The division of child care during the coronavirus crisis in Germany: How did short-time work affect fathers’ engagement?

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Abstract

**Objective:** This paper examines how participation in the short-time work scheme affected the gendered division of child care during the COVID-19 crisis in Germany.

**Background:** Short-time work (Kurzarbeit) has been one of the main policies used to combat the economic and labour market repercussions of the coronavirus pandemic in Germany. We examine whether and, if so, how the growing prevalence of short-time work has affected care patterns.

**Method:** We use data from the IAB-HOPP, a longitudinal study monitored by the German Institute for Employment Research (IAB). The analytical sample includes couples with children aged 12 and younger. We employ multinomial logistic regressions in which the outcome variable is the change in the division of care work from a period before to a period during the coronavirus crisis (June to October 2020).

**Results:** We find that among men, receiving short-time work benefits resulted in more gender-equal care patterns. The positive effect of short-time work on the division of child care is moderated by the level of education. Fathers with low or medium education are more likely to increase their child care share when receiving short-time work benefits compared to fathers with high education. However, we also find that participating in the short-time work programme had no strong or significant effects on the gendered division of care among women.

**Conclusion:** The evidence from this study suggests that men’s working time is a major vehicle to change the gendered division of care in couple households.

**Key words:** Gendered division of care, fathers’ involvement, employment, Germany
Family life has been affected by the coronavirus crisis in multiple ways. There is consistent empirical evidence that satisfaction with family life declined sharply during the (first) lockdown in Germany (Hübener et al. 2021), with lone-parent families, families with children of kindergarten age, and families with children with special needs reporting the largest declines in well-being (Langenkamp et al. 2020; Hübener et al. 2021; Möhring et al. 2021a). It has also been observed that parents’ “mental load” increased substantially during the pandemic due to mounting worries about how to organise child care and home-schooling (Czymara, Langenkamp & Cano 2021). Moreover, the pandemic has led to increases in depression and decreases in mental well-being among children and young people, particularly among those who were experiencing critical life course transitions during the pandemic (Andresen et al. 2020; Ravens-Sieberer et al. 2021).

While there is every reason to believe that the pandemic has posed serious challenges for families and children, scholars have also pointed out that the crisis has resulted in some positive changes. For example, the pandemic may have triggered a long overdue digital transformation of the German labour market. In particular, it has promoted the adoption of “remote work”, which can make it easier for parents to combine work and family life (Nagel 2020). Furthermore, fathers have been spending more time with their children during the pandemic than they did before (Bujard et al. 2020; Kreyenfeld & Zinn 2021; Margaria 2021). Clearly, this additional family time was the result of closures of schools and day care centres. Thus, for many parents, this additional time spent with children may have felt more like a “care burden” than “quality time”, particularly if it was the result of a job loss, or if parents had to combine child care with working remotely.

However, in Germany, job losses were much rarer in the early phase of the pandemic than they were in other countries (such as the US). One of the main labour market policy instruments the German government uses to discourage employers from laying off large numbers of employees in times of crisis is the “short-time work” programme (Kurzarbeit). In April 2020, 18 per cent of all employees were in short-time work, with men (19 per cent) being more likely than women (17 per cent) to participate in the programme (Konle-Seidl 2020; Statistik der Bundesagentur für Arbeit 2021). These gender discrepancies in participation increased further in the subsequent months (see Figure 1). There is also evidence that parents were more likely than childless individuals to be in short-time work (Möhring et al. 2021c). When employees participate in the short-time work programme, their working hours are reduced, while the government subsidises their forgone wages. Thus, short-time work operates in the same way as paid leave. As being placed on short-time work suddenly affected people’s work hours and their time budgets, the sharp rise in the number of workers participating in the programme can be regarded as an “exogenous shock”. As such, it can be viewed as a “natural experiment” that can be studied to determine the causal impact of paid leave on paternal behaviour.

In this paper, we examine the relationship between participation in the short-time work scheme and parental engagement in child care. More specifically, we examine the question of whether fathers’ child care contributions increased during the pandemic as a result of their participation in the short-time work programme. Thus, our analysis adds to the growing body of research on the impact of the coronavirus crisis on gendered care
patterns (e.g., Hank & Steinbach 2021; Kohlrausch & Zucco 2020; Kreyenfeld & Zinn 2021). It also provides insights into the scope of paternal involvement in a welfare state that has recently intensified its efforts to increase maternal employment rates, and to promote a more equal division of labour. The data for this analysis came from IAB-HOPP, which is an internet survey panel monitored by the Institute for Employment Research (IAB). The sample was randomly drawn from the German employment registers. For this investigation, we used data gathered between June 2020 (wave 2) and October 2020 (wave 5). The data include prospective measures on the division of care work for wave 2 to wave 5 and retrospective measures for the period before the coronavirus pandemic that were collected in wave 2 of the survey. Using these data, we were able to distinguish between couples based on whether the gendered division of care in their household had become more equal, had become less equal, or had remained the same over the course of the coronavirus pandemic. Thus, the data allowed us to investigate how care patterns have changed during the coronavirus crisis, and whether these changes can be attributed to the growing prevalence of short-time work among fathers.

The remainder of our paper proceeds as follows. In Section 2, we provide relevant background information on the German institutional context, and a summary of prior research. In Section 3, we formulate our argument regarding the interplay of fathers’ participation in the short-time work scheme and the division of care in couples, while drawing on theories regarding the division of labour. In Section 4, we present the data and the analytical sample. In Section 5, we provide a descriptive overview of the gendered division of child care before and during the coronavirus crisis, and analyse the changes in the gendered division of care based on IAB-HOPP data. Furthermore, we employ multinomial logistic regressions to determine whether couples changed their care patterns between the period before the coronavirus pandemic and June to October 2020. Additionally, we examine how educational status moderated the effect of fathers’ employment status on the division of care. While the focus of the analysis is on how fathers’ participation in the short-time work programme affected the division of labour in the household, we briefly present results for mothers (see online appendix). In Section 6, we discuss the results within the broader societal context, and consider how contemporary societies can encourage couples to organise child care more equally.

2. Institutional context and prior findings

2.1 Family policies and gendered work and care patterns

Germany has regularly been classified as the ideal type of a conservative and familialistic welfare state regime in which the family is regarded as the main provider of care (Esping-Andersen 1990). As a result of the gendered division of care, the majority of women in post-World War II West Germany did not participate fully in the labour market. The legacy of this traditional male breadwinner system is still apparent in Germany’s income-splitting taxation system, as well as in the country’s public health insurance system, which allows for the co-insurance of the non-working spouse. This history also explains the low
employment rates of married women and the gendered division of labour that has characterised (West) German society for decades.

