ECONSTOR
Make Your Publications Visible.

A Service of
ZBW
Leibniz-Informationszentrum Wirtschaft
Leibniz Information Centre for Economics

Bünning, Mareike

Article — Published Version

Paternal Part-Time Employment and Fathers' Long-Term Involvement in Child Care and Housework

Journal of Marriage and Family

Provided in Cooperation with:
WZB Berlin Social Science Center

Suggested Citation: Bünning, Mareike (2020) : Paternal Part-Time Employment and Fathers' Long-Term Involvement in Child Care and Housework, Journal of Marriage and Family, ISSN 1741-3737, Wiley-Blackwell, Oxford, Vol. 82, Iss. 2, pp. 566-586, https://doi.org/10.1111/jomf.12608

This Version is available at:
https://hdl.handle.net/10419/207006

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.

https://creativecommons.org/licenses/by/4.0/

WWW.ECONSTOR.EU

Mitglied der Leibniz-Gemeinschaft

Journal of Marriage and Family

Mareike Bünning WZB Berlin Social Science Center

Paternal Part-Time Employment and Fathers' Long-Term Involvement in Child Care and Housework

Objective: *This study examines whether paternal part-time employment is related to greater involvement by fathers in child care and housework, both while fathers are working part-time and after they return to full-time employment.*
Background: *The study draws on four strands of theory—time availability, bargaining, gender ideology, and gender construction. It studies couples' division of labor in Germany, where policies increasingly support a dual-earner, dual-carer model.*
Method: *The study uses data from the German Socio-Economic Panel from 1991 to 2015 on employed adult fathers living together with at least one child younger than age 17 and the mother. The analytic sample comprises 51,230 observations on 8,915 fathers. Fixed effects regression techniques are used to estimate the effect of (previous) part-time employment on fathers' child-care hours, housework hours, and share of child care and housework.*
Results: *Fathers did more child care and housework while they worked part time. Yet, most fathers reverted to previous levels of involvement after returning to full-time work. The only exception was fathers with partners in full-time employment, who spent more time doing child care and took on a greater share of housework after part-time employment than before.*
Conclusion: *The findings are largely consistent with the time availability perspective, although the results for fathers with full-time employed partners indicate that the relative resources and gender ideology perspectives have some explanatory power as well.*

WZB Berlin Social Science Center, Reichpietschufer 50, 10785 Berlin, Germany (mareike.buenning@wzb.eu).

© 2019 The Authors. *Journal of Marriage and Family* published by Wiley Periodicals, Inc. on behalf of National Council on Family Relations.
This is an open access article under the terms of the Creative Commons Attribution License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

Key Words: child care, employment, fathers, fixed-effects models, housework/division of labor, part-time work.

Introduction

The meaning of fatherhood has changed in recent decades. Fathers today want not only to be breadwinners but also caregivers who provide emotional support, time, care, and affection to their children (Palkovitz, 2012). Male support for the male breadwinner model has declined considerably in industrialized countries since the 1980s, and by 2002, the majority of European men agreed that fathers should be more involved in housework and child care (Hofäcker, 2007; Scott, 2006).

Nevertheless, fathers' behavior lags behind their aspirations. Mothers continue to perform the majority of domestic work (child care and housework), even in couples where both partners work full-time (Craig & Mullan, 2011; Eurostat, 2009). Given that many fathers want to be

DOI:10.1111/jomf.12608

more involved, it is vital to better understand the conditions that enable them to participate more actively in family life.

This study analyzes the implications of part-time employment for paternal involvement in domestic work. Studies have shown that mothers often switch to part-time work as a strategy to balance work and family life (Blossfeld & Hakim, 1997; Fagan & Walthery, 2007; Hipp, Bernhardt, & Allmendinger, 2015). Previous research has also found that long working hours constitute a major barrier to paternal involvement in child care (Roeters, van der Lippe, & Kluwer, 2009; Roeters, van der Lippe, Kluwer, & Raub, 2012; Tanaka & Waldfogel, 2007; Yeung, Sandberg, Davis-Kean, & Hofferth, 2001) and housework (Bianchi, Milkie, Sayer, & Robinson, 2000; Coltrane, 2000) and that they intensify work–family conflict among men (Steiber, 2009). Hence, one can expect part-time employment to allow fathers to participate more actively in caregiving and to create a more egalitarian division of housework.

This study draws on four prominent theories on couples' division of unpaid work—time availability, bargaining, gender ideology, and gender construction—and addresses the following two questions: Do fathers become more involved at home while working part-time? Do they maintain their involvement after returning to full-time employment? The answer to the first question sheds new light on the relative strengths of the four theories by using a new dependent variable and focusing on the father's employment status. The second question contributes to the literature by addressing how past employment histories are related to couples' current division of labor—a question that has received little attention in research to date (for an exception, see Cunningham, 2007). Working part-time may permanently change fathers' gender role attitudes or reduce their bargaining power, whereas the time availability perspective would expect fathers to be more involved at home while they are working part-time, but not after returning to full-time work.

The study also has policy implications. Promoting paternal involvement in child care and increasing gender equality in unpaid work are key aims of European social policy, as they are an important step toward a gender-equal society and may boost Europe's low fertility rates (European Commission, 2006, 2012). Previous studies on policy support for paternal involvement in child care have focused primarily on parental leave (O'Brien, 2004, 2009; O'Brien & Moss, 2010; Smith & Williams, 2007). This research shows that parental leave is positively associated with fathers' involvement at home even after they return to full-time work (Bünning, 2015; Schober & Zoch, 2019). Yet, although children need parental care throughout childhood, parental leave usually only covers the initial months of a child's life (O'Brien, 2004; Russel & Hwang, 2004). This study therefore sheds light on whether part-time employment should be promoted as a means of increasing fathers' ongoing involvement in family life.

The study focuses on Germany, where a small but growing proportion of fathers work part-time. Although only 2% of employed fathers worked part-time in 1996, this proportion increased to 5.5% in 2012 (Keller & Haustein, 2013). Given the fluctuation of the part-time workforce, the proportion of children whose fathers worked part-time at least once during their childhood may be considerably higher. More than half of the fathers choose to work part-time, often for family reasons, but one third only work part-time because they could not find a full-time job (Keller & Haustein, 2013). In recent years, fathers' uptake of parental leave has increased, and many fathers choose to work part-time during their leave. This suggests that child care is becoming a more common reason for paternal part-time employment.

Theoretical Background

Studies on father involvement and the division of labor in couples usually refer to the following four theoretical approaches: time availability, bargaining, gender ideology, and gender construction (for an overview of theories regarding the division of housework, see Coltrane, 2000; Lachance-Grzela & Bouchard, 2010; for theories on the division of child care, see Raley, Bianchi, & Wang, 2012). These differ in their expectations on how fathers' involvement in child care and housework changes when they switch from full-time to part-time work and back again.

According to the time-availability approach, time spent in paid work limits the time available for housework (Blood & Wolfe, 1960). The shorter fathers' working hours and the

longer their partners' working hours, the more involved fathers should be in unpaid work at home. Fathers should therefore perform more child care and housework while working part-time than while working full-time. The time-availability perspective, however, would not expect the effect of part-time employment to persist after fathers return to full-time work.

According to the bargaining perspective, couples negotiate their division of labor (Blood & Wolfe, 1960; Lundberg & Pollack, 1996). The partner who earns a higher income and thus has more control over the couples' economic resources has greater marital power and can therefore negotiate his or her way out of unpleasant tasks. Previous research has generally considered housework unpleasant (see a review by Lachance-Grzela & Bouchard [2010]). It is therefore an important issue in the bargaining process. Yet the relationship between bargaining power and the division of child care is more nuanced. Although parents may wish to avoid some routine physical care tasks (such as feeding or changing diapers), they enjoy interactive aspects of child care, such as playing with or talking to their children (Robinson & Godbey, 2000), and many fathers regret not spending enough time with their children (Milkie, Mattingly, Nomaguchi, Bianchi, & Robinson, 2004). Hence, parents may use their bargaining power to negotiate out of housework while not using it to negotiate out of (all aspects of) child care (Cooke, 2007; Craig & Mullan, 2011; Raley et al., 2012).

As fathers' income and bargaining power decreases when they switch from full-time to part-time work, they should increase their unpaid work at home. Conversely, once they return to full-time work, they should be able to negotiate out of some of their responsibilities at home. Research has also shown, however, that part-time employment is associated with a permanent wage penalty (Bünning, 2016; Ferber & Waldfogel, 1998; Hirsch, 2005; O'Dorchai, Plasman, & Rycx, 2007; Wolf, 2014). Fathers' earnings and hence their bargaining power may not reach previous levels when they return to full-time work, and as a result, they may remain more involved at home than previously. Following this line of argumentation, fathers' loss of bargaining power during and after part-time work should be greatest if their partner works full-time, as their loss of income relative to their partner should be greater the more the partner earns. By contrast, if his partner is not employed, a father's loss of bargaining power should be less severe, as he still provides 100% of the couple's combined earnings. Furthermore, if bargaining power is the main mechanism behind the associations between part-time employment and fathers' participation in domestic work, the effects of current and previous part-time work should decrease when relative income is controlled for. By contrast, if available time is the main mechanism, controlling for relative income should not alter the effect of part-time employment.

