care, weekday participation rates and time spent are very similar across countries, with the exception of the United States. American fathers spend about 1-1/4 hours on weekdays compared to about 45 minutes in the other countries. On weekends, the participation rate of American fathers lags behind German and British fathers by about 10 percentage points, but American fathers post 1-3/4 hours compared to 1-1/4 hours.

Focusing on the time fathers spend alone with their children, Norwegian fathers post the

highest participation rate on weekdays at 77%, American and German fathers post around 60%, and British fathers show the lowest rate at 44%. Among fathers spending time alone with their children, British and American fathers show the greatest time alone with children (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. German fathers post the least time at about 2 hours, but show higher participation rates (71%) than both the United States and the United Kingdom (at 53% and about 3 hours). Norwegian fathers show high participation (79%) and time (2-1/2 hours).

[INSERT TABLE 3 ABOUT HERE.]

In all four countries, fathers are clearly more involved with their children on weekends than on weekdays. There is intriguing variation across countries, however, in fathers' time with children. Norwegian fathers are the most involved and German fathers are the least involved in both physical care and time alone with children, but not in interactive care. These country differences could arise from differences in the demographic composition of households, 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 hypothesis 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 about 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 of 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 in the United Kingdom where fathers spend over 40 minutes more of physical care if they have a weekday off. In the other cases, the increase is about 15 minutes. The finding that fathers in the United States 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' time on weekends may actually underestimate the difference between weekdays and weekends for fathers who only work 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.

[INSERT TABLE 4 ABOUT HERE.]

We do not present results for interactive care (a table is available upon request). We observe minimal associations between fathers' interactive care and own employment

characteristics or partners' employment. We observe 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.

Table 5 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 on weekdays or weekends, the exception of Norway on weekends. Fathers working over 50 hours per week appear to spend almost an hour less with children; this association, however, needs to be considered in the context of the positive, but not statistically significant, association with hours of work (i.e., 1.29 x 50 = 64 minutes – 59 minutes = 5 minutes).

Men having their diary day off of work is associated with more time spent alone with children on weekdays in all cases, except for Norway on weekends. Again, the magnitude is greatest in the United Kingdom where fathers post 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, partners' full-time work status is only significant in the United States and on weekdays; fathers spend about 40 minutes more alone with children if their partner is employed full-time. American fathers also spend about 20 minutes more alone with children on weekdays if their partner is employed part-time. British fathers spend about 50 minutes more on weekdays, and 1/2 an hour more on weekends 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.

[INSERT TABLE 5 ABOUT HERE.]

Multivariate results suggest differences across countries in fathers' time with children,

and in relevant mechanisms depending on the country, task, 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. Fathers in the United States and the United Kingdom show greater time when compared to German fathers, but American and British fathers stand out as being more responsive to partners' employment than both German and Norwegian fathers.

DISCUSSION

We find that not only are American fathers more engaged and accessible on weekends than weekdays, but so are British, German, and Norwegian fathers. On weekends, employed fathers spend more time on physical care, interactive care, and time alone with children. Fathers' time engaged with children is important because it is strongly correlated with warmth, closeness, and monitoring, and thus child well-being (Pleck & Masciadrelli, 2004). Additionally, fathers' time alone with children is important because during this time fathers are less likely to be in a helper role, are more likely to be substituting for mothers' time, and may be forging stronger relationships with their children (Craig, 2006). In these four countries weekends do appear to be an opportunity for fathers to engage in "new fatherhood."

It is important to consider, however, that not all fathers have weekends free from work. On weekend days, 17 to 35% of employed fathers in these countries reported working; fathers in the United States are especially likely to report working weekends. American and British fathers who work on weekends spend less time on physical care and less time alone with their children on those days. Similarly, not all weekdays are workdays; 83 to 87% of employed fathers reported working on their weekday diary day. British fathers with a weekday off were especially likely to translate that time into more physical care and more time alone with children.

While it may be surprising that the weekly work hours of employed fathers make little difference in their time with children, we stress that the fathers in the sample show very little variation in work hours. Less than five percent of fathers work fewer than 40 hours per week, over half report exactly 40 hours, and almost 30% report 50 or more hours per week. Very few fathers are working reduced hours that may facilitate more time with children.