More recently, Germany has launched major family policy reforms. Since 2005, child care for children under the age of three has been expanded. In 2007, an earnings-related parental leave system was introduced. Since the implementation of this reform, parents have been eligible to receive 67 per cent of their previous income (65 per cent since 2011) for the first 12 months of parental leave. In addition, the so-called “daddy months” were introduced to incentivise fathers to take parental leave (Bünning 2020). Scholars have argued that these recent family policy reforms have led to a fundamental shift in Germany away from the country’s conservative and familialistic heritage (Fleckenstein 2011). Thus, Germany is gradually moving towards becoming a “dual-earner dual-carer society”. While this diagnosis may be premature, an evaluation of the abovementioned family policy reforms has indeed shown that the expansion of child care has led to significant increases in maternal full-time employment rates (Geyer et al. 2015).

Child care patterns among fathers in Germany have also changed significantly in recent years. Following the implementation of the new parental leave system, the proportion of fathers who take parental leave has increased sharply. While fathers still tend to take much shorter leave periods than mothers, around 40 per cent of all fathers use at least some of their parental leave benefits (Statistisches Bundesamt 2020b). Furthermore, gendered care patterns have shifted in recent years, with fathers today performing more child care chores than their counterparts did in prior decades. For example, Samtleben et al. (2020) found that men in couple households were performing 30 per cent of child care tasks in 2017, up from just 20 per cent in the 1990s. It is, however, important to note that there are pronounced East-West differences in family behaviour. While part-time employment rates have been increasing among women in East Germany, mothers in the East are much more likely than mothers in the West to be in full-time employment (Trappe et al. 2015). For example, in 2018, 48 per cent of mothers (with children under age 18) in East Germany were working part-time, compared to 71 per cent of mothers in West Germany (Statistisches Bundesamt 2020a). There is also evidence that the gendered division of care in couple households is more equal in the East than in the West (Trappe 2010).

The coronavirus pandemic hit Germany at a time when the country’s families had been undergoing significant changes. The families that were most affected by the closure of schools and day care centres were those with children aged 12 and under. These were families who had their children after the expansion of child care and the introduction of the parental leave system. On the one hand, it could be assumed that for this new generation of parents, having been exposed to these family policies led to fundamental changes in their gender role attitudes that guided their care patterns. Furthermore, it may be assumed that these families have become more aware that a single-earner model is a risky arrangement given the high divorce and separation rates in Germany. In addition, the experience of the global financial crisis of 2007/08 may have sharpened the awareness of couples that both partners have to be integrated into the labour to secure the well-being of the family. On the other hand, it could be argued that these changes have been relatively recent, and that the changes in family life during the pandemic might have led to a backlash that nullified the progress towards gender equality that has been made in
recent years. In Germany, women’s earnings have not yet reached parity yet with men’s earnings. Thus, a crisis of this kind may have strengthened the position of the main provider in the household, while weakening the position of the “second earner”. This dynamic may be especially likely occur in households in which the woman has been in part-time or marginal employment, as is often the case in West German families. Thus, the pandemic may have led to a “re-traditionalisation” of gender role behaviour (Allmendinger 2020).

2.2 Prior research on the division of care during the COVID-19 pandemic

Prior research on the “coronavirus-related” changes in the division of work has mostly refuted the abovementioned “re-traditionalisation hypothesis” in the German context. Based on longitudinal data from the German Family Panel (pairfam), Hank and Steinbach (2021) compared parents’ reports in 2019 with their reports in March 2020, and found that the division of care remained largely unchanged over this time period. Kreyenfeld and Zinn (2021) corroborated these findings using data from the German Socio-Economic Panel (GSOEP). The latter study drew on data from 2019 that were linked to data collected during the first lockdown (March to May 2020). As expected, the results indicated that parents spent more time with their children during the lockdown than they did before, but the absolute increases were similar for both mothers and fathers.

In addition, the results of a study based on a non-probabilistic survey by Hipp and Bünning (2021) failed to confirm the hypothesis that during the coronavirus pandemic, there has been a backlash that has led to more gendered care patterns. Indeed, the findings suggested that the division of care actually became somewhat more equal during the early stages of the pandemic, although this effect wore off over time; i.e., between March and August 2020 (Hipp & Bünning 2021: 667). In a policy brief on the gendered division of care among German households, Kohlrausch and Zucco (2020) analysed data from a convenience sample that covered the period of time immediately after the first lockdown (April 2020), as well as retrospective data on the period before the coronavirus pandemic. While strongly emphasising that women have been more seriously affected by the pandemic than men, the authors nevertheless showed that the gendered division of care in couple households remained largely unchanged – or, to the extent that it changed, it became more equal. For example, they found that the share of men in the sample who reported that they were the main caregiver in the household increased substantially during the coronavirus crisis (Kohlrausch & Zucco 2020: 6). They also found that the women in the sample reported a less pronounced shift in the gendered division of care.

1 For the UK, Sevilla and Smith (2020) did not observe any major changes in the division of care work during the coronavirus crisis. For Israel, Yaish et al. (2021) reported that the division of housework had become less equal, but they did not observe that child care tasks were divided less equally during than before the coronavirus crisis. In the US, men and women reported a shift towards a more gender-equal division of household labour, which was mostly due to fathers spending more time on domestic tasks (Petts et al. 2020). For Spain, Farré et al. (2020) found that women shouldered most of the care burden during the pandemic, but that men increased their participation in housework and child care at least marginally. In the realm of unpaid work, Yerkes et al. (2020) observed that gender inequality in the division of labour decreased, while gender inequality in paid work increased.
These findings are in line with prior evidence showing that women’s and men’s perceptions of their contributions to housework and care often differ (Lee & Waite 2005; Trappe 2010).

Thus, while prior research did not uncover any signs of a shift towards a re-traditionalisation of care patterns during the pandemic, most studies reported that couples’ experiences have varied considerably (Hank & Steinbach 2021; Kohlrausch & Zucco 2020; Kreyenfeld & Zinn 2021). In other words, it appears that the pandemic has led to a more equal division of care in some households, and to a less equal division of care in others. Thus, it is important to understand the factors that have led to this heterogeneity in the changes in care patterns.

2.3 Gendered work patterns during the COVID-19 pandemic

The extent to which the pandemic has affected the division of labour depended on various factors: whether mothers and fathers have been working remotely, were in marginal employment before the pandemic, have taken unpaid leave, have been working in an essential occupation, or have been unemployed or in short-time work.

The Mannheim Corona Study, which is one of the first large-scale empirical surveys that has monitored work and family life in the course of the pandemic, provided very early evidence on the uptake of remote working (Blom et al. 2020). Based on these data, Möhring et al. (2020) showed that around one-quarter of women and men who were employed in January 2020 were working remotely between March and May 2020. Frodermann et al. (2021) analysed the transition patterns into remote work based on data from the IAB-HOPP and the Corona-survey of the Linked Personnel Panel (LPP). The findings indicated that more women than men have shifted to remote work over the course of the coronavirus pandemic (Frodermann et al. 2021: 4). Based on the findings of the Corona Study of the National Educational Panel Study (NEPS), Zoch et al. (2021) examined the relationship between remote work and the gendered division of care. They showed that remote work by the father was positively associated with a more gender equal division of care, whereas remote work by the mother increased the chances of “mother care only”.