The gender ideology perspective assumes that fathers participate more at home when they hold egalitarian gender role attitudes (Davis & Greenstein, 2009). This may account for behavioral differences among fathers, for example, fathers who hold more egalitarian gender role attitudes may be more likely to both work part-time and participate more in domestic tasks. Furthermore, fathers' gender role attitudes may change over time and become more egalitarian due to part-time employment, and these changes in gender role attitudes may explain changes in domestic work. As previous research has argued, exposure to a nontraditional division of labor may lead people to adopt more egalitarian gender role attitudes. For instance, with increasing participation in full-time employment, women's gender role attitudes become more egalitarian (Cunningham, 2007, 2008). For fathers, research on parental leave has argued that deviating from the traditional division of labor during parental leave may permanently transform fathers' gender role attitudes. Fathers subsequently maintain these more egalitarian attitudes when they return to work and therefore remain more involved at home, in particular in child care (Haas & Hwang, 2008; Tanaka & Waldfogel, 2007). Applying this argument to part-time employment, the gender ideology perspective expects fathers to take on more domestic work while working part-time and to continue to do so after returning to full-time work. Moreover, following the exposure argument, gender ideologies should become especially egalitarian if both partners engage in nontraditional behavior. Therefore, fathers' participation at home during and after a period of part-time employment should be greatest if the mother works full time.

According to the gender construction approach (West & Zimmerman, 1987), gendered identities are the products of social

Table 1. *Theoretical Expectations About the Relationship Between Part-Time Employment and Father Involvement at Home by Four Strand of Theory*

Theoretical approach	During part-time employment	After return to full-time work
Time availability	More housework and child care	Housework and child care reduced to previous levels
Bargaining	More housework (and child care), mediated by lower relative income	Some participation in housework (and child care) persists, mediated by lower relative income
Gender ideology	More housework and child care	Greater participation in housework and child care persists
Gender constructionism	No changes in housework	No changes in housework

behavior. Men and women have to reproduce their identities as male or female through daily routines and interactions. Engaging in behavior that is regarded as stereotypically female can be threatening to men's gender identity. Hence, when men feel that their gender identity is threatened in one domain (e.g., at work), they may compensate for this by displaying masculine behavior in another domain (e.g., at home; Arrighi & Maume, 2000; Brines, 1994).

Qualitative research shows that part-time work may threaten fathers' masculinity at work (Björk, 2013; Buschmeyer, 2008). Hence, fathers may choose to reaffirm their masculinity by avoiding housework. By contrast, they will probably not avoid child care because many men currently consider involvement with children a component of good fathering (Brandth & Kvande, 2016; Palkovitz, 2012) and—as official statistics show—because child care is often the reason why fathers choose to work part-time (Keller & Haustein, 2013).

The expectations emerging from the four theoretical perspectives are summarized in Table 1: The gender constructionist perspective does not expect fathers to increase participation in housework while working part-time and does not make clear predictions on child care. The other three perspectives expect fathers to become more involved in child care and housework while working part-time, but differ on whether this increased involvement persists after fathers return to full-time work. The gender ideology perspective expects a lasting effect of part-time work, whereas the time availability perspective does not. The bargaining perspective expects fathers' involvement at home to persist to some extent, although it expects the effect to be stronger in the area of housework than in child care and mediated by fathers' relative income.

The German Context

The German welfare state has a long history of supporting the male-breadwinner, female-homemaker model. Family policies such as income splitting in the taxation system, coverage of dependents in the public health insurance scheme, and long periods of parental leave have reinforced the traditional division of labor in couples. Over time, the one-and-a-half earner model emerged as the predominant employment pattern of couples. Mothers have entered the labor force in increasing numbers, but mostly on a part-time basis (Cooke, 2011). This was supported by a 2001 law granting every employee in Germany the legal right to work part-time. The law also prohibits discrimination against part-time employees, which ensures, among other things, that part-time employees are entitled to full social benefits. Although both men and women have the right to work part-time under this legislation, it is mainly used by mothers; full-time employment continues to be the norm for fathers. In 2012, 70% of employed mothers and 5.5% of employed fathers worked part-time (employment rates were 60% and 84%, respectively; Keller & Haustein, 2013).

More recent policies aim at supporting a dual-earner, dual-carer model. In 2005, a law was passed that aimed to expand public child care for children younger than age 3 and thereby to promote maternal employment. The parental leave regulation was revised in 2007 to encourage greater uptake of parental leave among fathers and to promote paternal involvement in child care. Parents can take a total of 36 months of parental leave, of which up to 14 months are paid. Of the 14 months of paid parental leave, 2 are reserved for the father and lost to the family if he does not use them. Paid leave can only be taken within the first 14 months after birth, although parents can take unpaid

leave until the child's 8th birthday. Parents can take parental leave on a full-time or part-time basis, working up to 30 hours per week. Due to the reform, fathers' uptake of parental leave increased from 3.5% in 2006 to its current level of about 30% (Bundesministerium für Familie, Senioren, Frauen und Jugend [BMFSFJ], 2012; Statistisches Bundesamt, 2014). About 14% of the fathers who currently take parental leave do so part-time. Almost all mothers take parental leave. About 5% of them take (some) parental leave part-time (Deutscher Bundestag, 2012).

The study is based on data from reunified Germany. Hence, the same policies apply to the eastern and western parts of the country. Yet some differences between the two parts of Germany persist even 25 years after reunification. The most noteworthy of these are that East German fathers are more involved in domestic work (Cooke, 2007), East German mothers are more likely to work full-time (Keller & Haustein, 2013), and the gender wage gap is considerably smaller in eastern Germany (5.7% compared with 24.7%; Nisic & Melzer, 2016).

Data and Methods

This study uses data from the German Socio-Economic Panel (SOEP; www.diw.de/en/soep). SOEP is representative of the adult population of private households in Germany. Data collection started in West Germany in 1984 and an East German sample was added in 1990 shortly before German reunification. Refresher samples were added at several points in time to account for panel attrition and increase sample size (Wagner, Frick, & Schupp, 2007). It uses a randomly selected sample of households using a multistage stratified sampling procedure and annually interviews all members of these households who are older than the age of 16.

This study uses SOEP data from 1991 to 2015. Originally, the SOEP contained 73,264 observations on 13,868 adult fathers who had at least one child younger than age 17 who were cohabiting with the child's mother and who were the head of household or partner to the head of household. Observations on fathers who were older than 54 years ($n = 2{,}681$, 3.7%), in education or training ($n = 2{,}634$, 3.6%), or not working at the time of interview ($n = 5{,}740$, 7.8%) were excluded, as were observations with missing values on the dependent variables ($n = 2{,}615$ for child-care hours, $n = 493$ for share of child care, $n = 1{,}370$ for housework hours, $n = 166$ for share of housework, total 6.3%) or independent variables ($n = 1{,}435$ for employment status, $n = 905$ for partner's employment status, $n = 167$ for relative earnings, $n = 718$ for level of education, $n = 632$ for partner's level of education, $n = 87$ for marital status, $n = 21$ for region of residence, $n = 1$ for unemployment experience, total 5.4%). This leaves 53,599 observations on 11,284 fathers. After excluding 2,369 fathers who were observed only once, the analytic sample comprises 51,230 observations on 8,915 fathers. Detailed information on the distribution of the length of the observation period within the sample, reasons for entering and leaving the analytic sample, and gaps in the observation period are presented in Tables S1 to S4.

Variables

The dependent variables are fathers' absolute time spent in housework and child care and their share of housework and child care relative to their partners. The variables were measured by fathers' and their partners' answers to the following questions: "What does a typical weekday look like for you? How many hours per day do you spend on the following activities?" The activities include "child care" and "housework (washing, cooking, cleaning)." Housework hence covers routine, conventionally female tasks, whereas the questionnaire does not further define which activities are regarded as child care and therefore does not allow us to differentiate between routine and interactive tasks as several previous studies have done (Craig, 2006; Raley et al., 2012; Roeters et al., 2009).

The main explanatory variables are two dummy variables that measure fathers' employment status. The first dummy variable indicates that fathers worked part-time at the time of interview. The second dummy variable indicates that fathers worked part-time in the past but have returned to full-time work. Observation-years when fathers were working full-time and had never previously worked part-time are the reference category.

There is no universally accepted definition of part-time employment. National definitions of part-time employment are based either on workers' self-reported employment status or on a threshold for usual hours worked or on a combination of both, which makes

cross-national comparisons difficult (van Bastelaer, Lemaître, & Marianna, 1997). However, in this single country study, this issue is less relevant. The SOEP collects data on respondents' self-reported employment status and their weekly working hours, including overtime at the time of interview. In addition, fathers report their employment status, but not their working hours in each month of the previous year, which provides information on past part-time employment.

Consistent with the German definition of part-time employment, fathers were coded as employed part-time for all observation-years in which they reported working part-time and also reported working fewer than 32 hours per week. This maintains consistency with the use of self-reported employment status to define previous part-time employment and ensures that fathers really have additional time to spend in domestic work.

Fathers were coded as having previously worked part-time for all observation-years after a year in which they either worked part-time at the time of interview or reported part-time as their employment status for at least 1 month.

As the division of domestic work depends on the labor supply of both partners, the models control for mother's employment status, distinguishing between being employed full-time (at least 32 hours), part-time (less than 32 hours), and not employed. To assess whether the effect of fathers' part-time work is mediated by their relative income (as expected by the bargaining perspective), fathers' relative income is measured as their gross monthly earnings as a proportion of both partners' combined gross monthly earnings. Further time-varying control variables are whether fathers ever took full-time parental leave (dummy variable), unemployment experience in months, number of children (distinguishing between one, two, and three or more), the age of the youngest child, marital status (married or cohabiting), region of residence (East or West), year (dummies), and both partners' level of education (distinguishing between low [Hauptschule], medium [Realschule or Abitur], and high [tertiary education] according to the Casmin classification).