As hypothesized, Norwegian and German fathers appear less responsive to their own work characteristics 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. This lack of responsiveness is consistent with expectations. 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 fathers in the United Kingdom. In her comparison to fathers in France, she found that British fathers were more involved in care, yet France is more "family-friendly" providing extensive public care for small children. Explaining this difference, 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. In Norway, public childcare is also extensive, and most Norwegian fathers are not facing severe financial constraints or lack of alternatives. Yet, we find that fathers in Norway spend more time caring

for their children than fathers in the United Kingdom. It is likely then, that Norway's strong gender equality norms and policies, such as paternity leave, support men's caring even in the presence of state care.

Cross-national variation in fathers' responsiveness to women's employment suggests that time constraints do not operate symmetrically in different contexts. It is important to consider the context in which demand or availability are operating. This suggests caution when applying research findings across countries and when analyzing countries in a pooled model.

A major limitation of this work is that it is a cross-sectional comparison across four countries. While the results are consistent with our expectations, our explanations for country differences in levels and mechanisms are not conclusive. 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. parental leave, 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).

We find some evidence of new fathers on weekends. Fathers' increased involvement on weekends is generally positive for fathers and for children (Eggebeen & Knoester, 2001; Marsiglio, et al., 2000), and likely for mothers too (Coltrane, 2000). We observe variation across countries, however. In Norway we see substantially more participation in the physical care of children on both weekdays and weekends. This suggests that certain contexts do facilitate greater involvement on more than just weekends and in more than the most desirable tasks. Future work should further investigate how context influences the opportunities and demands for men to spend time with their children.

REFERENCES

Bittman, M., Craig, L., & Folbre, N. (2004). Packaging care: What happens when parents utilize non-parental childcare. In N. Folbre & M. Bittman (Eds.), *Family time: The social organization of care* (pp. 133-151). London: Routledge.

Blood, R. O. J., & Wolfe, D. M. (1960). *Husbands and Wives: The Dynamics of Married Living*. Glencoe, IL: The Free Press.

Borchorst, A. (2002). Danish child care policy: Continuity rather than radical change. In S. Michel & R. Mahon (Eds.), *Child Care Policy at a Crossroads: Gender and Welfare State Restructuring* (pp. 267-286). New York: Routledge.

Budig, M., & Folbre, N. (2004). Activity, proximity, or responsibility? Measuring parental childcare time. In N. Folbre & M. Bittman (Eds.), *Family time: the social organization of care* (pp. 51-68). London: Routledge.

Casper, L. M., & O'Connell, M. (1998). Work, income, the economy, and married fathers as child-care providers. *Demography, 35*(2), 243-250.

Coltrane, S. (2000). Research on household labor: Modeling and measuring the social embeddedness of routine family work. *Journal of Marriage and the Family, 62*, 1208-1233.

Coverman, S. (1985). Explaining husbands' participation in domestic labor. *Sociological Quarterly, 26*(1), 81-97.

Craig, L. (2006). Does father care mean fathers share?: A comparison of how mothers and fathers in intact families spend time with children. *Gender & Society, 20*(2), 259-281.

Doherty, W. J., Kouneski, E. F., & Erickson, M. F. (1998). Responsible fathering: An overview and conceptual framework. *Journal of Marriage & the Family, 60*(2), 277-292.

Duyvendak, J. W., & Stavenuiter, M. (2004). *Working fathers, caring men: Reconciliation of working life and family life*. The Hague: Ministry of Social Affairs and Employment.

Eggebeen, D. J., & Knoester, C. (2001). Does fatherhood matter for men? *Journal of Marriage and the Family, 63*(2), 381-393.

Engstler, H., & Menning, S. (2004). *Families in Germany - Facts and Figures*. Berlin: German Centre of Gerontology.

Esping-Andersen, G. (1990). *The three worlds of welfare capitalism*. Cambridge: Polity Press.

Gerhsuny, J., & Egerton, M. (2006). *Evidence on participation and participants' time use from day- and week-long diaries: Implications for modeling time use*. Paper presented at the International Association of Time-Use Research.

Gershuny, J. (2000). *Changing times: Work and leisure in postindustrial society*. Oxford: Oxford University Press.

Gornick, J., & Meyers, M. (2003). *Families that work: Policies for reconciling parenthood and employment*. New York: Russell Sage Foundation.

Gregory, A., & Milner, S. (2007). Fatherhood regimes and father involvement in France and the UK. *Community, Work & Family, 11*(1), 61-84.

