

# Extending theoretical explanations for gendered divisions of care during the COVID-19 pandemic

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## Abstract

**Objective:** This article extends pre-pandemic theories, empirically testing the salience of pandemic-based absolute and relative resources and time availability mechanisms for understanding gendered divisions of childcare across the COVID-19 pandemic.

**Background:** Multiple cross-sectional studies have examined gender differences in pandemic divisions of childcare, yet few longitudinal studies exist, particularly using pandemic-specific theoretical mechanisms.

**Method:** The authors used five waves (six data points, April 2020–November 2021) of probability-based longitudinal data from the Netherlands to estimate fixed-effects regression models (person-wave data; 2165 mothers and 1839 fathers) to analyze the division of childcare.

**Results:** Essential occupation was associated with a relative decrease in childcare tasks for mothers but not fathers. Mothers whose partner worked in an essential occupation experienced a relative increase in childcare tasks. Time availability also mattered; primarily for fathers. Working from home was associated with a relative increase in father's involvement in childcare, whereas an increase in work hours was associated with a decrease. Unemployment affected mothers only and was associated with an increase in relative childcare.

**Conclusion:** Having an essential occupation potentially functioned as a new resource for some mothers to bargain for more gender-egalitarian divisions of care but also reaffirmed the relative importance of men's paid employment over that of women's in shaping divisions of care. Time

Stéfanie André, Chantal Remery, and Mara A. Yerkes contributed equally to this study.

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availability played a role in divisions of care during the pandemic, but mostly for fathers.

**Implications:** The findings extend traditional resources and time availability theories to explain pandemic-based gender differences in the division of care across the pandemic.

#### KEYWORDS

absolute resources, division of care, essential occupations, gender, parents, relative resources, time availability

## INTRODUCTION

The start of the COVID-19 pandemic led to concerns among some scholars about the potential negative effect of lockdown measures on gendered divisions of household and childcare tasks between working parents (e.g., Chung, 2020). Indeed, in many countries, scholars reported an increase in inequality between working parents, with women taking on larger shares of housework and childcare (e.g., Chung et al., 2021; Hipp & Bünning, 2021). At the same time, in countries like the United States, Canada, Australia, France, and the Netherlands, studies reported an increase in fathers' relative childcare divisions during the initial lockdowns (Carlson et al., 2022; Craig, 2020; Dominguez-Folgueras, 2021; Shafer et al., 2020; Yerkes et al., 2020).

These mainly cross-sectional studies provided key insights into the effect of the initial shock of the pandemic on gendered divisions of care. However, later studies suggested that the impact of the pandemic on the relative division of care differed as the pandemic progressed, whereby initial shifts toward more egalitarian divisions of care later disappeared (Remery et al., 2021; Sánchez et al., 2021). Explanations for these changing patterns and any potential return to pre-pandemic gendered divisions of care remain limited, with few studies reconceptualizing, in pandemic terms, extant theories for explaining gender differences in relative childcare divisions (see Dominguez-Folgueras, 2021; Zamberlan et al., 2021 for exceptions), particularly from a longitudinal perspective.

We make two unique contributions to the rich literature on the impact of the pandemic on gendered divisions of care. First, we use five waves of probability-based, longitudinal data with six data points collected in the Netherlands between April 2020 and November 2021 to determine empirically the extent to which changes in the relative division of care were sustained over a longer period of time. Second, we provide key theoretical insights by testing the role of essential occupations as a potential new household resource and home-working and increased work hours as constraints or enablers of time availability during the pandemic, extending existing theories to pandemic conditions. An in-depth understanding of a particular national context is useful for understanding the potential explanatory power of pandemic-based theoretical mechanisms at a time when countries differed significantly in measures taken to safeguard against the spread of the COVID-19 virus. Contextualized single-country case studies can inform our empirical understanding of the nuanced effects of the pandemic as well as provide a theoretical foundation for future research.

## GENDER INEQUALITY AND COVID-19 IN THE NETHERLANDS

Despite scoring consistently high on gender equality indices in the domains of paid work (i.e., employment rates), health, and knowledge (Plantenga et al., 2009), the Netherlands remains characterized by a high degree of inequality between men and women's paid work

hours and the division of childcare and household tasks (Khoudja & Fleischmann, 2018; Koster et al., 2022; van den Brakel et al., 2020). Comparatively, the Netherlands represents the “one-and-a-half earner model” (Plantenga, 2002), where most fathers work full-time, and most mothers work part-time while doing the majority of caregiving and household tasks. Part-time work (e.g., <35 h a week) is the norm among women in the Netherlands, who worked 26 h per week on average in 2020 compared to 35 h per week for men (van den Brakel et al., 2020). Gender gaps also exist in childcare. Among 25- to 49-year-old parents, almost all mothers in the Netherlands (98%) provide care or education for their children daily compared to 83% of fathers (Eurostat, 2020).

Lockdown measures throughout the pandemic had the potential to worsen these gender inequalities. Similar to most industrialized countries, schools and daycare centers closed during the early months of the pandemic in the Netherlands (Blum & Dobrotić, 2021). These measures were regulated by the national government and did not differ regionally or locally (e.g., per school). Primary schools were completely closed from mid-March to mid-May 2020, and only completely reopened on June 8 (the school year ends mid- to late-July). Primary schools closed again during the second wave of the pandemic (mid-December 2020 to early February 2021). For secondary schools, closures were even longer (see Timeline in Supporting Information Material). Homeschooling was a reality for 88% of households with children during the first lockdown (Yerkes et al., 2020). When reopened, schools and day cares struggled with staff shortages due to COVID-19 infections and quarantine rules, while parents struggled with strict attendance regulations that prohibited school or childcare attendance if children or other household members had any symptoms potentially COVID-related (Yerkes et al., 2020). During lockdowns, public gatherings and events were prohibited, and places like bars, restaurants, hairdressers, and gyms were closed (RIVM, 2023). Most other shops remained open if they were able to maintain social distancing requirements and public spaces and public transportation were accessible. People were expected to work from home whenever possible during much of 2020 and a large part of 2021, and the use of grandparent care, an often-used alternative to formal childcare in the Netherlands (Plantenga & Remery, 2017), was strongly discouraged to prevent infection among the older population. Access to emergency childcare and schooling was limited to workers in essential occupations. In this situation, care tasks for children increased for all parents in the Netherlands. How these tasks were divided among parents likely differed, given variation in absolute and relative resources as well as time availability, both within and across households.

## EXPLAINING PERSISTENT GENDER INEQUALITY IN DIVISIONS OF CHILDCARE

The division of labor between men and women has been widely studied (Bianchi & Milkie, 2010; Perry-Jenkins & Gerstel, 2020), clearly establishing that the increase in women’s employment in most Western countries in the second half of the 20th century did not result in an equivalent increase in men’s participation in housework or care work. We focus here on two dominant theoretical perspectives used to explain this persistent inequality pre-pandemic: absolute versus relative resources and time availability. We purposely do not focus on a third, often-used perspective, the gender perspective, which suggests relatively unequal divisions of care can be explained by differences in men’s and women’s ascription to more or less gender-traditional behavior in the household (Bianchi et al., 2000). Initial studies suggest that some changes to gender attitudes (i.e., beliefs about women’s and men’s roles in paid and unpaid work) are evident during the pandemic (e.g., men and women becoming more or less traditional in their beliefs; Danzer et al., 2021; Vandecasteele et al., 2022), but insufficient time has passed to know

whether these changes are merely temporal or substantial (Van Tienoven et al., 2021; Vandecasteele et al., 2022).