Method and Analytic Strategy

To estimate the effect of part-time employment on father involvement, this study uses fixed effects regression models (Allison, 2009; Brüderl & Ludwig, 2015). These models allow us to control for stable, unobserved differences between fathers who work part-time and those who do not so that the results are not biased by self-selection into part-time employment. In fixed effects regressions, the individual-specific mean of each variable is subtracted from its actual value in each time period. Fixed effects estimation therefore does not infer a causal effect by comparing different persons, but by comparing a within-person change that is induced by a treatment effect (in this case part-time employment). In other words, the estimates of the relationship between fathers' part-time employment and their participation in domestic work are identified based on the difference between average participation in unpaid work before, during, and after spells of part-time employment net of control variables. This relationship can only be estimated for fathers who were employed full time for at least one year of observation and who experienced at least one episode of part-time employment. Observations on a control group who did not work part time are needed to estimate the effect of a general time trend and the effects of the control variables. For instance, previous research found that fathers do less child care when they have older children (Yeung et al., 2001). Due to the research design, fathers inevitably have older children after part-time employment than before. By including the control group, I can disentangle the "part-time employment effect" and the "ageing effect" under the assumption that the time trend is the same for both groups of fathers. The equation can be written as follows:

$$y_{\mathrm{it}} - \overline{y}_{\mathrm{i}} = (X_{\mathrm{it}} - \overline{X}_{\mathrm{i}})\beta + (\alpha_{\mathrm{i}} - \overline{\alpha}_{\mathrm{i}}) + (u_{\mathrm{it}} - \overline{u}_{\mathrm{i}})$$

The left-hand side of the equation is the dependent variable y (participation in child care and housework) of person i in year t subtracted by the person-specific mean value on this variable $\overline{y}$. X_{it} is the time-variance matrix of independent variables, and β a matrix of estimated parameters. α_{i} are unobserved time-invariant characteristics of the fathers that are netted out of the model, and u_{it} is an idiosyncratic error that varies across subjects and over time.

The model assumes that there is no unobserved time-variant heterogeneity net of control variables. Further assumptions are that idiosyncratic errors must be homoscedastic and serially

uncorrelated. Therefore, I use panel-robust standard errors to correct for the arbitrary clustering of time series and heteroskedasticity. Because fixed effects estimates use within variation, the effects of variables that vary little over time (such as level of education) need to be interpreted with caution. Note also that the model eliminates any stable differences between fathers from eastern and western Germany. The "east" coefficient only estimates how the dependent variables change if a father moves from one region to the other. Furthermore, the results are only generalizable to those units that show within variation (so called "average treatment effect on the treated" [Brüderl & Ludwig, 2015, p. 353]).

Three models are estimated for each dependent variable. The first model estimates the main effect of fathers' current and previous part-time work, excluding relative income as a control. The second model adds an interaction effect between fathers' previous and current part-time employment and their partners' employment status to test whether the effects of fathers' current and previous part-time work are moderated by mothers' employment status. The third model then includes fathers' relative income as a control variable to test whether the effect of part-time employment is mediated by relative income, as expected by the bargaining perspective.

Note that in the estimation of interaction effects, all individuals with variation in either of the two interacted variables are considered. This means I can estimate the interaction effect for all fathers who changed employment status irrespective of whether the mother also changed employment status or had a stable employment status throughout the entire observation period. Distributions of cases across the combination of fathers' and their partners' employment status are shown in Table S5. Each cell includes at least 344 observations.

Results

Altogether, fathers in the sample worked part time for 2.3% of the person-years, but the proportion of fathers who worked part time at least once during the observation period was considerably higher at 8.5% ($n = 758$). Of the fathers who had worked part time, 64% ($n = 488$) had returned to a full-time position by the end of the observation period, and among them, the median length of part-time employment was 12 months. This shows that part-time employment is often an intermediary episode for fathers.

Table 2 displays descriptive statistics of the dependent variables separately for fathers who worked part time during the observation period and fathers who worked full time for all observation-years. Furthermore, for fathers within the part-time employment sample, the table provides descriptive statistics separately for observation-years before, during, and after part-time employment. As the table shows, fathers who later worked part-time were

Table 2. *Descriptive Statistics on Fathers' Involvement in Child Care and Housework: Estimated Means and Standard Deviations for Part-Time (*N *= 758) and Full-Time (*N *= 8,157) Employment Samples*

	Part-time employment sample				Full-time employment sample			
	Before part-time		During part-time		After part-time		Never part-time	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Child care in hours per weekday	1.87	1.87	3.46	3.40	2.09	2.54	1.48	1.74
Share of child care	0.26	0.19	0.40	0.23	0.29	0.22	0.24	0.20
Housework in hours per weekday	0.70	0.78	1.35	1.06	0.83	0.82	0.58	0.70
Share of housework	0.20	0.21	0.37	0.25	0.26	0.23	0.16	0.19
Relative income	0.79	0.24	0.58	0.34	0.70	0.24	0.82	0.19
Own income[a]	25.91	17.05	11.64	10.09	27.99	21.12	33.60	23.81
Partner's income[a]	9.00	13.47	15.80	18.44	15.13	16.75	8.50	11.48
Weekly work hours	43.67	9.50	20.60	7.97	43.02	9.84	45.37	8.48
Person-years	1,280		1,151		1,865		46,934	
Persons			758				8,157	

[a]Monthly gross labor income in 100 Euro.

somewhat more involved in child care and housework even prior to part-time employment than fathers who worked full-time continuously. Hence, there appears to be some selection of more highly involved fathers into part-time work, which underlines the need for fixed effects models.

During the observation-years when fathers worked part-time, they spent almost twice as much time in child care and housework than before they worked part-time, indicating that fathers used the extra time available to become more involved at home. Fathers' share of the couples' total amount of housework and child care also increased when they worked part-time, but their partners continued to perform the majority of unpaid work.

In the observation-years after fathers returned from part-time to full-time work, their participation in child care and housework decreased substantially, but they continued to be somewhat more involved at home than before they worked part-time. The descriptive results were hence consistent with the time-availability perspective. Yet they might also indicate that fathers' reduced bargaining power or more egalitarian gender roles might lead to greater participation at home during and after a period of part-time employment. Consistent with the bargaining perspective, fathers' relative earnings decreased from 79% to 58% when they were working part time and only increased to 70% again after fathers returned to a full-time position. Hence, working part-time was associated with a permanent reduction in fathers' relative income. This is mainly because their partners earned considerably more in the period after paternal part-time employment. Fathers' own incomes also rose slightly, and their weekly working hours reverted to essentially the same level as before part-time work. Tables S6 and S7 display these descriptive statistics separately for eastern and western Germany and show that the patterns described above apply to both parts of the country.

Descriptive statistics for the control variables are displayed in Table 3 separately for fathers in the full-time employment sample and fathers in the part-time employment sample. Fathers in the two samples differed in a number of ways, which showed that there was considerable selection into part-time employment. Fathers in the part-time employment sample were more highly educated, more likely to live in eastern Germany, less likely to be married, more likely to take full-time parental leave, and more likely to have experienced unemployment. Their partners were more highly educated and more likely to work full-time. Furthermore, fathers in the part-time employment sample had younger children. The additional multivariate analyses displayed in Table S8 largely confirm these patterns of selection.

Table 3. *Estimated Means and Standard Deviations of Control Variables for Fathers Who Worked Part-Time (N = 758) During the Observation Period and Fathers Who Did Not (N = 8,157)*

	Part-time employment sample		Full-time employment sample	
Variable	*M*	*SD*	*M*	*SD*
Partner's employment status				
Not working	0.34		0.37	
Part-time employed	0.33		0.41	
Full-time employed	0.33		0.22	
Took parental leave[a]	0.10		0.03	
Months unemployed	7.40	16.67	1.30	5.56
Number of children				
1 child	0.25		0.27	
2 children	0.45		0.46	
3+ children	0.31		0.27	
Age of the youngest child	5.70	4.40	6.77	4.76
Education[b]				
Low	0.28		0.35	
Medium	0.39		0.40	
High	0.33		0.25	
Partner's education[b]				
Low	0.22		0.27	
Medium	0.47		0.53	
High	0.31		0.20	
Married[a]	0.86		0.92	
Eastern Germany[a]	0.29		0.22	
Person-years	4,296		46,934	
Persons	758		8,157	

[a]Dummy variables: 1 = "yes." [b]Casmin classification: low = Hauptschule, medium = Realschule or Abitur, high = tertiary education.

The results of the fixed effects regression models on fathers' child-care hours are displayed in Table 4. As shown in Model 1, during the years when fathers worked part-time, they spent on average 1.29 hours per weekday more doing child care than they had spent before they worked part-time ($p < .001$). Yet once they returned to a full-time position, their

Table 4. *Fixed Effects Estimates on Employed Fathers' Child-Care Hours* (N = *8,915*)

	Model 1		Model 2		Model 3	
Variable	*B*	*SE*	*B*	*SE*	*B*	*SE*
Father's employment status (ref.: never worked part-time)						
During part-time employment	1.29***	0.14	1.36***	0.21	1.37***	0.21
After part-time employment	0.17	0.11	0.02	0.13	0.03	0.13
Partner's employment status (ref.: not employed)						
Part-time employed	0.13***	0.02	0.14***	0.02	0.07+	0.03
Full-time employed	0.09**	0.03	0.07*	0.03	−0.04	0.05
Father's × Partner's Employment Status						
During Part-Time × Partner Part-Time			−0.30	0.29	−0.38	0.29
During Part-Time × Partner Full-Time			0.07	0.28	−0.02	0.28
After Part-Time × Partner Part-Time			0.02	0.13	−0.01	0.13
After Part-Time × Partner Full-Time			0.39*	0.17	0.36*	0.17
Relative income					−0.34**	0.12
After parental leave	0.83***	0.13	0.82***	0.13	0.82***	0.13
Months unemployed	−0.00	0.00	−0.00	0.00	−0.00	0.00
No. of children (ref.: 1)						
Two children	0.29***	0.05	0.29***	0.05	0.30***	0.05
Three or more children	0.31***	0.09	0.31***	0.09	0.32***	0.09
Age of the youngest child	−0.05***	0.01	−0.05***	0.01	−0.05***	0.01
Education (ref.: low) [a]						
Medium	0.06	0.07	0.06	0.07	0.06	0.07
High	0.00	0.14	0.01	0.14	0.01	0.14
Partner's education (ref.: low) [a]						
Medium	0.06	0.07	0.06	0.07	0.06	0.07
High	0.13	0.19	0.12	0.18	0.11	0.18
Married	0.28***	0.08	0.28***	0.08	0.28***	0.08
Eastern Germany	−0.16	0.13	−0.16	0.13	−0.17	0.13
Number of person-years	51,230		51,230		51,230	
Number of persons	8,915		8,915		8,915	
R^2 within	0.03		0.03		0.03	

Note. Controlled for year of observation (dummy variables), panel-robust standard errors. R^2 within: proportion of intraindividual variance explained by the model. ref. = reference category.