Harvey, A. S. (1993). Guidelines for time use data collection. *Social Indicators Research, 30*, 197-228.

Højgaard, L. (1997). Working fathers - Caught in the web of the symbolic order of gender. *Acta Sociologica, 40*, 245-261.

Hook, J. L. (2006). Care in context: Men's unpaid work in 20 countries, 1965-2003. *American Sociological Review, 71*(August), 639-660.

Hook, J. L. (2010). Gender inequality in the welfare state: Sex segregation in housework, 1965–2003. *American Journal of Sociology, 115*(5).

Hyggen, C., & Skevik, A. (2002). *Demography of the family in Norway: First report for the project 'Welfare Policy and Employment in the Context of Family Change'*. York, UK: Social Policy Research Unit, University of York.

Hyggen, C., & Skevik, A. (2003). *Labour supply in Norway: Second report for the project 'Welfare Policy and Employment in the Context of Family Change'*. York, UK: Social Policy Research Unit, University of York.

Juster, F. T. (1985). The validity and quality of time use estimates obtained from recall diaries. In F. T. Juster & F. P. Stafford (Eds.), *Time, goods, and well-being* (pp. 63-91). Ann Arbor: University of Michigan Press.

Kitterød, R. H. (2001). Does the recording of parallel activities in time use diaries affect the way people report their main activities? *Social Indicators Research, 56*, 145-178.

Kitterød, R. H., & Pettersen, S. V. (2006). Making up for mothers' employed working hours? Housework and childcare among Norwegian fathers. *Work, Employment and Society, 20*(3), 473-492.

Kreider, R., & Fields, J. (2005). *Living arrangements of children: 2001*. Washington, D.C.: U.S. Census Bureau.

Lamb, M., Pleck, J., Charnov, E., & Levine, J. (1987). A biosocial perspective on paternal behavior and involvement. In J. Lancaster, J. Altmann, A. Rossi & L. Sherrod (Eds.), *Parenting across the life span: Biosocial dimensions* (pp. 111-142). New York, NY: Aldine de Gruyter.

Marini, M. M., & Shelton, B. A. (1993). Measuring household work: Recent experience in the United States. *Social Science Research, 22*, 361-382.

Marsiglio, W., Amato, P., Day, R., & Lamb, M. (2000). Scholarship of fatherhood in the 1990s and beyond. *Journal of Marriage and Family, 62*, 1173-1191.

Moss, P., & Deven, F. (1999). Parental leave in context. In P. Moss & F. Deven (Eds.), *Parental Leave: Progress or Pitfall?* (pp. 1-24). The Hague, Brussels: NIDI/CBGS Publications.

O'Connor, J. S., Orloff, A. S., & Shaver, S. (1999). *States, markets, families: Gender, liberalism, and social policy in Australia, Canada, Great Britian and the United States*. Cambridge: Cambridge University Press.

Office for National Statistics (2005). *Focus on families*. London: Office for National Statistics.

Ostner, I. (2002). A new role for fathers? The German case. In B. Hobson (Ed.), *Making men into fathers: Men, masculinities and the social politics of fatherhood* (pp. 150-167). Cambridge, UK: Cambridge University Press.

Ostner, I., Schmitt, C., Reif, M., & Turba, H. (2004). *Labour supply in Germany before and since unification: National report section 2 for the project 'Welfare Policy and Employment in the Context of Family Change'*. York, UK: Social Policy Research Unit, University of York.

Palkovitz, R. (1997). Reconstructing "involvement": Expanding conceptualizations of men's caring in contemporary families. In A. Hawkins & D. Dollahite (Eds.), *Generative fathering: Beyond deficit perspectives* (pp. 200-216). Thousand Oaks, CA: Sage.

Parke, R. D. (1996). *Fatherhood*. Cambridge, MA: Harvard University Press.

Pettit, B., & Hook, J. (2005). The structure of women's employment in comparative perspective. *Social Forces, 84*(2), 779-801.

Pettit, B., & Hook, J. L. (2009). *Gendered tradeoffs: Family, social policy, and economic inequality in twenty-one countries*. New York: Russell Sage.

Pfau-Effinger, B. (2000). Gender cultures, gender arrangements and social change in the European context. In S. Duncan & B. Pfau-Effinger (Eds.), *Gender, economy and culture in the European Union* (pp. 262-276). New York: Routledge.