There are several reasons to assume that mothers were also more likely than fathers to have reduced their working hours or lost their jobs during the pandemic. First, a substantial share of mothers who work are in marginal employment, whereas marginal employment is rare among fathers. Workers who are marginally employed are especially likely to be laid off in times of crisis. In addition, these jobs are considered precarious, as they do not provide workers with unemployment benefits or short-time work compensation. There is also some evidence that mothers took unpaid leave more frequently than fathers (Möhring et al. 2021b; Zoch et al. 2021). Zoch et al. (2021: 582), who analysed data from the NEPS Corona Study, noted that mothers were more likely than fathers to report that they were on unpaid leave. Möhring et al. (2021b) also found that women were more likely than men to be on unpaid leave in March 2020, whereas the share of persons on unpaid leave rapidly declined over time (from 11 per cent in March to less than three per cent in May 2020). Furthermore, mothers tend to be more likely than
fathers to reduce their working hours by taking advantage of child-related sick leave benefits (“Kinderkrankentage”).

While there are persuasive arguments for why women would have reduced their working hours more than men in the course of the coronavirus pandemic, there is still no consistent evidence that this actually occurred (see also Jakob et al. in this Special Issue). A possible reason may be that there are other factors to consider: Women may have been more likely to be working in essential occupations. As frontline jobs in the health care sector tend to be female-dominated, some women may have faced a lower risk than men of being made redundant (Koebe et al. 2020). It has also been pointed out that the self-employed, who are more likely to be men, were hit especially hard by the pandemic (Hobler et al. 2020). The most important difference in the experiences of male and female workers during the pandemic was that men were more likely than women to be in short-time work (see next section).

2.4 Short-time work in the German context

One of the main labour market policy instruments the German government uses to discourage employers from laying off large numbers of employees is the “short-time work” programme. Under this programme, the government subsidises a portion of employers’ payroll costs. Firms that have to reduce their employees’ working hours according to their current needs are entitled to apply for short-time work subsidies from the Federal Employment Agency. The benefits employees receive depend on their prior earnings and on whether they have children. In the first three months of their participation in the short-time work programme, employees receive 60 per cent of their lost net salary, or 67 per cent if they have children. From the fourth month onwards, they receive 70 per cent, or 77 per cent if they have children. After six months, employees receive 80 per cent, or 87 per cent if they have children. Employees in short-time work may not work at all or they may work reduced hours, while only a fraction of their earnings is compensated. During the COVID-19 pandemic, several changes in the regulations of the short-time work scheme have been implemented (for a detailed overview, see Konle-Seidl 2020). In general, the changes made the eligibility criteria for participating in the programme less stringent, and allowed for more extended periods of short-time work.

In April 2020 alone, about six million employees – or around 18 per cent of all employees in Germany – were participating in the short-time work programme (Statistik

2 During the coronavirus pandemic, child-related sick leave was one of the key measures the German Family Ministry used to alleviate the care burden of families. Although the scheme technically provides for “sick leave”, during the pandemic, it could be used by the parents of children who could not attend school or day care due to closures, or because the children had to quarantine. Employees receive 90 per cent of their prior net earnings when taking child sick leave. Unfortunately, there are no official statistics available that indicate to what degree parents made use of this leave programme, and whether there were differences by gender.

3 Sectors with collective agreements receive higher benefits (Möhring et al. 2021b). As women primarily work in areas without collective agreements, they may be less likely to receive these “top-ups” (Hammerschmid et al. 2020).
The COVID-19 pandemic led to a substantial increase in short-time work in many sectors with higher shares of female employees, especially the hospitality industry (accommodation and gastronomy); as well as other services in the areas of arts, entertainment, and recreation; and private household services (Gehrke & Weber 2020). Half of the sectors in which large numbers of employees were registered for short-time work benefits have an above-average share of female employees (Hammerschmid et al. 2020). Nevertheless, no correlation was found between the share of women among the employees in an industry and the share of employees in these sectors who were participating in the short-time work programme in March and April 2020 (Schäfer & Schmidt 2020). Overall, far more male than female employees were receiving short-time work benefits during the pandemic. At the height of participation in the short-time work programme in May 2020, 19 per cent of male employees and 15 per cent of female employees were receiving short-time work benefits. While participation in the short-time work scheme skyrocketed during the first half of 2020, unemployment rates in Germany remained at a modest level (Figure 1). It appears that compared to other countries, such as the US and the UK (Adams-Prassl et al. 2020; Alon et al. 2021), Germany had been successful in averting potential layoffs by expanding short-time work benefits in this time period.

**Figure 1:** Unemployment rate by gender and share of women and men receiving short-time work benefits out of all employees, Germany by month in 2020.

Source: Statistik der Bundesagentur für Arbeit (2021); Statistisches Bundesamt (2021).
While the short-time work scheme has been widely used in Germany during the coronavirus pandemic, we have very little evidence on how the availability of these benefits has affected parents’ behaviour and the gendered division of labour within the household. Möhring et al. (2021a) showed that fathers who were receiving short-time work benefits during the coronavirus pandemic in 2020 reported that their levels of family satisfaction increased significantly compared to their levels in 2019. However, Schmid et al. (2021) reported opposite effects for the impact of short-time work on relationship satisfaction. Their results indicated that relationship satisfaction decreased if one partner was participating in the short-time work scheme. Using cross-tabulations based on data from the Mannheim Corona Study, Bujard et al. (2020) found that receiving short-time work benefits among fathers was associated with a more equal division of labour in the household. Overall, these prior results suggest that participation in the short-time work programme may have led to greater paternal involvement. However, the conclusions that can be drawn from these results are still far from clear, as these studies either provided only descriptive evidence (Bujard et al. 2020), or did not explicitly focus on the division of care work (Möhring et al. 2021a, c; Schmid et al. 2021). With our investigation, we seek to provide a more fine-grained analysis of the role of short-time work benefits. While we will analyse the experiences of both men and women, our focus is on how fathers’ participation in the short-time work scheme affected the division of care in households.