[a]Casmin classification: low = Hauptschule, medium = Realschule or Abitur, high = tertiary education.

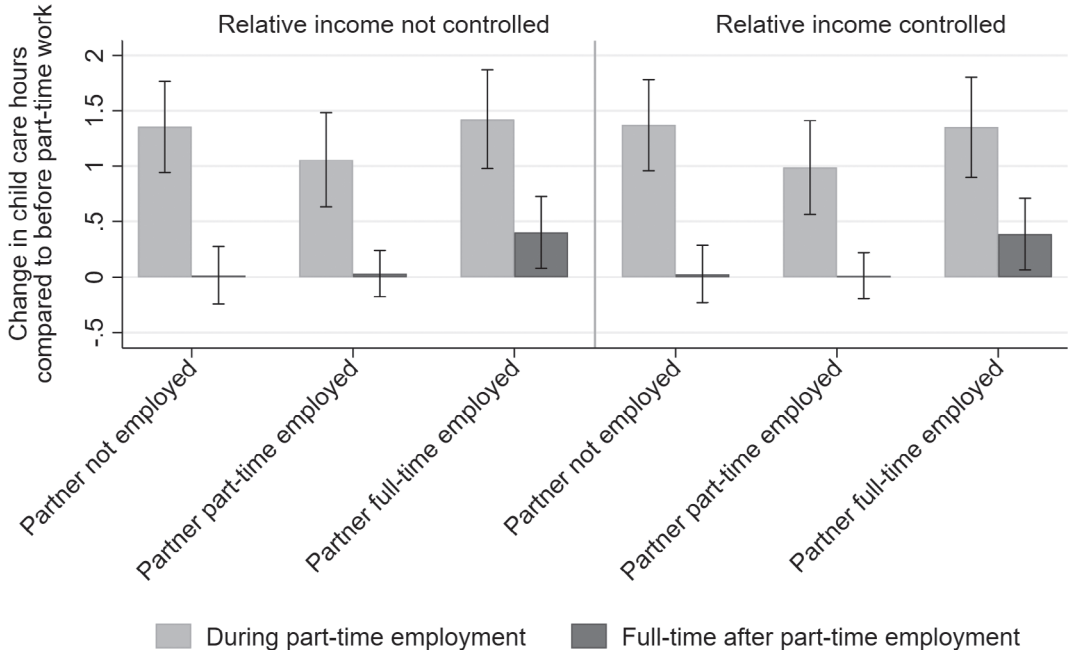
$^{***}p < .001$. $^{**}p < .01$. $^{*}p < .05$. $^{+}p < .1$.

participation in child care decreased again and did not differ significantly from before they worked part-time ($b = 0.16$, $p > .1$).

Models 2 and 3 differentiate the results by the partner's employment status. Fathers' transition from full-time to part-time work was associated with an increase in their child-care hours regardless of their partners' employment status: The effect on fathers whose partners worked part-time or full-time was not significantly different from that on fathers whose partners were nonemployed (the reference category). After returning to full-time work, fathers with nonemployed partners did no more child care than before working part-time, but fathers with full-time employed partners did significantly more child care than fathers with nonemployed partners. For fathers with part-time or full-time employed partners, postestimation is needed to assess whether changes in child-care hours during and after part-time employment are significant compared with years before they worked part-time during which they had part-time or full-time employed partners.

The postestimation results are displayed in Figure 1. The figure is structured in two sections. The three bars on the left-hand side correspond to Model 2 in Table 4 and show

Figure 1. Fixed Effects Estimates and 95% Confidence Intervals of Part-Time Employment on Fathers' Child-Care Hours by the Partner's Employment Status.



Note: Predicted changes in employed fathers' child-care hours during and after part-time employment compared with before part-time employment, holding constant partner's employment status and controlling for use of parental leave, unemployment experience, number of children, age of the youngest child, marital status, both partner's level of education, region of residence, and year of observation. $N = 8{,}915$.

the relationship between fathers' and their partners' employment status net of all control variables except relative income. The right-hand bars show this relationship when relative income is included in the models (corresponding to Model 3). As Figure 1 shows, fathers increased their child-care hours during part-time employment irrespective of the mothers' employment status. Moreover, fathers who previously worked part-time and had full-time employed partners spent nearly half an hour more per weekday on child care (0.40 hours, $p < .05$) compared with time points when they had full-time employed partners and had not worked part-time yet. Fathers whose partner worked part-time or was not employed, by contrast, did no more child care after part-time employment compared with time points when they had part-time employed or nonemployed partners and had not worked part-time yet. Controlling for relative resources did not alter these relationships.

The results for fathers' shares of child care are displayed in Table 5 and Figure 2. According to Model 1 in Table 5, fathers increased their share of child care by 9% points ($p < .001$) on average when switching from full-time to part-time work. Yet their share of child care after part-time employment did not differ significantly from their share before working part-time ($b = -0.00$, $p > .1$).

Fathers increased their share of child care during part-time employment even when their partner was not employed, but the changes were most pronounced when the partner worked full-time (Table 5, Model 2). When relative income was controlled for (Model 3), increases in fathers' share of child care during part-time employment no longer differed by the partner's employment status. Thus, the relationship between the mother's employment status and part-time employed fathers' share of child care was fully mediated by (full-time) employed mothers' greater relative resources.

Table 5. *Fixed Effects Estimates on Employed Fathers' Share of Child Care* (N = *8,915*)

	Model 1		Model 2		Model 3	
Variable	*B*	*SE*	*B*	*SE*	*B*	*SE*
Father's employment status (ref.: never worked part-time)						
During part-time employment	0.09***	0.01	0.07***	0.01	0.08***	0.01
After part-time employment	−0.00	0.01	−0.01	0.01	−0.01	0.01
Partner's employment status (ref.: not employed)						
Part-time employed	0.05***	0.00	0.05***	0.00	0.01**	0.00
Full-time employed	0.14***	0.00	0.14***	0.00	0.08***	0.01
Father's × Partner's Employment Status						
During Part-Time × Partner Part-Time			0.02	0.02	−0.03+	0.02
During Part-Time × Partner Full-Time			0.04*	0.02	−0.01	0.02
After Part-Time × Partner Part-Time			0.01	0.01	−0.00	0.01
After Part-Time × Partner Full-Time			0.02	0.02	0.00	0.02
Relative income					−0.20***	0.01
After parental leave	−0.02+	0.01	−0.02+	0.01	−0.02*	0.01
Months unemployed	−0.00	0.00	−0.00	0.00	−0.00+	0.00
No. of children (ref.: 1)						
Two children	−0.03***	0.01	−0.03***	0.01	−0.03***	0.01
Three or more children	−0.04***	0.01	−0.04***	0.01	−0.04***	0.01
Age of the youngest child	0.01***	0.00	0.01***	0.00	0.01***	0.00
Education (ref.: low)[a]						
Medium	−0.02	0.01	−0.02	0.01	−0.02+	0.01
High	−0.03	0.02	−0.03	0.02	−0.03	0.02
Partner's education (ref.: low)[a]						
Medium	−0.01	0.01	−0.01	0.01	−0.01	0.01
High	−0.03+	0.02	−0.03+	0.02	−0.04+	0.02
Married	−0.03***	0.01	−0.03***	0.01	−0.02***	0.01
Eastern Germany	−0.03	0.02	−0.03	0.02	−0.03	0.02
Number of person-years	51,230		51,230		51,230	
Number of persons	8,915		8,915		8,915	
R^2 within	0.08		0.08		0.08	

Note. Controlled for year of observation (dummy variables), panel-robust standard errors. R^2 within: proportion of intraindividual variance explained by the model. ref. = reference category.

[a]Casmin classification: low = Hauptschule, medium = Realschule or Abitur, high = tertiary education.

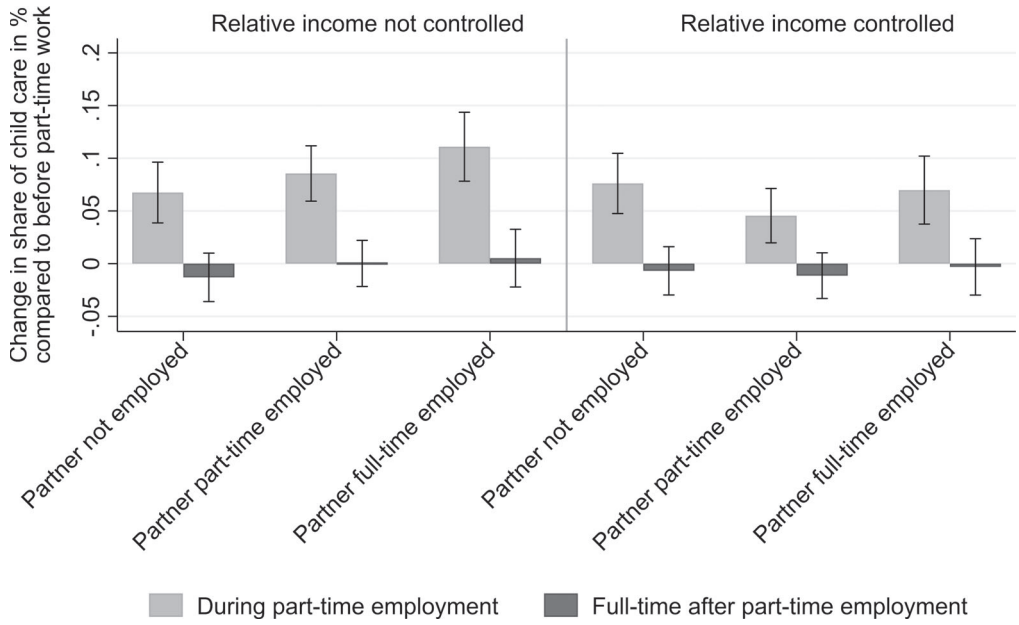
$^{***}p < .001$. $^{**}p < .01$. $^{*}p < .05$. $^{+}p < .1$.