## Pre-pandemic absolute and relative resources

Gender-unequal patterns in the division of household and care tasks are often viewed as a result of power imbalances within the household: women with fewer educational and/or financial resources than their male partner have less power to negotiate relatively gender-equal divisions of tasks. Women with higher levels of education or income, in contrast, have relatively more power to negotiate more egalitarian divisions (Bianchi & Milkie, 2010; Hook, 2006). In practice, this means that in addition to being able to outsource tasks given higher income, household chores, and childcare will be shared more equally in households where women have resources relatively equal to men (Fuwa, 2004).

Despite theoretical clarity, pre-pandemic empirical findings were often mixed (e.g., Aassve et al., 2014; Bianchi et al., 2000). Empirical discrepancies have been attributed to nuanced differences in how gender relates to other social identities and characteristics, such as class, race, and ethnicity (Perry-Jenkins & Gerstel, 2020). For example, Usdansky and Parker (2011) show income is primarily a resource for low-educated mothers; the higher their income, the less time they spend on housework. Housework scholars have shown that greater empirical clarity can be gained by distinguishing between absolute and relative resources. Gupta (2007) established, for example, that women's absolute resources (income) more clearly explain gendered divisions of housework than women's income relative to their partner. Extending this argument, Hook (2017) shows that time spent on housework is primarily related to women's own time and money, with diminishing returns. These studies suggest that relative income does not sufficiently explain gendered divisions of time spent on housework.

The division of childcare tasks is shaped by gender as well as absolute and relative resources (e.g., own and partner's income and education), although this relationship received less scholarly attention pre-pandemic than housework divisions (Nitsche & Grunow, 2018). Both divisions are explicitly gendered (Bianchi & Milkie, 2010; Perry-Jenkins & Gerstel, 2020), but the division of childcare differs compared to housework because both men and women enjoy doing childcare (Sullivan, 2013). Yet throughout children's lives, mothers provide relatively more care than fathers (Bianchi & Milkie, 2010; Perry-Jenkins & Gerstel, 2020) and are more likely to adjust work commitments to accommodate childcare needs (Craig & Sawrikar, 2009). The role of gender interacts with parents' resources to create gendered work-family arrangements resulting from jointly "planned and created" relative divisions of resources (Nitsche & Grunow, 2018). Gender also interacts with education, which is a particularly important resource in the division of childcare (Perry-Jenkins & Gerstel, 2020). In line with "intensive parenting" trends (Hays, 1996), tertiary-educated parents often spend more time caring for their children than parents without tertiary education (Sullivan, 2013). But mothers, more than fathers, adopt intensive parenting roles, spurred on by popular representations of what good mothering entails (e.g., Shirani et al., 2012; Verniers et al., 2022). The extent to which educational attainment matters for the division of care between mothers and fathers differs across countries (Craig & Mullan, 2011), however, pointing to the need for nuanced analysis in combination with in-depth attention for potentially unique ways in which country contexts shape these intersections.

Country context matters because which resources are available to men and women and how these resources are divided within households depends on complex interplays between educational, economic, and labor market structures as well as family policies (e.g., parental leave, childcare policies; see, e.g., Prince Cooke & Baxter, 2010; Sullivan et al., 2009; Van Lancker & Zagel, 2022). In countries with greater labor market opportunities for women, men spend more

time on housework, indicating higher bargaining power among women (Hook, 2006). However, in households where men work full-time and women work part-time, women's bargaining power is generally considered to be lower. Explaining fathers' involvement in household and childcare tasks in relation to the country context, particularly recent increases in the time fathers spend on these tasks has proven more difficult. Altintas and Sullivan (2017) show differing patterns of father involvement across varying welfare regimes, whereby drivers of these changes appear to depend on the welfare regime being studied. In Liberal welfare regimes, where government intervention is limited and targeted at low-income families with strict entitlement rules (e.g., the United States and the United Kingdom), fathers' increased involvement appears primarily to be related to increasing percentages of fathers without paid employment. In Continental welfare regimes, where governments traditionally provided limited, family-based benefits, significant improvements to family policies in recent years (e.g., in Germany, see Morgan, 2012) have not led to substantial increases in fathers' involvement in childcare and household tasks compared to other countries.

In the Netherlands, a historically Continental European country with a male breadwinner legacy, the increase in women's employment largely occurred through an increase in part-time work (Plantenga, 2002). Consequently, women generally have lower bargaining power than men as their shorter working hours translate into a lower (annual) income, thus lower absolute resources and lower income relative to their partner (van den Brakel et al., 2020). This is particularly evident in the division of care tasks, whereby mothers were historically and continue to be primarily responsible for care (Plantenga, 2002; van den Brakel et al., 2020). Mothers have fewer absolute and relative resources to bargain either for a reduction of their involvement or fathers' increased involvement in care in the Netherlands, given their structural embedding as part-time workers (Plantenga, 2002; Yerkes & Hewitt, 2019). At the individual level, the bargaining power of women working part-time is also strongly related to education in the Netherlands: tertiary-educated women have been shown to be more likely to work in full-time jobs and part-time jobs of longer hours compared to women without tertiary education who are more likely to work part-time and in short-hours part-time jobs in particular (Yerkes & Hewitt, 2019). As a result, tertiary-educated women in the Netherlands had more absolute and relative resources pre-pandemic.

## Pre-pandemic time availability

From a time availability perspective, individuals do more or fewer household and childcare tasks based on the time they can allocate to them (Becker, 1981). Within households, such decisions are not taken individually, but jointly (Blau & Robins, 1988), with the basic assumption that within a household, the partner who works less (and thus has the most time) takes on the most housework (Aassve et al., 2014; Bianchi et al., 2000). The underlying, rational choice logic of time availability does not presuppose gendered roles per se; rather divisions of work within the home are based on an efficiency argument. The fact that for many decades, women participated less in paid employment than men explained why women did a disproportionate share of unpaid work (van der Lippe, 1994). Indeed, empirical studies confirm that the time availability of fathers and mothers influences the extent to which parents take on household and care tasks (see Bianchi & Milkie, 2010 for an overview).

Extensive time availability studies suggest, however, that the relative allocation of time to household and childcare tasks among couples is often gendered (Craig & Mullan, 2010; Hook, 2017; Reimer, 2017). Housework research indicates women do not show compensatory gendered housework behavior in counter-normative gender situations (i.e., where women work more hours than men and thus have less time availability; Hook, 2017). However, in relation to the division of care work, mothers continue to do more than fathers, even with similar time



availability (Chesley & Flood, 2017). Moreover, the *types* of care tasks mothers and fathers perform often reflect socially acceptable ways of “doing gender” (West & Zimmerman, 1987), with mothers more often doing physical care tasks and fathers doing discretionary care tasks, such as playing and recreational activities (e.g., Craig, 2006; Doucet, 2009). Evidence from the United States demonstrates that normative beliefs about childcare tasks can also be ascribed to gender differences (Doan & Quadlin, 2019).

Empirical research suggests these gendered time allocation patterns in childcare reflect institutional constraints at societal and organizational levels (e.g., Geist & Ruppner, 2018; Hook, 2006; Perry-Jenkins & Gerstel, 2020; Stanczyk et al., 2017; Sullivan et al., 2009). In countries with dual-earner/dual-carer models, like Denmark, where both parents are supported in their paid employment and caring roles (e.g., through the public provision of parental alternatives to care, such as affordable, high-quality childcare), the disparities in time demands on mothers and fathers have been found to be less pronounced than in countries without these supportive policies, like Australia and the United States (Craig & Mullan, 2010). These institutional effects vary dependent upon the national context, supporting the need for a detailed understanding of these policy and employment contexts to understand how they shape the division of childcare tasks (Hook, 2006). Qualitative evidence additionally suggests parents may deviate from dominant country-level work-care models dependent on personal characteristics, such as educational level and age of the children (e.g., Larsen, 2004).

