### Housework and Parenting during the Lockdowns in France: How Have Socio-Economic and Gender Inequalities Changed?

Ariane Pailhé\*, Anne Solaz\*, Lionel Wilner\*\* and the EpiCov team\*\*\*

**Abstract** – The lockdowns imposed during the COVID-19 pandemic had an unprecedented impact on people's time use. This article analyses the changes in time spent on household tasks and parenting by men and women during the lockdowns of the spring and autumn of 2020 in France, by social category, education, working arrangements and family configurations, using data from the major longitudinal EpiCov survey. The time spent on housework was high in the spring of 2020 and caring for children was particularly time consuming. This additional domestic and parental burden affected both women and men, but women continued to perform the majority of the housework, in spite of the similar working conditions between the sexes during this period. During the first lockdown, women at the top of the social hierarchy, who generally perform fewer household chores, spent far more time than usual on these tasks, thereby temporarily reducing social differences.

#### JEL: J22

Keywords: COVID-19, lockdown, housework, parenting time, gender, social class, inequality

\*INED; \*\*INSEE; \*\*\*Nathalie Bajos and Josiane Warszawski (scientific leads), Guillaume Bagein, François Beck, Emilie Counil, Florence Jusot, Nathalie Lydie, Claude Martin, Laurence Meyer, Ariane Pailhé, Philippe Raynaud, Alexandra Rouquette, Delphine Rahib, Patrick Sicard, Rémy Slama, Alexis Spire. This research was funded by the Agence nationale de la recherche ("Résilience COVID-19", reference ANR-21-COVR-0028-01). Correspondence: pailhe@ined.fr

Received in November 2021, accepted in April 2022. Translated from 'Travail domestique et parental au fil des confinements en France : comment ont évolué les inégalités socioéconomiques et de sexe ?'.

The opinions and analyses presented in this article are those of the author(s) and do not necessarily reflect their institutions' or INSEE's views.

Citation: Pailhé, A., Solaz, A. & Wilner, L. (2022). Housework and Parenting during the Lockdowns in France: How Have Socio-Economic and Gender Inequalities Changed? *Economie et Statistique / Economics and Statistics*, 536-37, 3–25 (First published online: July 2022). doi: 10.24187/ecostat.2022.536.2086

The lockdowns implemented during the COVID-19 pandemic had an unprecedented impact on the way that people spent their time. In France, working hours decreased or fell to zero for employees faced with job losses, a reduction in hours, or partial unemployment; for others, particularly those in front- and second-line jobs, they remained stable or increased (Barhoumi et al., 2020; Jauneau & Vidalenc, 2020). The introduction of remote working allowed those who were able to continue working in this way to reclaim the time that they would usually spend commuting, but blurred the lines between the private and professional domains. The periods of lockdown and the introduction of the curfew limited the leisure activities that people could participate in outside the home, due to both the restrictions on movement and the closure of sports and cultural establishments. On the other hand, households were faced with increased demands in terms of household chores. Staying at home meant that more meals needed preparing and more shopping and cleaning had to be done (Craig & Churchill, 2021; Sevilla & Smith, 2020), while opportunities to outsource or delegate these tasks were limited by the closure of canteens and restaurants and the fact that many home help services were no longer available, particularly during the first lockdown in spring 2020. This increase in housework represents a break in the long-term trend, which has seen a gradual decline in housework for women in France (Champagne et al., 2015), as is the case in other Western countries (Pailhé et al., 2021; Kan et al., 2011), brought about by the increase in employment among women, the development of household appliances and alternative products, and by a change in expectations and norms when it comes to housework.

During the first lockdown, the closure of nurseries, primary schools, secondary schools and extracurricular activities meant that parents of young and school-age children also had to look after them all day and provide more intensive support for their education (Thierry *et al.*, 2021). Regardless of their social environment, families prioritised the well-being of their children in accordance with good parenting standards (CAFC, 2021). This increased investment in activities with children seems to continue the trend observed in recent decades, for both women and men alike.