As shown in Figure 2, irrespective of the mothers' employment status and irrespective of whether relative income was controlled for or not, there was no evidence that fathers' share of child care was larger after part-time employment than before, as the effect sizes were small and none of the effects reached conventional significance levels.

Turning to housework, Table 6 shows that fathers also performed more housework during their part-time work episode than before it. On average, they spent half an hour longer per weekday doing housework ($b = 0.47$, $p < .001$). Once they returned to full-time employment, their housework hours did not differ significantly from before they worked part-time ($b = 0.04$, $p > .1$).

Distinguishing by the partner's employment status, Model 2 showed that the greater the mother's involvement in paid work, the greater the father's participation in housework during part-time employment. This relationship was partly mediated by relative resources: The effects of current part-time employment decreased once relative earnings were added in Model 3. Consistent with the bargaining perspective, the decreases were most pronounced among fathers with partners in full-time employment, whereas the coefficients for fathers with nonemployed partners—who continued to earn

Figure 2. Fixed Effects Estimates and 95% Confidence Intervals of Part-Time Employment on Fathers' Share of Child Care by the Partner's Employment Status.



Note: Predicted changes in employed fathers' share of child care during and after part-time employment compared with before part-time employment, holding constant partner's employment status and controlling for use of parental leave, unemployment experience, number of children, age of the youngest child, marital status, both partner's level of education, region of residence, and year of observation. $N = 8{,}915$.

100% of the couples' combined income while employed part-time—hardly changed.

As shown in Figure 3, irrespective of the mothers' employment status and irrespective of whether relative income was controlled for or not, there was no evidence that fathers spent more time on housework after part-time employment than before. Effect sizes were small and none of the effects reached conventional significance levels.

As shown in Table 7, fathers also increased their share of housework by 10% points when working part-time ($p < .001$). Once they returned to full-time employment, their share of housework did not differ significantly from their share before they worked part-time ($b = 0.01$, $p > .1$).

A more nuanced picture emerges when distinguishing by the partner's employment status. The greater the mother's involvement in paid work, the greater the father's share of housework during part-time employment (Model 2). Furthermore, fathers who previously worked part-time and had full-time employed partners exhibited greater involvement in housework compared with time points when they had full-time employed partners and had not worked part-time yet (left-hand bars in Figure 4). However, in substantive terms, this permanent increase in housework was rather small, amounting to 3% points ($p < .05$).

The relationship between fathers' share of housework and both partners' employment status was partly mediated by relative resources: Among fathers with employed partners, the effect of fathers' current and previous part-time employment decreased once relative resources were added to the models (right-hand bars in Figure 3). The effect of previous part-time employment was only marginally significant ($p < .1$) for fathers with full-time employed partners when relative income was controlled for.

Given that relative income proved to be a significant mediator of the relationship between fathers' part-time employment and their housework hours, share of housework and share of child care, a more in-depth understanding of this mediating mechanism was warranted. There are three reasons why a man's relative income may

Table 6. *Fixed Effects Estimates on Employed Fathers' Housework Hours* (N = *8,915*)

	Model 1		Model 2		Model 3	
Variable	*B*	*SE*	*B*	*SE*	*B*	*SE*
Father's employment status (ref.: never worked part-time)						
During part-time employment	0.47***	0.06	0.28***	0.06	0.30***	0.06
After part-time employment	0.04	0.03	−0.04	0.05	−0.03	0.05
Partner's employment status (ref.: not employed)						
Part-time employed	0.07***	0.01	0.07***	0.01	−0.01	0.01
Full-time employed	0.15***	0.01	0.13***	0.01	0.01	0.02
Father's × Partner's Employment Status						
During Part-Time × Partner Part-Time			0.12	0.08	0.02	0.08
During Part-Time × Partner Full-Time			0.41***	0.10	0.31*	0.10
After Part-Time × Partner Part-Time			0.10*	0.05	0.06	0.05
After Part-Time × Partner Full-Time			0.11+	0.06	0.08	0.06
Relative income					−0.38***	0.04
After parental leave	0.09*	0.04	0.07+	0.04	0.07	0.04
Months unemployed	0.00	0.00	0.00	0.00	0.00	0.00
No. of children (ref.: 1)						
Two children	−0.04+	0.02	−0.04*	0.02	−0.03+	0.02
Three or more children	−0.03	0.03	−0.03	0.03	−0.02	0.03
Age of the youngest child	−0.01**	0.00	−0.01**	0.00	−0.01**	0.00
Education (ref.: low)[a]						
Medium	−0.04	0.03	−0.04	0.03	−0.04	0.03
High	−0.03	0.05	−0.03	0.05	−0.03	0.05
Partner's education (ref.: low)[a]						
Medium	0.04	0.04	0.04	0.04	0.04	0.04
High	−0.04	0.06	−0.03	0.07	−0.04	0.06
Married	−0.07**	0.02	−0.07**	0.02	−0.07**	0.02
Eastern Germany	0.01	0.05	0.01	0.06	0.01	0.05
Number of person-years	51,230		51,230		51,230	
Number of persons	8,915		8,915		8,915	
R^2 within	0.02		0.02		0.02	

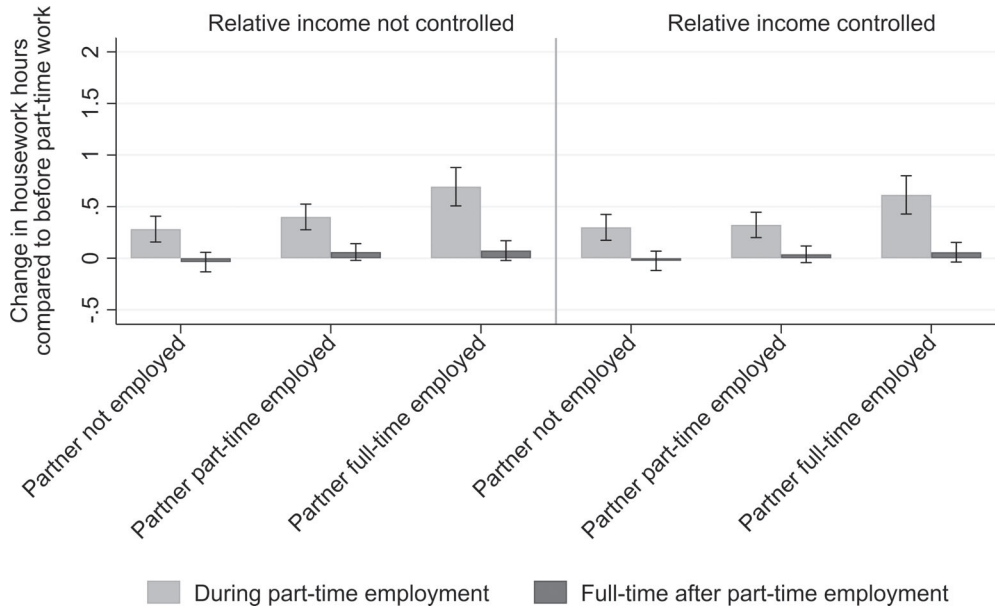
Note. Controlled for year of observation (dummy variables), panel-robust standard errors. R^2 within: proportion of intraindividual variance explained by the model. ref. = reference category.

[a]Casmin classification: low = Hauptschule, medium = Realschule or Abitur, high = tertiary education.

$^{***}p < .001$. $^{**}p < .01$. $^{*}p < .05$. $^{+}p < .1$.

decrease during and after part-time employment. First, he may face wage penalties. Second, his part-time employment may enable his partner to increase her working hours, and third, her hourly wages may increase (for a discussion of the relative income measure and its interpretation, see Gupta, 2007). Post hoc, additional fixed effects analyses that regressed fathers' and their partners' monthly labor income on fathers' current and previous part-time employment show that all three aspects matter (see Table 8): Compared with before part-time employment, fathers earned 77% ($p < .001$) less during part-time employment and 7% ($p < .01$) less after part-time employment (Model 1). Mothers earned 69% ($p < .001$) more per month during fathers' part-time work and 24% ($p = .11$) more after fathers returned to full-time work (Model 2). The effect of fathers' part-time employment on their partner's earnings was partly mediated by the partner's employment status. After controlling for partner's employment status (Model 3), mothers earned 19% ($p < .001$) more per month while fathers worked part-time and 12% ($p < .001$) more after fathers returned to a full-time position. This indicates that increases in mothers' monthly earnings were partly related to increased working hours.

Figure 3. Fixed Effects Estimates and 95% Confidence Intervals of Part-Time Employment on Fathers' Housework Hours by the Partner's Employment Status.



Note: Predicted changes in employed fathers' housework hours during and after part-time employment compared with before part-time employment, holding constant partner's employment status and controlling for use of parental leave, unemployment experience, number of children, age of the youngest child, marital status, both partner's level of education, region of residence, and year of observation. $N = 8{,}915$.