In the Netherlands, women’s time availability is shaped by the dominance of part-time work. This means that women take on more housework and care duties, and perceive this as fair (Koster et al., 2022). Women in the Netherlands also anticipate taking on care tasks, for example, by self-selecting into jobs that combine well with care tasks and/or into employment sectors where part-time work is common, even before having children or other care responsibilities. These differences increase when children are born; mothers reduce work hours while fathers often maintain their working hours (van den Brakel et al., 2020).

Although both theoretical perspectives—resources and time availability—may explain the unequal distribution of care tasks between fathers and mothers during the pandemic, *whether* they do so remains an empirical question. This theoretical ambiguity existed before the pandemic, with an absence of scholarly consensus on which mechanisms have the strongest explanatory power (e.g., Bianchi & Milkie, 2010; Hook, 2017). Indeed, contrasting results can arise if differing national policies and characteristics become conflated in an attempt to understand broader cross-national trends (Hook, 2006). In addition, although these theories were widely used before the pandemic, their ability to explain pandemic-related changes is less clear. Reconceptualization of these theories is needed to address pandemic conditions.

## Explaining gendered divisions of childcare during the pandemic

A rich body of literature has emerged in response to the COVID-19 pandemic, analyzing the impact of this societal shock on the division of childcare between mothers and fathers. Some scholars have clearly demonstrated how in countries like the United States, the United Kingdom, Australia, Argentina, Canada, Germany, France, Italy, Israel, and the Netherlands, the pandemic generally had a more significant impact on women than men, whereas in other countries, such as Switzerland, the gender gap stayed more or less the same. Furthermore, fathers in the United States, Canada, Australia, Germany, Italy, and the Netherlands have taken on relatively greater shares of care work than before the pandemic (Carlson et al., 2022; Costoya et al., 2022; Craig, 2020; Del Boca et al., 2020; Shafer et al., 2020; Steinmetz et al., 2022; Yaish et al., 2021; Yerkes et al., 2020; Zoch et al., 2021). These studies have also offered first insights into the relevance of existing theoretical mechanisms during the pandemic. For example, research in the United States and the United Kingdom seems to confirm time availability explanations: parents

who work from home spend more time on household and/or care tasks (Carlson et al., 2022; Chung et al., 2021). Zamberlan et al. (2021) also show that people who had fewer working hours due to the pandemic spent more time on household and care tasks. Moreover, pre-print evidence from Germany suggests the small reduction in mothers' relative childcare tasks compared to fathers was one of necessity (i.e., the intensification of mothers' work hours and their inability to work from home) rather than opportunity (i.e., fathers taking on more childcare tasks; Boll et al., 2021).

Although these studies offer important first findings to direct research efforts, further theoretical and empirical work is needed. Conceptually, attention is needed for potentially unique pandemic-based aspects of absolute and relative resources and time availability, including possible gender differences. In many industrialized countries, governments identified different sectors and occupations as essential to the functioning of society and the economy. We argue that the label "essential" potentially provides workers in these occupations with greater bargaining power within their relationship. Given the overrepresentation of women in many essential occupations (EIGE, 2021), if having an essential occupation is indeed a bargaining resource, it could strengthen mothers' *absolute* bargaining position within households, whereas having a partner with an essential occupation could weaken their *relative* bargaining power. We also recognize that working in an essential occupation could be related to time availability, as individuals in essential occupations may have less flexibility to work from home and less time to spend at home. However, we suggest the need to distinguish between the label "essential occupation" and work location. Some essential workers had more flexibility and were able to work from home during the pandemic (e.g., teachers and psychologists were deemed essential workers, but many worked from home), whereas other essential workers did not have this work location flexibility and were expected to work on location (e.g., supermarket personnel, nursing staff). For this reason, we distinguish between essential occupation as a resource and one's work location (incorporated in the time availability perspective).

Resources traditionally considered to strengthen the bargaining position of women may be less relevant in the pandemic context, in particular education. Given the potential importance of occupational resources and the correlation between occupation and work location (another potential driver of pandemic-related care divisions, see below), education could be less important from a bargaining perspective. Pre-pandemic research suggests that although it is a bargaining resource when negotiating household tasks, education plays a different bargaining role in the division of childcare. As caring is seen to be a valuable activity (Craig & Mullan, 2010; Sullivan, 2013), parents may be less likely to use this bargaining resource to reduce their own share of caring.

Empirically, more research is needed that considers how the mechanisms of time availability and resources work in explaining the gender division of care under pandemic conditions. Pandemic conditions were volatile, subject to (abrupt) change within and across countries. As more longitudinal data become available, we need to unpack when these theoretical mechanisms offer valid explanations of the division of care, whether this changed across time, and why. For example, parents' time availability during the pandemic clearly differed from before the pandemic (Costoya et al., 2022; Lyttelton et al., 2022; Restrepo & Zeballos, 2022), for varying reasons. Most working parents faced a time crunch during school and daycare closures, leading to an overall decrease in time availability (Restrepo & Zeballos, 2022; Yerkes et al., 2020). For some parents, however, government policies requiring people to work from home as much as possible gave them additional free time, for instance, because of the absence of commuting obligations (Restrepo & Zeballos, 2022). Some parents also had more time due to a reduction in work hours (Lemieux et al., 2020), short-time work schemes (e.g., furlough), or job loss (Steinmetz et al., 2022). However, studying whether these changes to parents' time availability led to changes in the gender division of care tasks does not address the potential within-person changes in time availability throughout the pandemic.

Initial longitudinal evidence is mixed, suggesting some women increased their housework and childcare tasks more than men (Yaish et al., 2021; Zoch et al., 2021). Others find that gender differences evident before the pandemic stayed largely the same (Steinmetz et al., 2022). Additional longitudinal evidence can help explain the potential longevity of any pandemic-related changes to divisions of care. For example, if fathers only occasionally took on more care tasks out of necessity, then it is unlikely that new, longer-term patterns of gender egalitarian sharing will emerge.

We aim to provide such conceptual and empirical contributions to the literature in our longitudinal investigation of absolute and relative resources and time availability mechanisms in explaining the gendered division of childcare within Dutch households during the pandemic. Extending absolute resources theory, we expect that: H1a. Parents whose occupation became essential during the pandemic will report a relative decrease in care responsibilities compared to parents who were in a nonessential occupation. H1b. The relative decrease is stronger for mothers compared to fathers, as the distinction of having an essential occupation provides them with greater bargaining power to improve their relative position within the household in relation to care tasks. As resources are relative to the partner, we are also interested in the effect of having a partner with an essential occupation. Extant pre-pandemic research suggests that mothers' share of care work, more than fathers, is dependent on household-level work arrangements (Bianchi et al., 2000; Craig & Mullan, 2011). We therefore extend relative resources theory, predicting that: H1c. When a partner has an essential occupation, the respondent will take on relatively more care duties, regardless of their own occupational status. H1d. This association is stronger for mothers than for fathers.

Extending time availability theory, we expect parents who work from home will have more time to provide care than parents who work at the workplace (e.g., because they do not need to commute). We, therefore, expect that: H2a. Throughout the pandemic, parents who change from working on location to working (partly) from home have a higher chance of increasing their relative involvement in childcare than parents who remain working on location. Independent of work location, some parents had to increase their work hours during the pandemic, which would decrease their time availability. H2b. Parents who increased their work hours at any point will be less likely to increase their relative involvement in childcare. Finally, when a parent becomes unemployed, they have more time available for childcare. However, earlier research showed that even when men become unemployed, they did not significantly increase their care tasks (van der Lippe et al., 2018). We, therefore, expect that: H2c. Becoming unemployed during the pandemic will lead to a relative increase in childcare. These time availability relationships are likely gendered, however, as mothers consistently take on greater care tasks than men (Craig & Mullan, 2011). We, therefore, expect that: H2d. The relative increases in care tasks is stronger for mothers compared to fathers.