From the start of the first lockdown, the question arose as to how gender inequalities would change, in particular when it came to domestic and parental activities. Some saw the pandemic as a potential catalyst for gender convergence. By creating an exceptional situation in which the working conditions of partners became very similar, for example as a result of everybody working from home, the lockdown allowed for greater involvement of men in the private sphere, an area in which women usually invest more time. Therefore, for Alon *et al.* (2020) many fathers had to assume the primary responsibility for childcare, which may ultimately contribute to eroding the social norms that underlie the unequal division of domestic and parental work between women and men.

However, many quantitative surveys have instead shown that gender inequality has remained the same or even worsened over the course of the pandemic, and the findings appear to be linked to the context and type of activities (domestic or parental) carried out. All of the studies carried out in Western countries have shown a sharp increase in unpaid work, particularly among women (Craig & Churchill, 2021; Sevilla & Smith, 2020), with the extent of this varying depending on how strict the lockdown measures in place were and the duration and extent of school closures and disruption to lessons. The degree to which men were involved prior to the pandemic is also a key determining factor for the variations observed. In Anglo-Saxon countries, men significantly increased their involvement in domestic tasks (Petts et al., 2021; Shafer et al., 2020; Hupkau & Petrongolo, 2020). In southern European countries, their involvement was limited, particularly when compared with the very significant increase in housework for women (Farré et al., 2022; Del Bocca et al., 2020). Men in particular contributed more than usual to parenting, whether it be in Anglo-Saxon countries (Sevilla & Smith, 2020; Andrew et al. 2020; Petts et al., 2021), continental Europe (Kreyenfeld & Zinn, 2021; Hipp & Bünning, 2020) or southern Europe (Biroli et al., 2021). The gender gap has even narrowed in Australia (Craig & Churchill, 2021; Craig, 2020) and Canada (Shafer et al., 2020). In Germany, the more even split of childcare observed at the start of the pandemic (Krevenfeld & Zinn, 2021) subsequently reduced (Boll et al., 2021). In southern Europe and the UK, women took on the majority of the increased childcare burden (Farré et al., 2022; Del Bocca et al., 2020), which brought about a widening of the gender gap (Hupkau & Petrongolo, 2020). These studies looked in particular at the impact of the change in working conditions on participation in housework during the pandemic. A small number of studies analysed the social differences and, once

again, the results were contrasted depending on the context. In Spain, for example, female graduates saw the amount of time that they spent on unpaid work increase more than any other group (Farré *et al.*, 2022), while, in Germany, it was the men and women with a lower level of education who spent more time caring for children (Kreyenfeld & Zinn, 2021).

In France, in the initial surveys performed on small or non-representative samples, women stated that, during the pandemic, housework and parenting in particular increased (Champeaux & Marchetta, 2021). On average, the time that women devoted to housework and parenting during the first lockdown remained higher than that of men (Safi *et al.*, 2020), but housework was shared a little more evenly between partners than before the pandemic (Boring & Moroni, 2021), particularly in the case of couples where the man was not working or was working from home (Dominguez-Folgueras, 2021).

This article aims to further explore these initial findings using data from the large longitudinal and representative EpiCov survey (Box 1). We will analyse the differences in time spent on household and parenting tasks by men and women during the 2020 spring and autumn lockdowns (Box 2) and in particular the differences based on socio-professional category, income, qualifications, working arrangements and family configuration.

Following a brief recap of the main theories concerning housework, in section 2, we will describe the data and method used. In the third section, we will describe the changes observed with regard to employment and working hours during the first two lockdowns, followed by the descriptive and then multivariate findings concerning the amount of time spent on household tasks, and finally those for the time spent on parenting tasks.