Pleck, J. H., & Masciadrelli, B. P. (2004). Paternal involvement by U.S. residential fathers: Levels, sources, and consequences. In M. E. Lamb (Ed.), *The role of the father in child development (4th ed.).* (pp. 222-271): John Wiley & Sons, Inc, Hoboken, NJ, US.

Pleck, J. H., & Stueve, J. L. (2001). Time and paternal involvement. *Contemporary Perspectives in Family Research, 3*, 205-226.

Presser, H. B. (2003). *Working in a 24/7 economy: Challenges for American families*. New York: Russell Sage.

Przeworski, A., & Teune, A. (1970). *The logic of comparative social inquiry*. New York: Wiley-Interscience.

Robinson, J. P. (1985). The validity and reliability of diaries versus alternative time use measures. In F. T. Juster & F. P. Stafford (Eds.), *Time, goods, and well-being* (pp. 33 - 62). Ann Arbor: University of Michigan Press.

Sayer, L. C., Bianchi, S. M., & Robinson, J. P. (2004). Are parents investing less in children? Trends in mothers' and fathers' time with children. *American Journal of Sociology, 110*(1), 1-43.

Sayer, L. C., Gauthier, A. H., & Furstenberg, F. F., Jr. (2004). Educational differences in parents' time with children: Cross-national variations. *Journal of Marriage and Family, 66*(5), 1152-1169.

Skevik, A. (2003). *Family policies in Norway: Third report for the project 'Welfare Policy and Employment in the Context of Family Change'*. York, UK: Social Policy Research Unit, University of York.

Smith, A. (2004). Who cares? Fathers and the time they spend looking after children. *University of Oxford Sociology Working Papers, 2004-05*.

Smith, A., & Williams, D. (2007). Father friendly legislation and paternal time across Western Europe. *Journal of Comparative Policy Analysis, 9*(2), 175-192.

Statistics Norway (2008). Table 7. Regularly patterns of working time, by working hours and sex. Retrieved November 12, 2009, from Statistics Norway: http://www.ssb.no/english/subjects/06/01/akutidord_en/tab-2009-03-04-07-en.html

Stewart, J. (2009). Tobit or not Tobit?, *IZA Discussion Paper No. 4588*. Bonn, Germany: Institute for the Study of Labor (IZA).

Stier, H., & Lewin-Epstein, N. (2000). Women's part-time employment and gender inequality in the family. *Journal of Family Issues, 21*(3), 390-410.

Townsend, N. (2002). *The package deal: Marriage, work, and fatherhood in men's lives*. Philadelphia, PA: Temple University Press.

Windebank, J. (2001). Dual-earner couples in Britain and France: Gender divisions of domestic labour and parenting work in different welfare states. *Work, Employment & Society, 15*(2), 269-290.

Yeung, W. J., Sandberg, J. F., Davis-Kean, P. E., & Hofferth, S. L. (2001). Children's time with fathers in intact families. *Journal of Marriage and the Family, 63*(1), 136-154.

Table 1. Summary of institutional context in 2000 (approximately)

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) OECD 2002; refers to children under age 15 b) Fagan 2002; Jabcobs and Gerson 2004 for U.S. c) Gornick and Meyers 2003; Hyggen and Skevik 2003 for Norway d) Gornick and Meyers 2003 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=7,215 diaries)

	United States		Norway		Germany		United Kingdom	
Variable	*Mean or %*	*SD*	*Mean or %*	*SD*	*Mean or %*	*SD*	*Mean or %*	*SD*
Individual and work characteristics								
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%	
Partners' work characteristics								
Spouse employed full-time (1 = yes)	37%		37%		13%		29%	
Spouse employed part-time (1 = yes)	25%		46%		51%		57%	
Children's characteristics								
Number of children in household	2.02	(.02)	1.99	(.05)	2.00	(.03)	1.80	(.03)
Youngest child < 6 (1=yes)	60%		69%		46%		63%	
Youngest child age 10-14 (1 = yes)	16%		12%		33%		16%	
Male child present (1 = yes)	73%		72%		68%		66%	
N - Individuals	1,972		317		1,123		628	
N - Total Diaries	1,972		631		3,366		1,247	
N - Weekday - Diaries	960		426		2,181		625	
- Individuals	960		268		1,120		625	
N - Weekend - Diaries	1,012		205		1,185		622	
- Individuals	1,012		158		1,121		622	