Finally, for both resources and time availability theories, little evidence is available to date to suggest how these relationships might change over time during the pandemic. We, therefore, explore whether these relationships are time-invariant.

## DATA AND METHODS

### Data

We used data from the COVID Gender Inequality Survey Netherlands (CoGIS-NL) project involving all three authors and colleagues collected within the Longitudinal Internet Study for the Social Sciences (LISS) panel (<https://www.lissdata.nl/>). LISS is a probability-based panel with a sample drawn from national register data, providing annual data on topics like work, income, household, care, and values (CentERdata, 2022). Panel members receive an invitation



to complete monthly questionnaires and are paid per completed questionnaire. In the first wave of CoGIS-NL project data, the sample included working parents with at least one minor coresident child; from the second wave onwards, the sample was extended to working adults in the same age range, without coresident minor children. These data were linked to core LISS panel data using respondent's unique ID numbers. Given the panel structure, several pre-pandemic measures were available, either collected previously or collected during the first wave. These measures were used to create a pre-pandemic baseline measure.

For our focus on the division of childcare, we selected working, partnered parents with coresident minor children using six-time points: pre-pandemic (Wave 0), April 2020 (Wave 1), June 2020 (Wave 2), September 2020 (Wave 3), November 2020 (Wave 4), and November 2021 (Wave 5). We do not analyze same-sex couples separately, given low numbers (only 1.25%–2.89% of respondents belong to a same-sex household in our data, between 10 and 31 persons in each wave). No measures were collected between November 2020 and November 2021. Response rates for each wave ranged from 70% to 79%. We included respondents who participated in at least two waves. On average, respondents participated in 4.9 of six waves; 50% participated in each wave. Respondents with relevant data for any wave were included in the analyses and excluded if responses on relevant variables were missing. The final analytical sample included 4004 observations across 818 couples (2165 mothers, 1839 fathers; see Table SA1 for an overview of missing values). Sample selection for Wave 1 was representative of the population of Dutch households with at least one working parent and at least one coresident minor child in April 2020. Mothers were slightly overrepresented in the achieved (net) sample. Nevertheless, the achieved sample was representative of the general population in terms of education and (un)employment.

## Variables

Our dependent variable, the relative division of childcare, was measured retrospectively in April 2020 with the question of how the respondent and their partner/spouse divided the care for their child(ren) (including homeschooling/homework support) before the COVID-19 pandemic. At all waves, we also asked: "How do you and your partner/spouse currently divide the care for your child(ren) (including homeschooling/homework support)?" Response categories were on a 7-point Likert scale ranging from 1 (*I did almost everything*) to 7 (*My partner did almost everything*).

We measured absolute resources based on whether the respondent worked in an essential occupation and relative resources based on whether their partner worked in an essential occupation (coded as no essential occupation in the pre-pandemic wave to indicate this distinction was pandemic-related only). No essential occupation (or no partner in an essential occupation) was the reference category. Essential worker status was primarily industry-focused in the Netherlands, meaning nearly all workers in each industry (e.g., education) were deemed essential to the functioning of society regardless of work location. Our measure was based on the government-developed list of essential occupations, created in March 2020 (differentiating, e.g., who had a right to emergency childcare given the essential nature of their work). This government list included care (including youth care and social support), childcare, public transport, the food chain (e.g., supermarkets), transport industry, waste/garbage collection/processing, media and communication, education, emergency services, and necessary government processes.

We measured time availability by combining work hours and work location data, assuming that respondents who worked fewer hours and/or worked (partly) from home had more time for childcare. Work location was coded as working (partly) from home versus working on location (reference). We constructed a variable measuring whether respondents worked more hours than

**TABLE 1** Descriptive statistics (mean (SD)) for person data per wave.

| Wave                                       | Pre-COVID    | 1 Apr 2020   | 2 Jun 2020   | 3 Sep 2020   | 4 Nov 2020   | 5 Nov 2021   |
|--|--------------|--------------|--------------|--------------|--------------|--------------|
| Relative division of childcare (range 1–7) | 3.69 (1.46)  | 3.70 (1.44)  | 3.94 (1.75)  | 4.09 (1.66)  | 3.88 (1.52)  | 4.11 (1.85)  |
| Resources                                  |              |              |              |              |              |              |
| Essential occupation                       | 0.00         | 0.40         | 0.38         | 0.39         | 0.40         | 0.33         |
| Partner essential occupation               | 0.00         | 0.31         | 0.28         | 0.28         | 0.32         | 0.27         |
| Time availability                          |              |              |              |              |              |              |
| Working from home                          | 0.05         | 0.51         | 0.41         | 0.32         | 0.35         | 0.33         |
| Work more hours                            | 0.00         | 0.07         | 0.26         | 0.22         | 0.24         | 0.26         |
| Unemployed                                 | 0.11         | 0.14         | 0.11         | 0.11         | 0.13         | 0.12         |
| Gender                                     | 0.55         | 0.55         | 0.55         | 0.55         | 0.54         | 0.56         |
| Age (range 24–72)                          | 42.85 (7.41) | 42.85 (7.41) | 43.29 (7.37) | 43.52 (7.28) | 43.58 (7.47) | 44.78 (7.39) |
| <i>N</i> (valid)                           | 779          | 779          | 626          | 645          | 578          | 597          |

before the pandemic or not (reference). Each measure was based on the current wave compared to the former wave (e.g., the April 2020 wave compared to pre-pandemic). All respondents were employed in Wave 0. In each subsequent wave, we asked people whether they became unemployed, which was scored 1 in each wave in which this was the case. See Table 1 for sample details and key variable descriptions.

## Method of analysis and modeling

We used panel regression fixed-effects models (Hausmann check [ $\chi^2 = 40.42, p < .001$ ]), analyzing all parents, and mothers and fathers separately, to compare gendered effects. Roughly half of our respondents were in the same household; separating the sample also controlled for within-household homogeneity. Models were built stepwise, starting with a parsimonious panel regression model for each variable to test its effect, followed by controlling for the wave dummies. Essential occupation, partner's essential occupation, and working more hours had time sensitive (i.e., stronger) effects in some waves than others, primarily in Wave 1. This is logical given the exogenous shock of the pandemic and the immediate, large changes between the pre-pandemic wave and the first lockdown. We present these simple and wave-controlled models in Table SA2a–c. In Table 2 below, we present the full model for parents, and for fathers and mothers separately, with and without wave controls. For each variable, we also report Cohen's *d* as effect size (calculated as  $b/\sigma_e$ ) (Baguley, 2009). A Cohen's *d* of 0.2 is a small effect size, 0.5 is a medium effect size, and 0.8 is a large effect size.