3. Theoretical considerations and hypotheses

3.1 Time availability and bargaining approaches

The most crucial characteristic of the short-time work programme is that it reduces the amount of time employees work. According to the time availability theory, differences in the spouses’ participation in housework and child care depend on the family’s demands and the available time (Coverman 1985). Thus, this approach argues that there is a strong relationship between the time women and men spend in paid employment and the time they spend on housework and child care. The more time parents spend in employment, the less time they have for child care, and vice versa. This time may be further affected by the household composition, such as the presence and the number of children in the household, as well as the size of the dwelling. During the COVID-19 pandemic, the demand for child care has been greater than usual. Although schools and day care centres had partially re-opened at the time of our data collection, children still had irregular daily schedules, and some were having to quarantine due to COVID-19 outbreaks in their classes and day care centres. Furthermore, the range of leisure time and after-class activities was highly limited. Depending on the age and the health status of the grandparents, parents had few to no options to “outsource” child care. Hence, it could be argued that the combination of the availability of short-time work benefits and the greater child care demands in the family increased the pressure on fathers to spend their newly acquired time with their children.
Another relevant point is that short-time work benefits only cover 60 or 67 per cent of a worker's net income. According to the relative resource theory (Blood & Wolfe 1978), a reduction in income leads to a smaller comparative advantage in the bargaining process between partners. The partner who has a higher level of education and income is likely to minimise his/her participation in unpaid work by bargaining to avoid having to perform these tasks (Coverman 1985). Thus, it is possible that the drop in wages related to participation in the short-time work programme weakened the bargaining power of men in couple households.

3.2 “Doing gender”

In addition to the time availability theory and the theory of relative resources, cultural theories of the division of labour should be considered. The underlying premise of these cultural theories is that “doing” housework and child care reproduces gender roles and gender identities (West & Zimmermann 1987). Typically, domestic and care tasks, including child care, are ascribed to women, whereas paid work and the breadwinner’s role are attributed to men. The COVID-19 pandemic may have called into question these established gender roles. On the one hand, receiving short-time work benefits is associated with increased economic uncertainty (Möhring et al. 2021a). Thus, if the male partner is participating in the programme, the couple’s awareness of the economic risks associated with gendered work patterns should increase, which may, in turn, weaken their traditional gender role attitudes. On the other hand, perceived job insecurity may threaten a father’s gender identity (Brines 1994). Following this argument, the father would be expected to resist increasing his share in work typically performed by women when he enters the short-time work scheme, because doing so could further jeopardise his gender identity. Similarly, we would expect to find that fathers receiving short-time work benefits are less involved in child care than fathers with regular working hours. Entrenched gender identities may override the economic rationale, such that even in situations in which the opportunity costs of the father’s time have decreased, it is still the mother who performs more of the child care tasks.

3.3 Hypotheses

In the preceding sections, we have laid out the different forces that may be at play in the gendered division of child care. On the one hand, Germany is a country that is just starting to undergo a shift in family policies and parental work patterns. The parents who were most affected by the pandemic because they had young children were also among those who had their children after Germany had enacted a series of policy reforms (in 2005 and subsequent years). Thus, these parents were already organising their care responsibilities more equally than their counterparts in previous decades. In addition, the Great Recession may have sharpened these parents’ awareness that a more equal division of care and employment is a more secure arrangement in contemporary societies. On the other hand, it has been hypothesised that because these developments are relatively recent, they are not yet sufficiently solidified to prevent the pandemic from triggering a re-
traditionalisation of behaviour patterns. In particular, we argue that whether the pandemic led to a re-traditionalisation of the division of care in a given couple depended on the employment situations of the partners. Here, we formulate two competing hypotheses that focus on the role of short-time work benefits. On the one hand, we argue that the division of care should have become more equal if the father was receiving short-time work benefits. The alternative hypothesis states that the father’s participation in the short-time work scheme should not have led to a major shift in the division of labour.

Similar hypotheses have been formulated regarding the effects of men’s unemployment on the division of household labour and care work (Voßemer & Heyne 2019). However, the analysis of short-time work has several advantages. Even though short-time work has characteristics similar to those of unemployment (no work, compensation of 60 or 67 per cent of previous income), short-time work differs from unemployment in several ways. First, the transition to short-time work is more likely to affect the whole company or even the entire sector, and not just one person because s/he has a limited contract, is laid off, or is terminated. In contrast to unemployment, in which workers may select themselves into the treatment (i.e., they terminate their employment to take care of a child), the sudden increase in the number of workers participating in the short-time work programme during the coronavirus crisis can be viewed as a “natural experiment”. The onset of the pandemic suddenly affected people’s work hours and their time budgets. Hence, we are in a better position than prior research on unemployment and care work to identify causal effects, and to determine whether the “treated” fathers were spending more time with their children than they had been before the crisis.

In the following, we test the hypothesis that short-time work has led to a more equal division of labour in couple households, while controlling for standard confounders (education, region, migration status, and age of the youngest child). Furthermore, we study effect heterogeneities, and investigate whether the impact of short-time work varies by the father’s level of education. Prior analysis on the parental leave benefit reform has shown that most of the fathers who took leave in response to this policy change were highly educated (Geisler & Kreyenfeld 2018). Although the parental leave reform of 2007 was different from the short-time work regulations implemented during the pandemic in 2020, both regulations provided workers with paid leave that gave them additional time to spend with their children. To check whether our results were driven by highly educated fathers disproportionately taking advantage of short-time benefits, we performed an interaction model to make sure that the effect was similar across all educational categories.

4. Data, variables, and analytical strategy

4.1 Data and analytical sample

In order to examine the association between fathers’ participation in the short-time work programme and the division of child care in couples, we use newly available data from the IAB-HOPP (Volkert et al. 2021). This dataset is an internet survey panel monitored by the
Institute for Employment Research (IAB). The sample has been randomly drawn from the German employment registers. The IAB-HOPP currently consists of seven survey waves that are available for scientific use. We use data from wave 2 (June 2020), wave 3 (July 2020), wave 4 (August 2020), and wave 5 (September/October 2020). We retrieved sociodemographic information (educational attainment, migration background, place of residence (federal state), gender, and household characteristics) from the first wave, but did not use this wave further in our analysis because it did not include information on the gendered division of care. Our main investigation is restricted to respondents who were living in a partnership at the time of the interview and had children who were born in 2007 or later, and who were, therefore, about 12 years old or younger at the time of the interview (in 2020). We have dropped parents with older children from the analysis, as the investigation focuses on the division of care work within the household context. Although older children require attention, time, and care, the time that parents spend with teenagers cannot be easily classified as “care time”. The dataset is organised in a long format, with each person contributing up to four entries. The total number of subjects in the dataset is 786, which corresponds to 1,959 person-months (see Table 1 for the sample composition). Most of the analysis is restricted to the male sample that is used to study how fathers’ short-time work influenced the division of work (380 fathers and 934 person-months). However, we also report some findings for the female sample (406 mothers and 1,025 person-months), in particular to illustrate differences by gender in the perception of the division of care.