Table 3. Descriptive Statistics on Fathers' Physical Care, Interactive Care, and Time Alone with Children, by County and Day-of-the-Week, Weighted (N=7,216 diaries)

		US		NO		GE		UK	
Physical care									
	Weekdays								
	Participation rate	56%	N, G	63%	G, B	46%	B	54%	
	Minutes participating	65		63		45	U, N, B	62	
		(2.8)		(3.6)		(1.8)		(4.1)	
	Weekends								
	Participation rate	47%	N, B	72%	G, B	44%	B	54%	
	Minutes participating	92	G, B	83	G, B	53		61	
		(6.8)		(7.3)		(2.9)		(3.2)	
	Difference (weekends - weekdays)								
	Participation rate	-8%	*	10%	*	-2%		0%	
	Minutes participating	27	*	20	*	8	*	-1	
Interactive care									
	Weekdays								
	Participation rate	36%		32%		35%		35%	
	Minutes participating	73	N, G, B	42		46		46	
		(3.6)		(3.5)		(2.4)		(2.6)	
	Weekends								
	Participation rate	31%	G, B	35%	g	43%		41%	
	Minutes participating	106	N, G, B	69		75		69	
		(5.4)		(10.3)		(3.5)		(4.1)	
	Difference (weekends - weekdays)								
	Participation rate	-5%	*	3%		8%	*	6%	*
	Minutes participating	33	*	27	*	29	*	23	*
Time alone with children									
	Weekdays								
	Participation rate	60%	N, g, B	77%	G, B	64%	B	44%	
	Minutes participating	116		97		81	U, N, B	136	N
		(5.2)		(4.9)		(3.0)		(10.8)	
	Weekends								
	Participation rate	53%	N, G	79%	G, B	71%	B	53%	
	Minutes participating	180		151		116	U, N, B	165	
		(7.3)		(10.9)		(4.3)		(9.6)	
	Difference (weekends - weekdays)								
	Participation rate	-7%	*	2%		7%	*	9%	*
	Minutes participating	65	*	54	*	35	*	29	*

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). Lower-case letters indicate a comparison is marginally significant (p<=.10).

Table 4. Linear Regression Predicting Minutes Spent on Physical Childcare, by County and Day-of-the-Week, Weighted

	WEEKDAYS															
	United States				Norway				Germany				United Kingdom			
	B	SE			B	SE			B	SE			B	SE		
Age	.75	.32	*	g	.37	.43			.06	.21			1.14	.64		
College degree	13.21	3.99	***		3.75	5.88			6.89	2.13	**		2.99	5.81		
Number of children	3.50	2.03			9.39	4.77	*	G,b	-.66	1.26			-.31	3.05		
Youngest child < 6	10.95	4.91	*	N	27.16	6.32	***	G	10.58	3.20	***		16.68	6.91	*	
Youngest child 10-14	-10.66	5.45	*	B	-7.25	8.86			-12.32	2.64	***	B	-26.65	5.86	***	n
Male child present	3.57	3.77			1.22	6.47			-.27	2.55			-1.83	5.10		
Work hours (weekly)	-.23	.57			-.06	.47			-.55	.30			-.26	.38		
Works over 50 hours	1.56	6.96			-4.86	8.51			5.08	4.11			-.75	6.59		
Partner full-time	19.89	4.91	***	G,B	10.82	8.29			.04	3.35			4.15	6.33		
Partner part-time	5.13	4.19			6.83	7.24			-2.82	2.59			18.07	6.43	**	G,u
Dayoff	16.03	7.63	*	B	12.97	10.03			11.37	3.78	**	B	41.03	8.65	***	N
Constant	-14.10	25.88			-17.63	28.83			37.10	15.57	*	u,n,b	-19.89	29.34		
R^2	.06				.12				.10				.15			
N	960				410				2,181				614			
	WEEKENDS															
Age	1.38	.45	**	G,B	-.01	1.04			-.32	.31			-.41	.42		
College degree	11.26	6.63			20.49	12.14			6.36	3.16	*		7.96	4.77		
Number of children	5.30	3.18			12.24	8.50			.56	1.88			.51	2.80		
Youngest child < 6	34.81	7.84	***	G,W	50.16	11.95	***	G,w	14.55	4.41	***	B	30.95	4.26	***	W
Youngest child 10-14	-16.90	6.84	*	B	1.56	16.11			-12.17	3.99	**	B	2.46	4.43		W
Male child present	2.55	6.31			-12.81	15.16			-1.75	3.25			-1.71	4.77		
Work hours (weekly)	1.90	1.16			-.55	.64			-1.06	.57			-.89	.43	*	U
Works over 50 hours	-15.26	14.30			-3.33	18.53			9.94	6.66			12.42	5.91	*	U
Partner full-time	-1.41	8.48		W	-11.94	20.16			-6.12	3.91			-8.42	6.16		w
Partner part-time	4.86	8.74			3.09	19.83			-.45	3.58			3.18	5.86		W
Dayoff	16.45	6.47	*		7.61	15.51			5.36	3.79			16.57	4.40	***	G,W
Constant	-132.31	49.28	**	G,N,B	20.43	43.21			68.20	29.36	*		48.92	27.04		
R^2	.07				.14				.11				.15			
N	1,012				197				1,185				593			