## RESULTS

Descriptively, although mothers reported doing relatively more childcare than fathers before the pandemic (scoring 2.86 and 4.69, respectively, whereby 4.00 = an equal division with their partner), these relative divisions of care have changed throughout the pandemic (see Figure SA1). By November 2021, mothers scored 3.41, showing an overall increase in their score (0.55 points on the 1–7 scale, which corresponds to a decrease in their relative division of childcare across time). Fathers scored 4.95 by November 2021, thus an overall

TABLE 2 Panel fixed-effects linear regression on changes in the relative division of childcare.

| Predictor                    | M1 Parents         |      | M2 Parents |      | M3 Fathers |      | M4 Fathers        |      | M5 Mothers        |      | M6 Mothers         |      |
|------------------------------|--------------------|------|------------|------|------------|------|-------------------|------|-------------------|------|--------------------|------|
|                              | B                  | SE   | B          | SE   | B          | SE   | B                 | SE   | B                 | SE   | B                  | SE   |
| Relative resources           |                    |      |            |      |            |      |                   |      |                   |      |                    |      |
| Essential occupation         | 0.27***            | 0.07 | 0.15*      | 0.08 | 0.10       | 0.09 | 0.10              | 0.10 | 0.37***           | 0.10 | 0.15               | 0.11 |
| Partner essential occupation | -0.10              | 0.07 | -0.19**    | 0.07 | -0.00      | 0.08 | -0.03             | 0.09 | -0.17             | 0.11 | -0.26*             | 0.11 |
| Time availability            |                    |      |            |      |            |      |                   |      |                   |      |                    |      |
| Working from home            | -0.10 <sup>†</sup> | 0.06 | -0.14*     | 0.06 | -0.22**    | 0.07 | -0.20*            | 0.08 | 0.02              | 0.09 | -0.05              | 0.10 |
| Work more hours              | 0.19**             | 0.06 | 0.06       | 0.06 | 0.20**     | 0.07 | 0.13 <sup>†</sup> | 0.08 | 0.17 <sup>†</sup> | 0.09 | -0.00              | 0.09 |
| Unemployment                 | -0.25 <sup>†</sup> | 0.16 | -0.31*     | 0.15 | -0.15      | 0.23 | -0.14             | 0.23 | -0.29             | 0.21 | -0.38 <sup>†</sup> | 0.21 |
| Wave dummies                 |                    |      |            |      |            |      |                   |      |                   |      |                    |      |
| Wave 1 Apr 2020              |                    |      | 0.08       | 0.07 |            |      | -0.05             | 0.09 |                   |      | 0.17               | 0.11 |
| Wave 2 Jun 2020              |                    |      | 0.29***    | 0.07 |            |      | 0.01              | 0.10 |                   |      | 0.50***            | 0.11 |
| Wave 3 Sep 2020              |                    |      | 0.41***    | 0.07 |            |      | 0.05              | 0.09 |                   |      | 0.68***            | 0.11 |
| Wave 4 Nov 2020              |                    |      | 0.20**     | 0.08 |            |      | 0.09              | 0.10 |                   |      | 0.25*              | 0.11 |
| Wave 5 Nov 2021              |                    |      | 0.47***    | 0.07 |            |      | 0.25**            | 0.09 |                   |      | 0.62***            | 0.11 |
| Intercept                    | 3.87***            | 0.04 | 3.74***    | 0.04 | 4.75***    | 0.04 | 4.74***           | 0.06 | 3.11***           | 0.06 | 2.92***            | 0.07 |
| R <sup>2</sup> (between)     | .01                |      | .01        |      | .01        |      | .02               |      | .03               |      | .04                |      |
| R <sup>2</sup> (total)       | .01                |      | .02        |      | .01        |      | .02               |      | .03               |      | .05                |      |

Note: Predictors essential occupation, partner essential occupation, working from home, work more hours and unemployment are dummy variables with 1 = yes. Reference category of the wave dummies is pre-COVID.

<sup>†</sup>p < .10;

\*p < .05; \*\*p < .01; \*\*\*p < .001.

increase (0.26 points on the 1–7 scale), which also corresponds to a decrease in their relative division of childcare across time. Thus, as the pandemic progressed, mothers did relatively less childcare, and while fathers initially did more childcare, this waned as the pandemic continued.

The wave dummies at the bottom of Table 2 (M2, M4, and M6) show that changes between waves in the relative division of childcare were reported much more by mothers than by fathers. Note a positive change in mothers' scores means they did relatively less childcare compared to pre-pandemic because their starting point is doing more care relative to their partner. In contrast, fathers, on average, provide relatively less care than their partner, meaning a decline in their score equates to them doing relatively more compared to pre-pandemic.

These changes to relative divisions of care were explained by both resources and time availability mechanisms. Extending resources theory, we surmised parents whose occupation became essential during the pandemic gained an *absolute* bargaining resource, which would be associated with a reported decrease in relative childcare responsibilities (H1a). We further expected mothers, more than fathers, to lose *relative* bargaining power if their partner's occupation became essential (H1b). The multivariate wave-controlled models (M2, M4, and M6) suggested limited support was available for both hypotheses, with some caveats. Whereas having an essential occupation was significantly associated with the relative division of care when all parents were modeled, it was not significant when mothers and fathers were modeled separately. As this potentially reflected a power issue, we reran the models excluding wave dummies (M1, M3, and M5), which showed a significant association for mothers (M5): having an essential occupation led to a 0.37-point decrease in mothers' relative involvement in care tasks, which reflects a small to medium effect size (Cohen's  $d = 0.37/1.22 = 0.30$ ). This finding suggested greater absolute bargaining power to improve their position within the household in relation to childcare tasks but only for mothers, not fathers. We, therefore, cautiously confirmed Hypotheses 1a and 1b but only for the models not controlling for time.

We further suggested having a partner with an essential occupation would likely lower a respondent's relative bargaining power regardless of their own occupational status, in line with relative resources theory (H1c), leading to an increase in relative care tasks, particularly for mothers (H1d). The results suggested a gendered partner effect of essential occupation was indeed visible in the wave-controlled models for parents (M2), but only for mothers in the wave-controlled split models (M6): having a partner with an essential occupation was correlated with a relative increase of 0.26 points in childcare tasks for mothers, which reflected a small effect (Cohen's  $d = 0.26/1.19 = 0.21$ ). These results partially confirmed H1c. This association was not visible among fathers (confirming H1d).

Second, we considered parents' time availability by looking at working from home, working more hours and unemployment in relation to relative divisions of care (see Table 2). We found varying relationships by gender for all three aspects of time availability, but in nuanced ways. Work location was associated with fathers' relative division of care: The increased time availability gained by working from home during the pandemic was correlated with a 0.20-point increase in fathers' relative share of childcare tasks, which reflected a small effect size (Cohen's  $d (0.20/0.92 = 0.21; M4)$ ). There was no significant association with mothers' relative childcare tasks (M6), thus confirming Hypothesis 2a only for fathers. Similarly, time spent on paid work correlated to decreases in fathers' relative care involvement: Working more hours compared to the previous wave was associated with a 0.13-point decrease in fathers' relative involvement in childcare ( $p = .09$ ), which reflected a very small effect size (Cohen's  $d (0.13/0.92 = 0.14; M4)$ ), but not for mothers (M6). These findings suggested that during the pandemic, time availability played a role in divisions of care but mostly for fathers: Fathers' (and not parents') relative division of care was sensitive to their time availability, both in terms of work location (associated with a decrease in care; partially confirming H2a) and work hours (associated with an increase in care; partially confirming H2b). These results simultaneously challenged the idea behind

H2d, that pandemic-based time availability relationships were gendered in a way that disadvantages mothers. Pre-pandemic evidence consistently showed that mothers' not fathers' relative division of childcare was sensitive to their own and their partner's time availability. Yet our evidence suggested the opposite: Fathers' relative division of childcare throughout the pandemic was sensitive to their time availability based on work location (relative decrease) and work hours (relative increase). We, therefore, rejected H2d. We found the opposite gender effect for unemployment, which increased the relative involvement of mothers in childcare tasks ( $p = .072$ ; Cohen's  $d = (0.38/1.19 = 0.31$ ; M6)) but unemployment was not correlated with fathers' relative division of childcare tasks (M4). We therefore rejected Hypothesis 2c.