4.2 Variables

The dependent variable is the change in the division of child care in a couple household, and is based on two “original” variables. The first variable captures the division of child care before the coronavirus pandemic. This information was collected retrospectively in wave 2 using the following question: “Thinking about the time before the Covid-19 crisis: How did you and your partner split the work in the following areas?: child care/management (homework, hobbies, appointments, birthday presents, clothes)?” The second variable captures the division of child care at the time of the interview (in waves 2 to 5). The answers to these two questions were recorded on a five-point scale: “(almost) entirely by my partner”, “mostly by my partner”, “about half and half”, “mostly by me”, and “(almost) entirely by me”. Based on the information on the gendered care patterns before and during the pandemic, we constructed a “change variable”. This variable reflects the within-couple changes over time; i.e., how the division of care before the pandemic (collected retrospectively in wave 2) differed from the division of care during the pandemic (collected prospectively in waves 2-5). We distinguish between:
- couples in which the father has been more engaged in child care than before,
- couples in which the father has been less engaged in child care than before, and
- couples in which there was no change in the division of care.
The key independent variable is whether a person was receiving short-time work benefits at the time of the interview.4 We distinguish between (1) employed persons who were receiving short-time work benefits, (2) employed persons who were not receiving short-time work benefits, and (3) persons who were not working (unemployed or in other forms of non-employment). We control for standard the socio-demographic variables. Level of education is classified according the CASMIN scheme, and differentiates between individuals who are and are not highly educated.5 We include migration background, which distinguishes between individuals whose parents were born in Germany and those who have a parent born outside of Germany. We also take into account whether a person was living in Eastern Germany (including Berlin) at the time of the survey. The age of the youngest child in the household was entered into the model as a continuous variable. We also control for the month of the interview (also as a continuous variable). In addition, the employment status of the partner was accounted for in the analysis by distinguishing between employment and other statuses. Ideally, we would have liked to have included information on whether the partner was receiving short-time work benefits or was working remotely, but this information was only surveyed in selected waves. Hence, the case numbers were too low for such an investigation. Whether the respondent was working remotely was not included in the analysis, as this information was only available for those who were employed. We have, however, provided additional analysis for the employed in which we controlled for working from home (see online appendix, Table 1.3 and 2.5).6

Table 1 provides the weighted sample composition.7 The table shows that the distribution of educational attainment was very similar in the male and the female samples. However, the table also indicates that there were stark gender differences in the prevalence of short-time work. At the time of the interview, 19 per cent of the men, but only six per cent of the women, were receiving short-time work benefits. Thus, it appears that the gender differences in participation in the short-time work programme were larger among the parents in our sample than they were in the total population (see above). Further analysis showed that participation in the short-time work programme was much more common among workers with low and medium education than among highly educated workers (see Table 5.1 in the appendix). However, we also found that a much larger share of the women (40 per cent) than of the men (eight per cent) were not in the labour market at the time of the interview. This pattern was also reflected in the

4 The underlying question is: “Are you currently receiving short-time work compensation as reimbursement for loss of earnings in connection with the coronavirus crisis?”
5 Due to very small case numbers in the low category, we had to group the low and the medium education categories together.
6 Furthermore, we could not control for essential occupations, because occupational codes are only available from the employment registers. While the IAB-HOPP could be technically combined with the employment registers, only the occupation of those respondents who agreed to record-linkage could be considered. However, this would further limit the sample and lead to low case numbers. Moreover, it was not possible to add information on the partner’s occupation.
7 Our analytical sample only includes a subset of the original sample. In particular, we do not use data from the refreshment sample that was drawn in wave 5. As a result, we cannot use the standard weights that are provided with the data set. We have used weights that were tailored to our specific sample.
employment status of the partner. On average, the youngest child in the household was slightly older than five years old.

Table 1: Sample composition, column per cent

<table>
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<tr>
<th></th>
<th>Women</th>
<th>Men</th>
<th>All</th>
</tr>
</thead>
<tbody>
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<td><strong>Gender</strong></td>
<td></td>
<td></td>
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<tr>
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<td>Female</td>
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<td>51</td>
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<td><strong>Region</strong></td>
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</tr>
<tr>
<td>Eastern Germany</td>
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<td>23</td>
<td>20</td>
</tr>
<tr>
<td><strong>Migration background</strong></td>
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<td></td>
</tr>
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<td>No migration background</td>
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<td>84</td>
</tr>
<tr>
<td>Migration background</td>
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<td>15</td>
<td>16</td>
</tr>
<tr>
<td><strong>Level of education</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low or medium</td>
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<td>58</td>
<td>60</td>
</tr>
<tr>
<td>High (CASMIN 3a,3b)</td>
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<td>42</td>
<td>40</td>
</tr>
<tr>
<td><strong>Employment status</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Employed: Short-time work</td>
<td>6</td>
<td>19</td>
<td>12</td>
</tr>
<tr>
<td>Employed: No short-time work</td>
<td>54</td>
<td>73</td>
<td>64</td>
</tr>
<tr>
<td>Not working</td>
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<td>8</td>
<td>24</td>
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<tr>
<td><strong>Employment status partner</strong></td>
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<td>21</td>
<td>13</td>
</tr>
<tr>
<td>Working</td>
<td>93</td>
<td>79</td>
<td>87</td>
</tr>
<tr>
<td><strong>Mean age of the youngest child</strong></td>
<td>5.68</td>
<td>5.40</td>
<td>5.55</td>
</tr>
<tr>
<td><strong>Interview month</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>June</td>
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<td>27</td>
<td>26</td>
</tr>
<tr>
<td>July</td>
<td>23</td>
<td>25</td>
<td>24</td>
</tr>
<tr>
<td>August</td>
<td>24</td>
<td>26</td>
<td>25</td>
</tr>
<tr>
<td>September/October</td>
<td>28</td>
<td>22</td>
<td>25</td>
</tr>
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<td><strong>Sample size</strong></td>
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<td></td>
<td></td>
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<tr>
<td>Respondents</td>
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<td>380</td>
<td>786</td>
</tr>
<tr>
<td>Person-months</td>
<td>1,025</td>
<td>934</td>
<td>1,959</td>
</tr>
</tbody>
</table>

Source: IAB-HOPP waves 2-5, own weighted estimates.

4.3 Analytical strategy

In the following empirical analysis, we investigate how receiving short-time work benefits affected the gendered division of care work. In a first step, we provide descriptive insights into the division of care in the period of June to October 2020, as well as in the period before the pandemic. We also provide descriptive evidence on the changes across time. In a final step, we employ multinomial logistic regression models. The dependent variable is coded “1” if the father reduced his child care share, “2” if the division of child care tasks remained stable, and “3” if the father expanded his relative contribution to child care tasks.
during the coronavirus crisis. We investigate a main model that controls for short-time work and socio-demographic control variables. Furthermore, we estimate an interaction model that investigates whether the effect of short-time work was similar across all educational categories. The results are reported as average marginal effects. We visualise the average predicted probabilities of the main variable of interest (employment status, including the realisation short-time work) in figures. As we observe the same persons multiple time in the data, we have estimated robust standard errors in all specifications. The multiple regression analysis focuses on the male sample (for analysis of the female sample, see Section 2 in the online appendix).