Fathers' part-time employment might hence be a strategy to support their partners' careers.

Robustness analyses that interact fathers' employment status with their region of residence indicated that part-time employed fathers increased their child-care and housework hours as well as their share of housework to a lesser extent if they lived in eastern Germany. By contrast, the relationship between part-time employment and fathers' share of child care did not differ between eastern and western Germany (see Tables S9–S12). Differentiating by the duration of employment spells revealed that fathers' involvement at home during part-time employment was mostly independent from the duration of their part-time spell, but that fathers with longer part-time spells were more likely to maintain their involvement at home after returning to full-time work (see Table S13).

Discussion and Conclusion

Although part-time employment is primarily used by mothers to reconcile work and family (Blossfeld & Hakim, 1997; Fagan & Walthery, 2007; Hipp et al., 2015), an increasing minority of fathers also work part-time at least once during the childrearing years. Given that fathers' work commitments often hinder their participation in child care and housework, this article asked whether working part-time would lead to greater paternal involvement in unpaid work at home. It expanded the literature by studying both whether fathers were more involved at home while they worked part-time and whether this effect was maintained after a return to full-time work.

The results showed that fathers were more involved in both child care and housework when they worked part-time rather than full-time. This applied to the absolute time spent as well as fathers' share relative to that of mothers. Yet after fathers returned to full-time employment, their participation in child care and housework substantially decreased again. Fathers whose partner was not employed or worked part-time did no more housework and child care after an episode of part-time

Table 7. *Fixed Effects Estimates on Employed Fathers' Share of Housework* (N = *8,915*)

	Model 1		Model 2		Model 3	
Variable	*B*	*SE*	*B*	*SE*	*B*	*SE*
Father's employment status (ref.: never worked part-time)						
During part-time employment	0.10***	0.01	0.05***	0.01	0.06***	0.01
After part-time employment	0.01	0.01	−0.02	0.01	−0.01	0.01
Partner's employment status (ref.: not employed)						
Part-time employed	0.04***	0.00	0.04***	0.00	0.00	0.00
Full-time employed	0.10***	0.00	0.09***	0.00	0.03***	0.01
Father's × Partner's Employment Status						
During Part-Time × Partner Part-Time			0.04*	0.02	−0.00	0.02
During Part-Time × Partner Full-Time			0.11***	0.02	0.06**	0.02
After Part-Time × Partner Part-Time			0.03**	0.01	0.02	0.01
After Part-Time × Partner Full-Time			0.05**	0.01	0.03*	0.01
Relative income					−0.17***	0.01
After parental leave	0.01	0.01	0.00	0.01	−0.00	0.01
Months unemployed	0.00	0.00	0.00	0.00	0.00	0.00
No. of children (ref.: 1)						
Two children	−0.02***	0.00	−0.02***	0.00	−0.02***	0.00
Three or more children	−0.04***	0.01	−0.04***	0.01	−0.03***	0.01
Age of the youngest child	−0.00+	0.00	−0.00+	0.00	−0.00*	0.00
Education (ref.: low) [a]						
Medium	−0.02*	0.01	−0.02*	0.01	−0.02*	0.01
High	−0.02	0.01	−0.02	0.01	−0.02	0.01
Partner's education (ref.: low) [a]						
Medium	0.01	0.01	0.01	0.01	0.01	0.01
High	−0.01	0.02	−0.01	0.02	−0.01	0.02
Married	−0.02***	0.01	−0.02***	0.01	−0.02***	0.01
Eastern Germany	0.03+	0.02	0.03+	0.02	0.03+	0.02
Number of person-years	51,230		51,230		51,230	
Number of persons	8,915		8,915		8,915	
R^2 within	0.04		0.05		0.05	

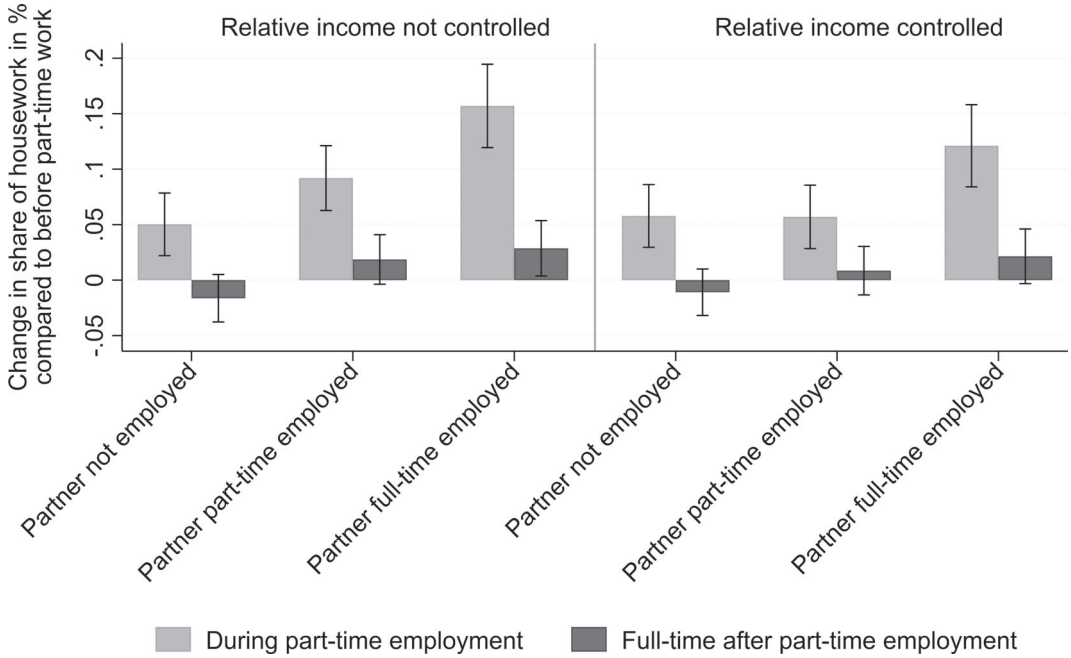
Note. Controlled for year of observation (dummy variables), panel-robust standard errors. R^2 within: proportion of intraindividual variance explained by the model. ref. = reference category. [a]Casmin classification: low = Hauptschule, medium = Realschule or Abitur, high = tertiary education. $^{***}p < .001$. $^{**}p < .01$. $^{*}p < .05$. $^{+}p < .1$.

employment than beforehand. Only fathers with full-time employed partners continued to be more involved in child care, but only in terms of absolute time and not in their share relative to mothers. After an episode of part-time work, they still spent half an hour more per day doing child care than before. They also continued to take on a larger share of housework, although from a substantive point of view, these changes were small (3% points).

The results were mostly in line with the time availability perspective, as they illustrate that full-time employment limits fathers' time available for domestic work. Yet the time-availability perspective cannot explain why fathers with full-time employed partners continued doing more housework and child care after they returned to full-time employment. Although the time-availability perspective predicts that fathers will be more involved at home if the mother works full-time, it does not expect this association to differ before and after their own part-time employment.

With regard to housework, the results indicate that parents negotiate their division of labor and use their relative income as bargaining power. The weaker the fathers' bargaining power, the more he participated in unpaid work. Part-time employment weakened fathers' bargaining power in two ways. First, it was associated with

Figure 4. Fixed Effects Estimates and 95% Confidence Intervals of Part-Time Employment on Fathers' Share of Housework by the Partner's Employment Status.



Note: Predicted changes in employed fathers' share of housework during and after part-time employment compared with before part-time employment, holding constant partner's employment status and controlling for use of parental leave, unemployment experience, number of children, age of the youngest child, marital status, both partner's level of education, region of residence, and year of observation. $N = 8{,}915$.

a permanent wage penalty. Second, fathers' part-time employment was used by mothers to increase their working hours and wages. These changes in relative income could partly explain the relationship between (previous) part-time employment and fathers' participation in housework. Yet, relative income did not affect fathers' increased participation in child care during and after part-time employment.

This suggests that other mechanisms exist, especially concerning more pleasant tasks such as child care. The results may indicate that fathers' gender role attitudes became more egalitarian due to their part-time employment experience, leading them to aspire to maintain greater involvement in child care after their return to full-time work. This fits well with Cunningham's (2008) findings that exposure to a nontraditional division of paid work (women's full-time employment in Cunningham's study, men's part-time employment in this study) may lead couples to adopt more egalitarian gender role attitudes. However, fathers only appear to live out these new attitudes and maintain greater involvement in domestic work if both partners work an equal number of hours. If this is not the case, fathers may easily fall back into more traditional routines despite their new attitudes (for qualitative evidence on this hypothesis, see Miller, 2011).

In sum, this study suggests that time availability, bargaining, and gender role ideologies all contribute to explaining the relationship between fathers' part-time employment and their participation in domestic work, although none can fully explain the patterns uncovered in this analysis. The only hypothesis not supported by this study is that fathers employed part-time feel threatened in their gender identity and affirm their masculinity by avoiding housework.