## Robustness checks

Several robustness checks were included to allow for the possibility that gender attitudes (Table SA3), education (Tables SA4 and SA5), or the age of the youngest child (Tables SA6 and SA7) were associated with changes in the relative division of childcare. These checks included split models (as panel fixed effects) to consider potential differences across groups as well as random effects models, accounting for covariates unlikely to change much throughout the pandemic. For example, gender attitudes were not included in the main models because initial evidence from the pandemic suggested more time was needed before temporal effects of changes in gender attitudes on divisions of household or care tasks became evident (Van Tienoven et al., 2021; Vandecasteele et al., 2022). Our robustness checks (see Table SA3) showed that for traditional parents (i.e., parents with more traditional views of men's and women's roles in paid work and care), having an essential occupation, working from home, and being unemployed were associated with relative care divisions. These associations were not found among parents with more egalitarian beliefs about men's and women's roles in paid work and care. This could suggest more change in relative care divisions was possible among traditional couples, whereas a ceiling effect could be evident among egalitarian parents, limiting any effects found here. Future research, including measures of gender role attitudes throughout the pandemic to test these relationships, would be useful. Regarding the education and age of the youngest child, our results remained largely the same as presented in Table 2: neither education nor age of the youngest child was significantly associated with the relative division of childcare. The split models also showed no substantive evidence of differences based on the education or age of the youngest child.

## DISCUSSION

Since the onset of the COVID-19 pandemic, family scholars have been concerned with the gendered effect of the pandemic on relative divisions of labor within the household. Empirical findings have been mixed, with evidence of increased gender inequality in some countries and decreased gender equality in others (Carlson et al., 2022; Del Boca et al., 2020; Steinmetz et al., 2022; Yerkes et al., 2020). For most countries, however, it is unclear whether initial pandemic effects were sustained as the pandemic developed and importantly, what explained these patterns. Using five waves of probability-based data for the Netherlands with six data points (pre-pandemic to November 2021), we extended the applicability of previously maintained resources and time availability theories for explaining gender differences in the relative division of childcare during the pandemic from a longitudinal perspective.

We found evidence that both absolute and relative resources matter in newly conceptualized ways. Working in an occupation labeled to be "essential" appears to have provided parents an absolute bargaining resource; working in an essential occupation was associated with a decrease



in care tasks, particularly for mothers (in models excluding wave dummies). Previous cross-sectional results with the same data suggest that working in an essential occupation was particularly associated with a decrease in mother's share of care early in the pandemic (André et al., 2021). The results for relative resources are more mixed. Mothers whose partner worked in an essential occupation took on greater shares of care tasks throughout the pandemic. No association was found for fathers. This suggests that within households, having a partner with an essential occupation reaffirmed gendered patterns of care because mothers' relative involvement is sensitive to their partner's situation, thus an issue of relative resources, whereas fathers' relative involvement was not sensitive to their partner's situation. These results are in line with extant pre-pandemic research that suggests the sensitivity of one's involvement in the household relative to the partner is gendered, whereby women are affected by their partner's labor market status, but men are not (Bianchi et al., 2000; Craig & Mullan, 2011). In short, the label essential given to many occupations during the pandemic thus potentially created a new absolute resource for some women to bargain for more gender egalitarian divisions of care but worsened the relative resources of women whose partner's work was deemed essential. Future research could focus on these absolute and relative resource mechanisms for housework or paid employment for women, alongside the relative division of care. Such research is needed to understand previously found differences in the role of absolute versus relative resources for different outcome measures (e.g., divisions of housework, childcare, or paid work; see, e.g., Bianchi & Milkie, 2010; Hook, 2017; Sullivan, 2013).

We further considered three potential time availability arguments, suggesting that parents who changed to working from home or became unemployed would do relatively more childcare and parents who increased work hours would do relatively less. Similar to our extension of pre-pandemic resource-based explanations, we expected these relationships to be gendered. Our findings both support and challenge pre-pandemic time availability arguments. Time availability matters, but in contrast to resources arguments, the gendered pattern here is mostly reversed: fathers' relative share of childcare increased when they (partly) worked from home and decreased when they worked more hours. These associations were not found for mothers, whose time availability was only associated with unemployment. Mothers who did not have paid work at any point in the pandemic spent more time on childcare relative to their partner, compared to before the pandemic. We did not find the same association for fathers. Cumulatively, these findings on time availability suggest men's involvement in childcare was potentially sensitive to opportunities to care, going against initial evidence from Germany (Boll et al., 2021) that suggests men's greater care involvement during the pandemic was born out of necessity. Research including partner work hours across multiple waves would help to unpack these relationships more, further extending our understanding of how gender affects time availability during and after the pandemic.

Whether these reconceptualizations of resources and time availability will continue to matter post-pandemic is unclear. Across time, we see that the pandemic-related effects of absolute and relative resources and changes in time availability slowly faded. Attention for these temporal aspects of the pandemic have, until now, received little attention. These findings extend the few longitudinal studies available (Boll et al., 2021; Carlson et al., 2022; Del Boca et al., 2020; Steinmetz et al., 2022; Yaish et al., 2021), providing a longer-term view of empirical developments in pandemic-related changes in divisions of care.

We note some limitations. We encountered power issues when controlling for time differences across waves. Small cell sizes similarly made it impossible to consider whether working on location was by choice or required by the employer. Future research with larger samples could allow for further investigation. In addition, although respondents were provided with a list of occupations labeled as essential by the Dutch government, data are self-reported and could therefore be liable to overreporting or underreporting. Moreover, given our in-depth focus on the Netherlands, we are unable to consider whether these relationships hold for other country

contexts. Future research using comparative, representative data for multiple countries would be an improvement in this regard. In addition, as pre-pandemic data were collected mainly during the initial lockdown, some retrospective bias could be evident. A final limitation is that we did not control for the usual testing of absolute resources by including income. Income was not included because nonresponse across waves was high (about 50%). Although we conceptualized working in an essential occupation as an absolute resource, controlling for both absolute and relative earnings would be beneficial in future studies.

Strengths of our study outweigh these limitations. Using probability-based panel data, we provide further conceptualization and empirical study of absolute versus relative resources and time availability perspectives within the pandemic context. Our unique ability to study the government-defined role of essential occupations of respondents and their partner extends current pandemic theorizing. Moreover, the availability of multiple waves of data allowed us to study the way in which resources and time availability potentially changed throughout the pandemic and their association with changes in the relative division of care within households. These findings extend traditional theories to explain pandemic-based gender differences in the division of care across the pandemic, offering insights for studying ways in which persistent gender inequalities in the division of care tasks may be challenged in the future.