5. Results

5.1 Descriptive results

Table 2 displays the distribution of child care chores during the period of June to October 2020, and clearly shows that the child care patterns were gendered: only 24 per cent of all couples were sharing child care equally. In most cases, the woman was providing most of the care. In less than five per cent of the cases, the father was the primary caregiver. In essence, the overwhelming majority of couples (roughly 70 per cent) were following a more traditional division of labour. These results correspond well to recent evidence from other studies (Samtleben et al. 2020). While the observation that 70 per cent of couples were in a traditionally organised partnership may appear to show that the German society is far from gender-equal, this finding has to be contextualised. Germany has been a strongly conservative and familialistic regime for decades, and is only gradually moving in a new direction. Other studies that have included longer time trends than ours have shown that in Germany, there is a strongly positive time trend towards greater gender equality (Samtleben et al. 2020; Zabel & Heintz-Martin 2013). The results of our analysis suggest that the pandemic may have even accelerated this positive trend, as the distribution was slightly more unequal before the crisis (see also Globisch & Osiander 2020). We find that the share of couples in which the father increased his engagement (20 per cent) was higher than the share of couples in which the father reduced it (16 per cent). In 64 per cent of the couples, the pandemic left the division of care unchanged.

The analysis also shows that fathers and mothers had different perceptions of their contributions to child care, with women being much more likely than men to say they believe that the mother is “entirely” responsible for child care, while men were more likely to say that the mother is “mostly” responsible. Women and men also had different perceptions of the changes over time. According to the female respondents, only 16 per cent of the fathers had increased their “care share” over the course of the coronavirus pandemic, while the corresponding figure cited by the male respondents was 24 per cent. While this discrepancy is very disturbing, it is in line with prior research, which has regularly shown that men and women tend to overstate their own contributions to housework and care, and to underestimate those of the other partner (Lee & Waite 2005; Trappe 2010). The division of care may also be sensitive to the wording of the question.
The question that we used asked parents to report on the division of care, including the management of care. The items “homework, hobbies, appointments, birthday presents, clothes” were mentioned in the question. This may have elicited a different answering pattern than if these “managerial dimensions” of child care had not been mentioned explicitly. Naming these tasks seems to have led to greater discrepancies in male and female responses than simple questions that asked respondents about the division of child care (see Figure A1 and A2 in the appendix, which provide a cross-tabulation for an alternative measure of the division of care).

<table>
<thead>
<tr>
<th>Table 2: Division of child care, column per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division of care during the coronavirus crisis</td>
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<tr>
<td>Father (entirely or mostly)</td>
</tr>
<tr>
<td>Both equally</td>
</tr>
<tr>
<td>Mostly mother</td>
</tr>
<tr>
<td>Entirely mother</td>
</tr>
<tr>
<td>Division of care before the coronavirus crisis</td>
</tr>
<tr>
<td>Father (entirely or mostly)</td>
</tr>
<tr>
<td>Both equally</td>
</tr>
<tr>
<td>Mostly mother</td>
</tr>
<tr>
<td>Entirely mother</td>
</tr>
<tr>
<td>Change in division of care</td>
</tr>
<tr>
<td>Father decreased share</td>
</tr>
<tr>
<td>No change</td>
</tr>
<tr>
<td>Father increased share</td>
</tr>
<tr>
<td>Sample size</td>
</tr>
<tr>
<td>Persons</td>
</tr>
<tr>
<td>Person-months</td>
</tr>
</tbody>
</table>

Source: IAB-HOPP waves 2-5, own weighted estimates.

5.2 Multiple regression results

Figures 2 and 3 plot the predicted probabilities (average margins) for the main variable of interest from the multinomial logistic regression for male respondents (Figure 2). The figure provides a clear pattern, whereby receiving short-time work benefits significantly increased the chances that a father expanded his share of the child care tasks. The predicted probability of increasing the child care load was 32 per cent for fathers in short-time work, compared to only 22 per cent for fathers in regular employment, and 25 per cent for non-employed fathers. Thus, the impact of non-employment is found to be similar to the impact of employment, and to be much weaker than the effect of short-time work. It is important to take into account that only a small share of the fathers were not working during the study period (see Table 1). In addition, we cannot rule out the possibility that there was some selection into non-employment among the fathers, which we assume was attenuated for those receiving short-time work benefits.
Figure 2: Average predicted probabilities from multinomial regression model, male sample

Note: Further control variables are education, migration background, age of the youngest child, region (East/West), partner’s employment status, interview month. Source: IAB-HOPP waves 2-5, own estimations.

The full model results, and, thus, the effects of the other covariates, are displayed as average marginal effects (AME) in Table A1 in the appendix. The results show a negative time trend for fathers’ involvement, which is in line with the findings of earlier studies (Hipp & Bünning 2021). Partner’s employment had the expected positive effect on fathers’ engagement. However, the parameters for the socio-demographic variables (such as Eastern and Western Germany, age of the children, and migration background) were not significant. Here, we should emphasise that while we observe no significant effects on changes in behaviour, we do find differences in the division of work between subgroups, such as between fathers in Eastern and Western Germany (for investigations on determinants of the division of care, see Sections 3 and 4 in the online appendix).

The online appendix also includes additional sensitivity analysis. A model in which we excluded all fathers who were completely engaged in child care tasks before the pandemic – and who were therefore unable to further increase their engagement – did not alter the results (see online appendix, Table 1.1 in Section 1). In addition, a model that controlled for child care engagement before the pandemic generated comparable estimates (see online appendix, Table 1.2 in Section 1). We also estimated separate models for the employed fathers and controlled for remote work (see online appendix, Table 1.3 in Section 1). We find that remote work was conducive to fathers’ engagement, but that the effect was only borderline significant. We also estimated the same models for the female
sample (see online appendix, Section 2). However, for mothers, no association between being in short-time work and increasing their already large child care share could be observed.

5.3 Effect heterogeneity

In a final step of our investigation, we estimated an interaction model to ensure that the effect of education was not driven by the behaviour of highly educated men. Figure 3 shows the predicted probabilities from this model. The interaction model reveals that the prior results were not driven by the highly educated men. Indeed, the model shows quite the opposite: namely, that fathers with low or medium education were more likely to increase their paternal involvement in response to being in short-time work. Among the low or medium educated fathers, the probability of increasing their care load was 36 per cent when they were subject to short-time work compared to 18 per cent when they were regularly employed. Among the highly educated, the probability to increase the care share is the same (roughly 25 per cent), regardless of whether the father was regularly employed or in short-time work. For the non-employed, the patterns were fairly similar across educational categories (roughly 25 per cent of fathers who increased their care share). Overall, the results from the interaction model do not support the assumption that highly educated men have been the vanguards in taking on further child care responsibilities in the coronavirus pandemic. Fathers with low or medium education were not only more likely than highly educated fathers to be receiving short-time work benefits (see Section 5 in the online appendix); if they were on short-time work, they were also more likely to increase their share of child care.