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). Lower-case letters indicate a comparison is marginally significant (p<=.10).

Table 5. Linear Regression Predicting Minutes Spent Alone with Children, by County and Day-of-the-Week, Weighted

	WEEKDAYS															
	United States				Norway				Germany				United Kingdom			
	B	SE			B	SE			B	SE			B	SE		
Age	.64	.64			.20	.63			-.08	.39			2.30	1.29		
College degree	7.54	7.46			-9.35	8.54			5.53	4.28			-3.45	10.35		
Number of children	6.33	4.78			12.60	6.03	*		5.78	3.23			9.51	6.20		
Youngest child < 6	27.32	9.10	**		26.75	10.54	*		11.62	6.11			20.92	12.42		
Youngest child 10-14	-7.91	9.84			11.23	16.76			-21.04	5.02	***	n	-32.99	12.20	**	N
Male child present	26.45	7.69	***	G, b	6.05	10.77			1.24	5.21			2.56	10.65		
Work hours (weekly)	-.25	1.06			-.16	.89			-.61	.37			-.60	1.23		
Works over 50 hours	.30	12.53			-13.30	15.21			4.55	6.55			.13	14.90		
Partner full-time	38.49	8.78	***	n, G, b	12.85	11.98			13.67	7.35			14.72	11.11		
Partner part-time	22.16	10.03	*		8.80	12.63			7.70	4.95			48.43	11.93	***	u, N, G
Dayoff	55.69	19.00	**		55.24	16.66	**		58.46	9.58	***		105.02	23.78	***	n, g
Constant	-21.04	52.95			14.39	47.95			51.01	22.09	*	b	-72.74	63.77		
R^2	.08				.09				.12				.15			
N	960				410				2,181				614			
	WEEKENDS															
Age	2.11	.73	**	B	.19	1.89			2.23	.69	**	B, W	-1.32	.87		
College degree	15.86	10.22			.76	19.43			8.12	7.36			30.91	14.88	*	W
Number of children	16.06	6.49	*		17.80	13.23			3.21	4.65			24.35	9.19	**	
Youngest child < 6	22.92	13.43			63.75	24.76	*		34.87	9.48	***	W	27.56	13.82	*	
Youngest child 10-14	-31.96	14.58	*		37.19	43.83			-28.96	8.67	***		28.92	21.71		W
Male child present	15.73	10.23			8.68	23.59			22.97	6.76	***	W	5.65	13.29		
Work hours (weekly)	2.01	1.57			1.29	.88			-.59	.66			.99	.83		
Works over 50 hours	-10.99	19.79			-58.62	28.18	*	G	10.75	11.10			-10.84	16.27		
Partner full-time	-10.27	11.04		W	-11.70	31.34			5.06	10.71			-.02	17.81		
Partner part-time	13.76	13.21			23.02	31.20			-.18	8.10			31.52	15.73	*	g
Dayoff	30.48	9.71	**	N	-21.95	24.48		W	16.58	7.87	*	W	51.76	12.26	***	N, G, w
Constant	-143.66	72.40	*		-11.66	71.84			-30.51	39.81			-36.20	54.31		
R^2	.06				.08				.07				.07			
N	1,012				197				1,185				593			

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). Lower-case letters indicate a comparison is marginally significant (p<=.10).