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## REFERENCES

- Aassve, A., Fuochi, G., & Mencarini, L. (2014). Desperate housework: Relative resources, time availability, economic dependency, and gender ideology across Europe. *Journal of Family Issues*, 35(8), 1000–1022. <https://doi.org/10.1177/0192513x14522248>
- Altintas, E., & Sullivan, O. (2017). Trends in fathers' contribution to housework and childcare under different welfare policy regimes. *Social Politics*, 24(1), 81–108. <https://doi.org/10.1093/sp/jxw007>
- André, S., Yerkes, M. A., & Remery, C. (2021). The influence of the COVID-19 pandemic on the relative division of care tasks between mothers and fathers: A longitudinal perspective. *Mens en Maatschappij*, 96(3), 331–356. <https://doi.org/10.5117/MEM2021.3.003.ANDR>
- Baguley, T. (2009). Standardized or simple effect size: What should be reported? *British Journal of Psychology*, 100(3), 603–617. <https://doi.org/10.1348/000712608X377117>
- Becker, G. (1981). *A treatise on the family*. Harvard University Press.
- Bianchi, S. M., & Milkie, M. A. (2010). Work and family research in the first decade of the 21st century. *Journal of Marriage and Family*, 72(3), 705–725. <https://doi.org/10.1111/j.1741-3737.2010.00726.x>
- 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>
- Blau, M., & Robins, P. K. (1988). Child-care costs and family labor supply. *The Review of Economics and Statistics*, 70(3), 374–381. <https://doi.org/10.2307/1926774>
- Blum, S., & Dobrotić, I. (2021). Childcare-policy responses in the COVID-19 pandemic: Unpacking cross-country variation. *European Societies*, 23, S545–S563. <https://doi.org/10.1080/14616696.2020.1831572>

- Boll, C., Müller, D., & Schüller, S. (2021). *Neither backlash nor convergence: Dynamics of intracouple childcare division after the first COVID-19 lockdown and subsequent reopening in Germany* (CESifo Working Paper No. 9091). CESifo.
- Carlson, D. L., Petts, R. J., & Pepin, J. R. (2022). Changes in US parents' domestic labor during the early days of the COVID-19 pandemic. *Sociological Inquiry*, 92(3), 1217–1244. <https://doi.org/10.1111/soin.12459>
- CentERdata. (2022). *LISS panel*. Tilburg University.
- Chesley, N., & Flood, S. (2017). Signs of change? At-home and breadwinner Parents' housework and child-care time. *Journal of Marriage and Family*, 79(2), 511–534. <https://doi.org/10.1111/jomf.12376>
- Chung, H. (2020). Return of the 1950s housewife? How to stop coronavirus lockdown reinforcing sexist gender roles. *The Conversation*. <https://theconversation.com/return-of-the-1950s-housewife-how-to-stop-coronavirus-lockdown-reinforcing-sexist-gender-roles-134851>
- Chung, H., Birkett, H., Forbes, S., & Seo, H. (2021). Covid-19, flexible working, and implications for gender equality in the United Kingdom. *Gender and Society*, 35(2), 218–232. <https://doi.org/10.1177/08912432211001304>
- Costoya, V., Echeverría, L., Edo, M., Rocha, A., & Thailinger, A. (2022). Gender gaps within couples: Evidence of time Re-allocations during COVID-19 in Argentina. *Journal of Family and Economic Issues*, 43(2), 213–226. <https://doi.org/10.1007/s10834-021-09770-8>
- 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. (2020). Coronavirus, domestic labour and care: Gendered roles locked down. *Journal of Sociology*, 56(4), 684–692. <https://doi.org/10.1177/1440783320942413>
- Craig, L., & Mullan, K. (2010). Parenthood, gender and work-family time in the United States, Australia, Italy, France, and Denmark. *Journal of Marriage and Family*, 72(5), 1344–1361. <https://doi.org/10.1111/j.1741-3737.2010.00769.x>
- 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>
- Craig, L., & Sawrikar, P. (2009). Work and family: How does the (gender) balance change as children grow? *Gender, Work and Organization*, 16(6), 684–709. <https://doi.org/10.1111/j.1468-0432.2009.00481.x>
- Danzer, N., Huebener, M., Spiess, C. K., Pape, A., Siegel, N. A., & Wagner, G. (2021). Cracking Under Pressure? Gender Role Attitudes Toward Maternal Employment in Times of a Pandemic. CESifo Working Paper No. 9144, Available at SSRN: <https://ssrn.com/abstract=3872383> or <http://dx.doi.org/10.2139/ssrn.3872383>
- Del Boca, D., Oggero, N., Profeta, P., & Rossi, M. (2020). Women's and men's work, housework and childcare, before and during COVID-19. *Review of Economics of the Household*, 18(4), 1001–1017. <https://doi.org/10.1007/s11510-020-09502-1>
- Doan, L., & Quadlin, N. (2019). Partner characteristics and perceptions of responsibility for housework and child care. *Journal of Marriage and Family*, 81(1), 145–163. <https://doi.org/10.1111/jomf.12526>
- Dominguez-Folgueras, M. (2021). Difficult times: The division of domestic work under lockdown in France. *Social Sciences*, 10(6), 219. <https://doi.org/10.3390/socsci10060219>
- Doucet, A. (2009). Dad and baby in the first year: Gendered responsibilities and embodiment. *Annals of the American Academy of Political and Social Science*, 624(1), 78–98. <https://doi.org/10.1177/0002716209334069>
- EIGE. (2021). *Essential workers*.
- Eurostat. (2020). *Childcare and housework*.
- Fuwa, M. (2004). Macro-level gender inequality and the division of household labor in 22 countries. *American Sociological Review*, 69(6), 751–767. <https://doi.org/10.1177/000312240406900601>
- Geist, C., & Ruppanner, L. E. (2018). Mission impossible? New housework theories for changing families. *Journal of Family Theory & Review*, 10(1), 242–262. <https://doi.org/10.1111/jftr.12245>
- 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>
- Hays, S. (1996). *The cultural contradictions of motherhood*. Yale University Press.
- Hipp, L., & Bünning, M. (2021). Parenthood as a driver of increased gender inequality during COVID-19? Exploratory evidence from Germany. *European Societies*, 23, S658–S673. <https://doi.org/10.1080/14616696.2020.1833229>
- Hook, J. L. (2006). Care in context: Men's unpaid work in 20 countries, 1965–2003. *American Sociological Review*, 71(4), 639–660. <https://doi.org/10.1177/000312240607100406>
- Hook, J. L. (2017). Women's housework: New tests of time and money. *Journal of Marriage and Family*, 79(1), 179–198. <https://doi.org/10.1111/jomf.12351>
- Khoudja, Y., & Fleischmann, F. (2018). Gender ideology and women's labor market transitions within couples in The Netherlands. *Journal of Marriage and Family*, 80(5), 1087–1106. <https://doi.org/10.1111/jomf.12510>
- Koster, T., Poortman, A.-R., van der Lippe, T., & Kleingeld, P. (2022). Fairness perceptions of the division of household labor: Housework and childcare. *Journal of Family Issues*, 43(3), 679–702. <https://doi.org/10.1177/0192513x21993899>
- Larsen, T. P. (2004). Work and care strategies of European families: Similarities or national differences? *Social Policy & Administration*, 38(6), 654–677. <https://doi.org/10.1111/j.1467-9515.2004.00412.x>