6. Conclusion

This paper has examined how the growing prevalence of short-time work among fathers affected changes in child care arrangements in couples in Germany between two time periods: before and during the COVID-19 pandemic. We used IAB-HOPP data that included prospective data on the division of child care for June to October 2020. The study also surveyed the division of care with a retrospective question that asked respondents how they arranged care before the coronavirus pandemic (without specifying any further the exact point in time). The analytical sample included parents in couple households with children aged 12 and younger.

The results of our study may be summarised as follows. The division of child care in couples in Germany was found to be mostly traditional, with mothers shouldering the bulk of the child care duties in 70 per cent of couple households. While the patterns were traditional overall, we did not observe a shift towards a “re-traditionalisation” of care patterns during the pandemic. However, the results of the investigation also echo those of prior studies that have shown that there are substantial differences between couples. In some couples, the coronavirus crisis led to a decline in paternal engagement (14 per cent),
while in other couples, fathers became more engaged (22 per cent). However, no changes were observed in 64 per cent of the couples.

**Figure 3**: Average predicted probabilities from multinomial regression model separated by educational status, male sample

![Graph showing predicted probabilities by educational status and employment status for men.]

*Note:* Further control variables are education, migration background, age of the youngest child, region (East/West), partner’s employment status, interview month.

*Source:* IAB-HOPP waves 2-5, own estimations.

There are various processes that may have contributed to a shift away from or towards greater gender equality in child care. In this study, we have primarily focused on the role of short-time work. The short-time work programme was one of the main measures the German government used to combat an increase in unemployment during the coronavirus pandemic, with men being more likely than women to participate in the scheme. In our study, 19 per cent of the fathers, but just six per cent of the mothers, were in short-time work during the June to October 2020 period. Our multiple regression results, which controlled for standard socio-demographic confounders, showed that short-time work benefits may have been an “enabler”, with a significant share of men using the time they gained to increase their engagement in care work. We found that 32 per cent of the fathers in short-time work, compared to 22 per cent of the fathers in regular employment, made progress towards a more equal division of care. Additionally, education was shown to moderate this effect: among fathers who were receiving short-time work benefits, those with low or medium educational levels were more likely to expand their child care share than those with high levels of education.
In light of these findings, we argue that examining the effects of participation in the short-time work programme can provide us with a deeper understanding of the potential to encourage men to change their work patterns through paid leave benefits. Thus, the implications of our research results go beyond the narrow context of the coronavirus pandemic by providing a positive assessment of the potential effectiveness of paid leave policies. The 9th Family Report advocates for an extension of paid parental leave for fathers (BMSFJ 2021). Our study provides support for the argument that measures of this kind are highly effective in encouraging fathers to become more involved in the lives of their children. We can also conclude that this positive effect is not limited to highly educated fathers – who are commonly regarded as the vanguards of engaged parenting – and that such measures can reach all layers of society.

However, some caution seems warranted in interpreting these results. While this study has provided novel and policy-relevant results, our investigation has many limitations. Most importantly, we found glaring differences in mothers’ and fathers’ perceptions of their own contributions to care. Our analysis relied on a measure that asked parents how they divided child care tasks and the management of child care in which “homework, hobbies, appointments, birthday presents, clothes” were explicitly included in the wording of the question. Prior studies have shown that there is a difference between “active” child care tasks and the mental and practical management of them. While it is known that fathers and mothers tend to differ in their perceptions of their own and their partner’s child care activities, even larger differences have been observed in mothers’ and fathers’ perceptions of the “management” of care (Lee & Waite 2005). The IAB-HOPP also included an alternative measure of the division of care for selected years, and the gender differences were less pronounced for these items (see Figure A1 and A2 in the appendix).

It is also important to note that the answering categories raise concerns. The IAB-HOPP relied on well-tested items to operationalise the gendered division of care, which are also used in other surveys. These items are: “(almost) entirely by my partner”, “mostly by my partner”, “about half and half”, “mostly by me”, and “(almost) entirely by me”. These batteries may no longer be suitable during periods in which gender role behaviour is shifting, and in which substantial shares of fathers and mothers are oscillating between the categories of “for the most part the mother” and “completely the mother”. Time use data for both parents can certainly provide a more fine-grained account of the division of care within the household.

There are other limitations that must be mentioned. First, we relied on retrospective information on the division of care before the coronavirus crisis. It is well known that the collection of past behaviour and attitudes is severely affected by recall bias. For example, the respondents may have had a more positive recollection of their past division of care (Hipp et al. 2020). If that was the case, the coronavirus pandemic had an even more positive effect on the gendered division of care than we measured with our data. Another important limitation of our investigation is that the IAB-HOPP is not a household survey. While it provided us with information on the gendered division of care in the household and some selected partner information, it did not allow us to examine the interaction of partner characteristics at the household level. A related problem is that we did not have
sufficient information on whether the partner was working in a frontline occupation, or was working remotely.

The survey was also limited in terms of household characteristics. For example, we had no information on whether the family was a nuclear family or a stepfamily. Thus, we labelled the respondents in our sample “fathers” and “mothers”, even though they may not be the biological parents of the children. Given that stepfatherhood is more common than stepmotherhood, we may have underestimated the “care share” of biological fathers in Germany by using data of this kind (Kunze 2020; Steinbach 2008). As stepfamilies make up about 10 per cent of all families in Germany, this is a serious concern (Steinbach 2008). Furthermore, the gender of the respondents’ partner was not surveyed in the IAB-HOPP. As a result, we were not able differentiate between homosexual and heterosexual unions. This is a limitation, as there is evidence that heterosexual couples and homosexual couples organise their care work differently (Evertsson et al. 2021).

Our analysis was restricted to the period of June to October 2020. The “care burden” has varied greatly across time in Germany because of the erratic and regionally diverse patterns of school and day care closures, lockdown measures, and school holidays. As the IAB-HOPP includes regional information, there is scope for future studies to better account for these contextual factors and their dynamics across time. Moreover, further studies can seek to address other questions, such as whether the early months of the coronavirus pandemic were unusual, and whether there have been additional shifts towards a more equal or unequal division of care with the increasing duration of the pandemic.