Reviewing a decade of research on couples' division of labor, Lachance-Grzela and Bouchard (2010) concluded that no single theory is able to fully explain couples' division

Table 8. *Fixed Effects Estimates on Employed Fathers' and Their Partners' Log Monthly Labor Income* (N = *8,915*)

	Model 1		Model 2		Model 3	
	Fathers' Income		Mothers' Income		Mothers' Income	
Variable	*B*	*SE*	*B*	*SE*	*B*	*SE*
Father's employment status (ref.: never worked part-time)						
During part-time employment	−0.77***	0.04	0.69***	0.18	0.19***	0.04
After part-time employment	−0.07*	0.02	0.24	0.15	0.12***	0.03
Partner's employment status (ref.: not employed)						
Part-time employed	−0.00	0.00			6.36***	0.02
Full-time employed	−0.01*	0.01			6.98***	0.02
After parental leave	−0.04+	0.02	0.63**	0.23	0.04	0.05
Months unemployed	−0.01***	0.00	−0.00	0.01	−0.00	0.00
No. of children (ref.: 1)						
Two children	0.05***	0.01	−0.40***	0.10	−0.10***	0.02
Three or more children	0.08***	0.02	−0.82***	0.18	−0.22***	0.03
Age of the youngest child	0.00	0.00	0.25***	0.02	0.02***	0.00
Education (ref.: low)[a]						
Medium	0.03*	0.02	0.13	0.25	0.06	0.04
High	0.08*	0.04	0.14	0.39	0.05	0.06
Partner's education (ref.: low)[a]						
Medium	0.02	0.02	0.39+	0.23	0.01	0.03
High	0.02	0.03	1.73***	0.34	0.16**	0.05
Married	0.03**	0.01	−0.11	0.13	−0.04+	0.02
Eastern Germany	−0.16***	0.03	−0.35	0.43	−0.07	0.06
Number of person-years	51,230		51,230		51,230	
Number of persons	8,915		8,915		8,915	
R^2 within	0.25		0.14		0.95	

Note. Controlled for year of observation (dummy variables), panel-robust standard errors. R^2 within: proportion of intraindividual variance explained by the model. Effects on log earnings can be roughly interpreted as percentage change. ref. = reference category.

[a]Casmin classification: low = Hauptschule, medium = Realschule or Abitur, high = tertiary education.

$^{***}p < .001$. $^{**}p < .01$. $^{*}p < .05$. $^{+}p < .1$.

of labor and that a combination of different factors is required. This study lends support to their conclusion and extends it to men's part-time employment, which has not been considered in previous research. This study is also one of the first to highlight that the division of labor is not only related to parents' current employment arrangements but also to their employment histories, presumably because employment histories shape gender role attitudes and bargaining power. It thus builds on findings by Cunningham (2007, 2008) on the role of women's employment histories.

However, the available data limited the extent to which the different theories could be operationalized in this study. In particular, the gender ideology perspective could not be tested directly because the SOEP lacks indicators on gender role attitudes. Concerning bargaining, distinguishing between routine child care and interactive child care would test whether parents bargain over unpleasant routine child care but not over pleasant interactive activities when fathers switch between full-time and part-time employment. Regarding the gender construction approach, it would be helpful to distinguish between fathers who work part-time for family reasons and fathers work part-time because they cannot find a full-time job. It may be that those who involuntarily work part-time make lower contributions to unpaid work to affirm their masculinity, whereas fathers who voluntarily work part-time do not do so because they regard part-time work as compatible with their masculinity. Qualitative research may also help to uncover mechanisms that explain

the relationship between fathers' part-time employment and their participation at home, for example, how parents construct gender identities when the father switches to part-time employment.

These limitations notwithstanding, this study highlights that not only mothers' but also fathers' employment status shapes the division of unpaid work in couples (see also similar findings by Gough & Killewald [2011] on the relation between unemployment and fathers' participation in housework). Part-time employment enables more involvement at home and greater time with children. Although fathers' episodes of part-time employment are usually rather short, they may increase long-term gender equality in couples' division of unpaid work if the mother is employed full-time. These findings are also relevant from a policy perspective. Previous research demonstrated that father-friendly parental leave schemes promote greater gender equality and father involvement at home in families with newborns (O'Brien, 2004, 2009; O'Brien & Moss, 2010; Smith & Williams, 2007). The positive association between paternal part-time employment and fathers' involvement at home uncovered in this study suggests that attractive part-time employment options for fathers should supplement father-friendly parental leave schemes to encourage greater father involvement at home throughout childhood.

Note

I thank Anette Fasang, Lena Hipp, Matthias Pollmann-Schult, Hannah Zagel, and the members of the Inequality and Social Policy Writing Workshop at WZB Berlin Social Science Center for valuable comments on an earlier version of this article. I acknowledge funding from the German Science Foundation (Grant PO1569/2-1) and the Hans Böckler Foundation (Grant 2015-926-3).

Supporting Information

Additional supporting information may be found online in the Supporting Information section at the end of the article.

Table S1. Counts and percentages of observation periods for fathers in the sample ($N = 8{,}915$).

Table S2. Counts and percentages of fathers' entry points into the sample ($N = 8{,}915$).

Table S3. Counts and percentages of fathers' exit points from the sample ($N = 8{,}915$).

Table S4. Gaps in the observation period ($N = 8{,}915$).

Table S5. Case numbers by the combination of fathers' and their partners' employment status ($N = 8{,}915$).

Table S6. Descriptive statistics on fathers' involvement in child care and housework in western Germany: Estimated means and standard deviations for part-time ($N = 541$) and full-time ($N = 6{,}444$) employment samples.

Table S7. Descriptive statistics on fathers' involvement in child care and housework in eastern Germany: Estimated means and standard deviations for part-time ($N = 217$) and full-time ($N = 1{,}713$) employment samples.

Table S8. *B* values and hazard ratios of experiencing a transition to part-time employment among fathers who have not worked part-time yet (discrete time event history models; $N = 8{,}915$).

Table S9. Fixed effects estimates on employed fathers' child-care hours: Fathers' employment status interacted with region of residence (eastern and western Germany; $N = 8{,}915$).

Table S10. Fixed effects estimates on employed fathers' share of child care: Fathers' employment status interacted with region of residence (eastern and western Germany; $N = 8{,}915$).

Table S11. Fixed effects estimates on employed fathers' housework hours: Fathers' employment status interacted with region of residence (eastern and western Germany; $N = 8{,}915$).

Table S12. Fixed effects estimates on employed fathers' share of housework: Fathers' employment status interacted with region of residence (eastern and western Germany; $N = 8{,}915$)

Table S13. Involvement in child care and housework by duration of part-time employment ($N = 8{,}915$).

References

Allison, P. D. (2009). *Fixed effects regression models*. London: Sage.

Arrighi, B. A., & Maume, D. J. (2000). Workplace subordination and men's avoidance of housework. *Journal of Family Issues*, *21*(4), 464–487. https://doi.org/10.1177/019251300021004003

Bianchi, S. M., Milkie, M. A., Sayer, L. C., & Robinson, J. P. (2000). Is anyone doing the housework?: Trends in the gender division of household labor. *Social Forces*, *79*(1), 191–228. https://doi.org/10.1093/sf/79.1.191

Björk, S. (2013). Doing morally intelligible fatherhood: Swedish fathers' accounts of their parental part-time work choices. *Fathering: A Journal of Theory, Research, and Practice About Men as Fathers*, *11*(2), 221–237. https://doi.org/10.3149/fth.1102.221

Blood, R. O., & Wolfe, D. M. (1960). *Husbands and wives: The dynamics of married living*. Glencoe, IL: Free Press.

Blossfeld, H.-P., & Hakim, C. (1997). *Between equalization and marginalization: Women working part-time in Europe and The United States*

of America. New York, NY: Oxford University Press.

Bundesministerium für Familie, Senioren, Frauen und Jugend (BMFSFJ). (2012). Ministerin Schröder: "*Das Elterngeld ist ein Erfolgsmodell*." Retrieved from http://www.bmfsfj.de/BMFSFJ/Presse/pressemitteilungen,did=184506.html

Brandth, B., & Kvande, E. (2016). Masculinity and fathering alone during parental leave. *Men and Masculinities*. Advance online publication, *21*, 72–90. https://doi.org/10.1177/1097184X16652659

Brines, J. (1994). Economic dependency, gender, and the division of labor at home. *American Journal of Sociology*, *100*(3), 652–688. https://doi.org/10.1086/230577

Brüderl, J., & Ludwig, V. (2015). Fixed-effects panel regression. In C. Wolf & H. Best (Eds.), *The SAGE handbook of regression analysis and causal inference* (pp. 327–357). Thousand Oaks, CA: SAGE.

Bünning, M. (2015). What happens after the 'daddy months'?: Fathers' involvement in paid work, childcare, and housework after taking parental leave in Germany. *European Sociological Review*, *31*, 738–748. https://doi.org/10.1093/esr/jcv072

Bünning, M. (2016). Die Vereinbarkeitsfrage für Männer: Welche Auswirkungen haben Elternzeiten und Teilzeitarbeit auf die Stundenlöhne von Vätern? [Work-family reconciliation for men: Do parental leave and part-time work affect fathers' hourly wages?] *KZfSS Kölner Zeitschrift für Soziologie und Sozialpsychologie*, *68*(4), 597–618. https://doi.org/10.1007/s11577-016-0387-0

Buschmeyer, A. (2008). Männlichkeitskonstruktionen Teilzeit arbeitender Väter [The construction of masculinity among part-time working fathers]. In N. Baur & J. Luedtke (Eds.), *Die soziale Konstruktion von Männlichkeit: Hegemoniale und marginalisierte Männlichkeiten in Deutschland* (pp. 123–140). Opladen, Germany: Budrich.

Coltrane, S. (2000). Research on household labor: Modeling and measuring the social embeddedness of routine family work. *Journal of Marriage and the Family*, *62*(4), 1208–1233. https://doi.org/10.1111/j.1741-3737.2000.01208.x

Cooke, L. P. (2007). Persistent policy effects on the division of domestic tasks in reunified Germany. *Journal of Marriage and Family*, *69*(4), 930–950. https://doi.org/10.1111/j.1741-3737.2007.00422.x

Cooke, L. P. (2011). *Gender-class equality in political economies. Perspectives on gender*. New York, NY: Routledge.