- Lemieux, T., Milligan, K. S., Schirle, T., & Skuterud, M. (2020). Initial impacts of the COVID-19 pandemic on the Canadian labour market. *Canadian Public Policy*, 46(S1), S55–S65. <https://doi.org/10.3138/cpp.2020-049>
- Lyttelton, T., Zang, E., & Musick, K. (2022). Telecommuting and gender inequalities in parents' paid and unpaid work before and during the COVID-19 pandemic. *Journal of Marriage and Family*, 84(1), 230–249. <https://doi.org/10.1111/jomf.12810>
- Morgan, K. J. (2012). Promoting social investment through work-family policies: Which nations do it and why? In N. Morel, B. Palier, & J. Palme (Eds.), *Towards a social investment state? Ideas, policies and challenges* (pp. 153–179). The Policy Press.
- Nitsche, N., & Grunow, D. (2018). Do economic resources play a role in bargaining child care in couples? Parental investment in cases of matching and mismatching gender ideologies in Germany. *European Societies*, 20(5), 785–815. <https://doi.org/10.1080/14616696.2018.1473626>
- Perry-Jenkins, M., & Gerstel, N. (2020). Work and family in the second decade of the 21st century. *Journal of Marriage and Family*, 82(1), 420–453. <https://doi.org/10.1111/jomf.12636>
- Plantenga, J. (2002). Combining work and care in the polder model: An assessment of the Dutch part-time strategy. *Critical Social Policy*, 22(1), 53–71. <https://doi.org/10.1177/02610183020220010601>
- Plantenga, J., & Remery, C. (2017). Out-of-school childcare: Exploring availability and quality in EU member states. *Journal of European Social Policy*, 27(1), 25–39. <https://doi.org/10.1177/0958928716672174>
- Plantenga, J., Remery, C., Figueiredo, H., & Smith, M. (2009). Towards a European Union gender equality index. *Journal of European Social Policy*, 19(1), 19–33. <https://doi.org/10.1177/0958928708098521>
- Prince Cooke, L., & Baxter, J. (2010). “Families” in international context: Comparing institutional effects across Western societies. *Journal of Marriage and Family*, 72(3), 516–536. <https://doi.org/10.1111/j.1741-3737.2010.00716.x>
- Reimer, T. (2017). Measuring German fathers' involvement in childcare. *Men and Masculinities*, 20(5), 588–608. <https://doi.org/10.1177/1097184X17728318>
- Remery, C., André, S., Besamusca, J., Yerkes, M. A., Hummel, B., & van der Zwan, R. (2021). De coronapandemie en de verdeling van huishoudelijke en zorgtaken in Nederland. Economisch Statistische Berichten. KVS Preadviezen. <https://esb.nu/de-coronapandemie-en-de-verdeling-van-huishoudelijke-en-zorgtaken-in-nederland/>
- Restrepo, B. J., & Zeballos, E. (2022). Work from home and daily time allocations: Evidence from the coronavirus pandemic. *Review of Economics of the Household*, 20(3), 735–738. <https://doi.org/10.1007/s11150-022-09614-w>
- RIVM. (2023). *Coronavirus COVID-19*.
- Sánchez, A. R., Fasang, A. E., & Harkness, S. (2021). Gender division of housework during the COVID-19 pandemic: Temporary shocks or durable change? *Demographic Research*, 45, 1297–1316. <https://doi.org/10.4054/DEMRES.2021.45.43>
- Shafer, K., Scheibling, C., & Milkie, M. A. (2020). The division of domestic labor before and during the COVID-19 pandemic in Canada: Stagnation versus shifts in fathers' contributions. *Canadian Review of Sociology*, 57(4), 523–549. <https://doi.org/10.1111/cars.12315>
- Shirani, F., Henwood, K., & Coltart, C. (2012). Meeting the challenges of intensive parenting culture: Gender, risk management and the moral parent. *Sociology*, 46(1), 25–40. <https://doi.org/10.1177/0038038511416169>
- Stanczyk, A. B., Henly, J. R., & Lambert, S. J. (2017). Enough time for housework? Low-wage work and desired housework time adjustments. *Journal of Marriage and Family*, 79(1), 243–260. <https://doi.org/10.1111/jomf.12344>
- Steinmetz, S., Vandecasteele, L., Lebert, F., Voorpostel, M., & Lipps, O. (2022). The gendered consequences of the COVID-19 lockdown on unpaid work in swiss dual earner couples with children. *Gender, Work and Organization*, 29(6), 2034–2051. <https://doi.org/10.1111/gwao.12875>
- Sullivan, O. (2013). What do we learn about gender by analyzing housework separately from child care? Some considerations from time-use evidence. *Journal of Family Theory & Review*, 5(2), 72–84. <https://doi.org/10.1111/jftr.12007>
- Sullivan, O., Coltrane, S., Mcannally, L., & Altintas, E. (2009). Father-friendly policies and time-use data in a cross-national context: Potential and prospects for future research. *Annals of the American Academy of Political and Social Science*, 624(1), 234–254. <https://doi.org/10.1177/0002716209335138>
- Urdansky, M. L., & Parker, W. M. (2011). How money matters: College, motherhood, earnings, and wives' housework. *Journal of Family Issues*, 32(11), 1449–1473. <https://doi.org/10.1177/0192513X11402953>
- van den Brakel, M., Portegijs, W., & Hermans, B. (2020). Emancipatiemonitor 2020. Centraal Bureau voor de Statistiek. <https://www.cbs.nl/nl-nl/publicatie/2020/50/emancipatiemonitor-2020>
- van der Lippe, T. (1994). Spouses and their division of labour, The Netherlands. *Journal of Social Sciences*, 30, 43–62.
- van der Lippe, T., Treas, J., & Norbutas, L. (2018). Unemployment and the division of housework in Europe. *Work, Employment and Society*, 32(4), 650–669. <https://doi.org/10.1177/0950017017690495>
- Van Lancker, W., & Zagel, H. (2022). Family policy research in Europe. In K. Nelson, R. Nieuwenhuis, & M. A. Yerkes (Eds.), *Social policy in changing European societies. Research agendas for the 21st century* (pp. 34–49). Edward Elgar Publishing. <https://doi.org/10.4337/9781802201710.00010>
- Van Tienoven, T. P., Minnen, J., Glorieux, A., Laurijssen, I., te Braak, P., & Glorieux, I. (2021). Locking down gender roles? A time-use perspective on gender division of household labour during the COVID-19 pandemic lockdown in Belgium. *Journal of Family Issues*, 44(3), 654–680. <https://doi.org/10.1177/0192513x211054463>

- Vandecasteele, L., Ivanova, K., Sieben, I., & Reeskens, T. (2022). Changing attitudes about the impact of women's employment on families: The COVID-19 pandemic effect. *Gender, Work and Organization*, 29(6), 3–2060. <https://doi.org/10.1111/gwao.12874>
- Verniers, C., Bonnot, V., & Assilaméhou-Kunz, Y. (2022). Intensive mothering and the perpetuation of gender inequality: Evidence from a mixed methods research. *Acta Psychologica*, 227, 103614. <https://doi.org/10.1016/j.actpsy.2022.103614>
- West, C., & Zimmerman, D. H. (1987). Doing gender. *Gender & Society*, 1(2), 125–151. <https://doi.org/10.1177/0891243287001002002>
- Yaish, M., Mandel, H., & Kristal, T. (2021). Has the economic lockdown following the Covid-19 pandemic changed the gender division of labor in Israel? *Gender & Society*, 35(2), 256–270. <https://doi.org/10.1177/08912432211001297>
- Yerkes, M. A., André, S. C. H., Besamusca, J. W., Kruijven, P. M., Remery, C. L. H. S., van der Zwan, R., Beckers, D. G. J., & Geurts, S. A. E. (2020). 'Intelligent' lockdown, intelligent effects? Results from a survey on gender (in)equality in paid work, the division of childcare and household work, and quality of life among parents in The Netherlands during the Covid-19 lockdown. *PLoS One*, 15(11), e0242249. <https://doi.org/10.1371/journal.pone.0242249>
- Yerkes, M. A., & Hewitt, B. (2019). Part-time work strategies of women and men of childbearing age in The Netherlands and Australia. In H. Nicolaisen, H. C. Kavli, & R. S. Jensen (Eds.), *Dualisation of part-time work: The development of labour market insiders and outsiders* (pp. 265–288). Policy Press. <https://doi.org/10.1332/policypress/9781447348603.003.0011>
- Zamberlan, A., Gioachin, F., & Gritti, D. (2021). Work less, help out more? The persistence of gender inequality in housework and childcare during UK COVID-19. *Research in Social Stratification and Mobility*, 73, 100583. <https://doi.org/10.1016/j.rssm.2021.100583>
- Zoch, G., Bächmann, A. C., & Vicari, B. (2021). Who cares when care closes? Care-arrangements and parental working conditions during the COVID-19 pandemic in Germany. *European Societies*, 23, S576–S588. <https://doi.org/10.1080/14616696.2020.1832700>

## SUPPORTING INFORMATION

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

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