Overall, our investigation paints a rosy picture of the potential for fathers to become more involved in child care. Caution is surely warranted in considering these findings, as we have provided evidence for only a brief period of time. The effect of short-time work on the gendered division of care may be short-lived, and could evaporate once men return to their normal work schedule (Boll, Müller & Schüller 2021). In addition, while our analysis refuted the re-traditionalisation hypothesis in the aggregate, we detected large differences across population sub-groups. Even if care patterns have become more equal in households in which the father has been in short-time work, they may have become less equal in other households. There is, for example, some evidence that couples who had a very unequal division of care before the crisis had an even less equal division of care during the crisis (Jessen et al. 2021). Thus, for some couples, the pandemic may have entrenched existing traditional care patterns.

Last but not least, we only investigated care patterns, and we did not examine the stress and worries that were caused by the organisation of child care and the incompatibility of work and family life. There is evidence that this “mental load” was heavier for women than for men (Steiber et al. and Li et al. in this Special Issue). It is also important to emphasise that our analysis was restricted to couple households. Single parents, who are overwhelmingly mothers, have experienced a particularly large care burden during the pandemic. As they were not part of our investigation, our analysis gives only a partial account of the gendered effect of the pandemic on care patterns.
Acknowledgments

We would like to thank the HOPP project team at the Institute for Employment Research (IAB) that has conducted the HOPP-study. We are particularly grateful to Stefan Zins (IAB) for generating tailored weights for our sample. Furthermore, we would like to thank the participants of the Social Policy Colloquium of the Hertie School and the University of Essex ISER series for their valuable comments on a first version of this paper. Funding by the German Research Foundation (DFG) is acknowledged as well (grant number 390285477/GRK2458). For language editing, we are grateful to Miriam Hils. All remaining errors are ours.

References


https://doi.org/10.1086/230577


https://doi.org/10.1111/jomf.12608


https://doi.org/10.1080/14616696.2020.1808692


https://doi.org/10.1093/sp/jxr022


https://doi.org/10.1177/0958928718765638
https://doi.org/10.1016/j.labeco.2015.07.001


https://www.diw.de/documents/publikationen/73/diw_01.c.789749.de/diw_aktuell_42.pdf [retrieved: April 29, 2021]

https://doi.org/10.20377/jfr-488

https://doi.org/10.1080/14616696.2020.1833229

https://doi.org/10.18148/srm/2020.v14i2.7741


https://doi.org/10.1007/s11150-020-09529-4

https://doi.org/10.18723/diw_wb:2021-9-1


Appendix

Table A.1: Regression results. Male sample. Multinomial regression model. Average marginal effects, z-statistic in parenthesis. Dependent variable: Decline in father’s engagement (base outcome), no change, increase in father’s engagement.

<table>
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<th>Decline</th>
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<th>Increase</th>
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<td>Ref.</td>
<td>Ref.</td>
</tr>
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<td>-0.033</td>
<td>0.102**</td>
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<td></td>
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<td>Not working</td>
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<td>0.032</td>
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</tr>
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<td>-0.003</td>
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</tr>
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<td></td>
<td>(-0.61)</td>
<td>(-0.06)</td>
<td>(0.58)</td>
</tr>
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<td>-0.028</td>
</tr>
<tr>
<td>Not working</td>
<td>-0.027</td>
<td>0.055</td>
<td>-0.028</td>
</tr>
<tr>
<td></td>
<td>(-0.91)</td>
<td>(1.32)</td>
<td>(-0.76)</td>
</tr>
<tr>
<td><strong>Interview month</strong></td>
<td>0.035***</td>
<td>-0.038***</td>
<td>0.003</td>
</tr>
<tr>
<td></td>
<td>(3.43)</td>
<td>(-2.63)</td>
<td>(0.25)</td>
</tr>
</tbody>
</table>

Person-months

822         822           822

Source: IAB-HOPP waves 2-5, own estimations.
Note: * p<0.10, ** p<0.05, *** p<0.01
**Figure A.1:** Division of care during the coronavirus crisis

<table>
<thead>
<tr>
<th></th>
<th>Women</th>
<th>Child care &amp; management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entirely mother</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Mostly mother</td>
<td>34</td>
<td></td>
</tr>
<tr>
<td>Both equally</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Men</th>
<th>Child care &amp; management</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entirely mother</td>
<td>20</td>
<td></td>
</tr>
<tr>
<td>Mostly mother</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Both equally</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>7</td>
<td></td>
</tr>
</tbody>
</table>

Note: The wording in German of the “child care” item is as follows: „Wenn Sie an die Zeit vor der Corona-Krise denken: Wie haben Sie und Ihr Partner/Ihre Partnerin sich die Arbeit in folgenden Bereichen aufgeteilt? Kinderbetreuung/-management (Schulaufgaben, Hobbys, Verabredungen, Geburtstagsgeschenke, Kleidung)? (fast) vollständig Partner/in; überwiegend Partner/in; etwa halb/halb; überwiegend ich; (fast) vollständig ich; trifft nicht zu“.

The wording in German of the “child care & management” item is as follows: „Und wie teilen Sie und Ihr Partner/Ihre Partnerin sich die Arbeit aktuell auf? Kinderbetreuung/-management (Schulaufgaben, Hobbys, Verabredungen, Geburtstagsgeschenke, Kleidung)? (fast) vollständig Partner/in; überwiegend Partner/in; etwa halb/halb; überwiegend ich; (fast) vollständig ich; trifft nicht zu“.

Source: IAB-HOPP waves 2-7, own weighted estimates.
Figure A.2: Division of care before the coronavirus crisis

Note: see Figure A1.

Source: IAB-HOPP wave 2, own weighted estimates.
Information in German

Deutscher Titel
Die Aufteilung der Kinderbetreuung während der Coronavirus Krise in Deutschland: Wie wirkte sich Kurzarbeit auf das Engagement der Väter aus?

Zusammenfassung

Fragstellung: In diesem Beitrag wird untersucht, wie sich Kurzarbeit auf die geschlechtsspezifische Aufteilung der Kinderbetreuung während der COVID-19-Krise in Deutschland auswirkte.

Hintergrund: Kurzarbeit war eine der wichtigsten Maßnahmen zur Bekämpfung der wirtschaftlichen und arbeitsmarktpolitischen Auswirkungen der Coronavirus Pandemie in Deutschland. Wir untersuchen, ob und wenn ja, wie sich die zunehmende Verbreitung von Kurzarbeit auf das Betreuungsverhalten ausgewirkt hat.


Schlussfolgerung: Die Erkenntnisse dieser Studie deuten darauf hin, dass die Arbeitszeiten von Männern einer der maßgeblichen Faktoren sind, um Veränderungen in der geschlechtlichen Sorgearbeit zu bewirken.

Schlagwörter: Geschlechtsspezifische Aufteilung der Kinderbetreuung, väterliches Engagement, Erwerbsarbeit, Deutschland