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. https://doi.org/10.1177/0891243205285212

Craig, L., & Mullan, K. (2011). How mothers and fathers share childcare: A cross-national time-use comparison. *American Sociological Review*, *76*(6), 834–861. https://doi.org/10.1177/0003122411427673

Cunningham, M. (2007). Influences of women's employment on the gendered division of household labor over the life course: Evidence from a 31-year panel study. *Journal of Family Issues*, *28*(3), 422–444. https://doi.org/10.1177/0192513X06295198

Cunningham, M. (2008). Changing attitudes toward the male breadwinner, female homemaker family model: Influences of women's employment and education over the lifecourse. *Social Forces*, *87*(1), 299–323. https://doi.org/10.1353/sof.0.0097

Davis, S. N., & Greenstein, T. N. (2009). Gender ideology: Components, predictors, and consequences. *Annual Review of Sociology*, *35*(1), 87–105. https://doi.org/10.1146/annurev-soc-070308-115920

Deutscher Bundestag. (2012). *Antwort der Bundesregierung auf die Kleine Anfrage der Abgeordneten Jörn Wunderlich, Diana Golze, Matthias W. Birkwald, weiterer Abgeordneter und der Fraktion DIE LINKE: Elterngeld bei Teilzeitbeschäftigung* [Answer by the Federal Government to the minor interpellation by Members of Parliament Jörn Wunderlich, Diana Golze, Matthias W. Birkwald, further Members of Parliament and the parliamentary group THE LEFT PARTY: Parental leave benefits during part-time employment] (Drucksache 17/9753). Retrieved from http://dipbt.bundestag.de/dip21/btd/17/098/1709883.pdf

European Commission. (2006). *A roadmap for equality between women and men 2006–2010*. Luxembourg: Office for Official Publications of the European Communities.

European Commission. (2012). *The role of men in gender equality: European strategies and insights*. Luxembourg: European Commission.

Eurostat. (2009). *Reconciliation between work, private and family life in the European Union* (Statistical books). Retrieved from http://ec.europa.eu/eurostat/documents/3217494/5705547/KS-78-09-908-EN.PDF/6180b5e6-e482-4d5f-a681-6a9bce05d733

Fagan, C., & Walthery, P. (2007). The role and effectiveness of time policies for reconciliation of care responsibilities. In Organization for Economic Cooperation and Development (Ed.), *Modernising social policy for the new life course* (pp. 75–116). Paris, France: Organization for Economic Cooperation and Development.

Ferber, M. A., & Waldfogel, J. (1998). The long-term consequences of nontraditional employment. *Monthly Labor Review*, *121*, 3–12.

Gough, M., & Killewald, A. (2011). Unemployment in families: The case of housework. *Journal of Marriage and Family*, *73*(5), 1085–1100. https://doi.org/10.1111/j.1741-3737.2011.00867.x

Gupta, S. (2007). Autonomy, dependence, or display?: The relationship between married women?S earnings and housework. *Journal of Marriage and Family*, *69*(2), 399–417. https://doi.org/10.1111/j.1741-3737.2007.00373.x

Haas, L., & Hwang, C. P. (2008). The impact of taking parental leave on fathers' participation in childcare and relationships with children: Lessons from Sweden. *Community, Work & Family*, *11*(1), 85–104. https://doi.org/10.1080/13668800701785346

Hipp, L., Bernhardt, J., & Allmendinger, J. (2015). Institutions and the prevalence of nonstandard employment. *Socio-Economic Review*, *13*(2), 351–377. https://doi.org/10.1093/ser/mwv002

Hirsch, B. T. (2005). Why do part-time workers earn less? The role of worker and job skills. *ILR Review*, *58*(4), 525–551. https://doi.org/10.1177/001979390505800401

Hofäcker, D. (2007). Väter Im Internationalen Vergleich [Fathers in international comparison]. In T. Mühling & H. Rost (Eds.), *Väter im Blickpunkt: Perspektiven der Familienforschung* (pp. 161–204). Opladen, Farmington Hills: Barbara Budrich.

Keller, M., & Haustein, T. (2013). Vereinbarkeit von Familie und Beruf: Ergebnisse des Mikrozensus 2012 [Reconciling work and family: Results from the Microcensus 2012]. *WISTA – Wirtschaft und Statistik*, 862–882.

Lachance-Grzela, M., & Bouchard, G. (2010). Why do women do the lion's share of housework? A decade of research. *Sex Roles*, *63*(11–12), 767–780. https://doi.org/10.1007/s11199-010-9797-z

Lundberg, S., & Pollack, R. A. (1996). Bargaining and distribution in marriage. *Journal of Economic Perspectives*, *10*(4), 139–158. https://doi.org/10.1257/jep.10.4.139

Milkie, M. A., Mattingly, M. J., Nomaguchi, K. M., Bianchi, S. M., & Robinson, J. P. (2004). The time squeeze: Parental statuses and feelings about time with children. *Journal of Marriage and Family*, *66*(3), 739–761. https://doi.org/10.1111/j.0022-2445.2004.00050.x

Miller, T. (2011). Falling back into gender? Men's narratives and practices around first-time fatherhood. *Sociology*, *45*(6), 1094–1109. https://doi.org/10.1177/0038038511419180

Nisic, N., & Melzer, S. M. (2016). Explaining gender inequalities that follow couple migration. *Journal of Marriage and Family*, *78*(4), 1063–1082. https://doi.org/10.1111/jomf.12323

O'Brien, M. (2004). Social science and public policy perspectives on fatherhood in the European Union. In M. E. Lamb (Ed.), *The role of the father in child development* (4th ed., pp. 121–145). Hoboken, NJ: Wiley.

O'Brien, M. (2009). Fathers, parental leave policies, and infant quality of life: International perspectives and policy impact. *The Annals of the American Academy of Political and Social Science*, *624*(1), 190–213. https://doi.org/10.1177/0002716209334349

O'Brien, M., & Moss, P. (2010). Fathers, work, and family policies in Europe. In M. E. Lamb (Ed.), *The role of the father in child development* (5th ed., pp. 551–577). Hoboken, NJ: Wiley.

O'Dorchai, S., Plasman, R., & Rycx, F. (2007). The part-time wage penalty in European countries: How large is it for men? *International Journal of Manpower*, *28*(7), 571–603. https://doi.org/10.1108/01437720710830061

Palkovitz, R. J. (2012). *Involved fathering and men's adult development: Provisional balances*. London, New York, NY: Taylor & Francis.

Raley, S., Bianchi, S. M., & Wang, W. (2012). When do fathers care?: Mothers' economic contribution and fathers' involvement in child care. *American Journal of Sociology*, *117*(5), 1422–1459. https://doi.org/10.1086/663354

Robinson, J. P., & Godbey, G. (2000). *Time for life: The surprising ways Americans use their time* (2nd ed.). University Park, PA: The Pennsylvania State University Press.

Roeters, A., van der Lippe, T., Kluwer, E., & Raub, W. (2012). Parental work characteristics and time with children: The moderating effects of parent's gender and children's age. *International Sociology*, *27*(6), 846–863. https://doi.org/10.1177/0268580911423049

Roeters, A., van der Lippe, T., & Kluwer, E. S. (2009). Parental work demands and the frequency of child-related routine and interactive activities. *Journal of Marriage and Family*, *71*(5), 1193–1204. https://doi.org/10.1111/j.1741-3737.2009.00663.x

Russel, G., & Hwang, C.-P. (2004). The impact of workplace practices on father involvement. In M. E. Lamb (Ed.), *The role of the father in child development* (4th ed., pp. 476–503). Hoboken, NJ: Wiley.

Schober, P., & Zoch, G. (2019). Change in the gender division of domestic work after mothers or fathers took leave: Exploring alternative explanations. *European Societies*, *21*(1), 158–180. https://doi.org/10.1080/14616696.2018.1465989

Scott, J. (2006). *Family and Gender Roles: How Attitudes Are Changing* (Gender Inequality in Production and Reproduction Working Paper No. 21).

Smith, A. J., & Williams, D. R. (2007). Father-friendly legislation and paternal time across Western Europe. *Journal of Comparative Policy Analysis: Research and Practice*, *9*(2), 175–192. https://doi.org/10.1080/13876980701311604

Statistisches Bundesamt. (2014). *Statistik zum Elterngeld: Beendete Leistungsbezüge für im Jahr 2012 geborene Kinder* [Statistics on parental leave benefits: Completed benefit receipts for children born in 2012]. Wiesbaden, Germany: Statistisches Bundesamt.

Steiber, N. (2009). Reported levels of time-based and strain-based conflict between work and family roles in Europe: A multilevel approach. *Social Indicators Research*, *93*(3), 469–488. https://doi.org/10.1007/s11205-008-9436-z

Tanaka, S., & Waldfogel, J. (2007). Effects of parental leave and work hours on fathers' involvement with their babies: Evidence from the millennium cohort study. *Community, Work & Family*, *10*(4), 409–426. https://doi.org/10.1080/13668800701575069

Van Bastelaer, A., Lemaître, G., & Marianna, P. (1997). The definition of part-time work for the purpose of international comparisons. *OECD Labour Market and Social Policy Occasional Papers*, *22*(22), 33. https://doi.org/10.1787/132721856632

Wagner, G. G., Frick, J., & Schupp, J. (2007). The German socio-economic panel study (SOEP): Scope, evolution and enhancements. *Schmollers Jahrbuch*, *125*(1), 139–169. https://doi.org/10.2139/ssrn.1028709

West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender & Society*, *1*(2), 125–151. https://doi.org/10.1177/0891243287001002002

Wolf, E. (2014). *The German part-time wage gap: Bad news for men?* Retrieved from https://doi.org/10.2139/ssrn.2463185

Yeung, J. M., Sandberg, J. F., Davis-Kean, P. E., & Hofferth, S. L. (2001). Children's time with fathers in intact families. *Journal of Marriage and Family*, *63*(1), 136–154. https://doi.org/10.1111/j.1741-3737.2001.00136.x