#### 1. Three Main Theories on Housework

The unprecedented experience of lockdown provided an opportunity to better understand the determinants of household and parental work and the mechanisms for its distribution between the genders. Three broad explanations are usually put forward. The first relates to available time: time spent on household tasks is inversely proportional to time spent at work for both women and men alike and therefore largely depends on their working hours (Presser, 1994; Blair & Lichter, 1991; Bianchi *et al.*, 2000; Gershuny *et al.*, 2005). The health crisis has severely disrupted the time that people

have available. In France, the average number of hours worked decreased by around 35% during the first lockdown when compared with the same period of the previous year (Jauneau & Vidalenc, 2020); it can therefore be expected that both men and women who did not work during lockdown will have spent more time on housework. This has been observed by many studies: the increase in the burden of household and parenting work is linked to occupational changes during lockdown (Adams-Prassl et al., 2020; Sevilla & Smith, 2020; Zoch et al., 2021; Dominguez-Folgueras, 2021). However, the empirical results differ for the two genders: the time spent by men on childcare and household chores during the pandemic was more dependent on their working conditions than was the case for women (Andrew et al., 2020; Sevilla & Smith, 2020; Hank & Steinbach, 2021), which is at odds with traditional findings, which show that the amount of time spent by women on housework stretches more around time spent on paid work than is the case for men. This means that, before the pandemic, women were more likely than men to increase the amount of time spent on housework, for example during periods of unemployment (van der Lippe et al., 2018). In this sense, lockdown was an unprecedented situation that could help us to understand how time spent on household chores varies depending on paid work. Indeed, it presented an exogenous and unanticipated shock to the working hours of both men and women alike, something that the analysis can take advantage of, seeing as this change to working hours is not a priori linked to gender roles,1 whereas changes in the working hours of men and women are usually shaped in advance by norms and earlier decisions concerning the gender-based division of work. The constraints of working hours are usually endogenous for everyone, so it is difficult to assess their role.

A second group of explanations concerns the relative resources of each partner. According to economic theories of conjugal specialisation, the time spent by each partner on household chores depends on comparative advantages in professional and private spheres (Becker, 1985). In heterosexual couples, since, on average, men earn more than women, they devote more time to paid work, while women spend more time doing housework. More recent economic theories highlight the bargaining power between spouses, which is dependent on their respective resources (Chiappori, 1997; Behrman, 1997). According to sociological analyses based on

<sup>1.</sup> Except with regard to the distribution by occupation and sector.

the relative resources of partners, the distribution of unpaid work within couples reflects the power relationships in which the partner with the highest income (generally the man) or with the highest level of education tends to delegate housework to the other (Shelton & John, 1996). Although lockdown did not have any impact on relative levels of education, it did affect the relative economic resources of the partners in situations in which one partner unexpectedly lost their job or suffered a drop in income as a result of part-time working or a reduction in working hours. In addition, a higher level of education or higher salary within the household could provide one of the partners, and in particular the woman, who performs the vast majority of the housework, with the means to outsource some of that housework without having to negotiate with the other partner (Gupta, 2007). From that perspective, the near-impossibility of outsourcing housework during the first lockdown may have resulted in the renegotiation of the distribution of tasks to be performed based on relative resources among those households who usually rely on outsourcing (often the wealthiest).

The third perspective explains the gender disparities observed in the performance of housework as the result of the gender roles instilled in people from childhood, which are deeply internalised (Cunningham, 2001; Akerlof & Kranton, 2000). According to constructivist approaches to gender performance or "doing gender", these roles are reinforced by practices (Berk, 1985; Brines, 1994; West & Zimmerman, 1987): women display their gender identity through the household tasks they perform (West & Zimmerman, 1987; Brines, 1994). Couples may even compensate for an atypical situation from the point of view of gender (for example, households in which the woman is the main breadwinner) by adopting a traditional division of work (Brines, 1994). From this perspective, the pandemic would not be expected to bring about any significant change to the organisation of household tasks due to the deep-rooted nature of these gender practices.

#### 2. Data and Method

#### 2.1. Data

We make use of the data from the large longitudinal EpiCov survey, the sample for which is representative of the French population (Box 1), in which the same people were questioned in May and November 2020 with regard to the amount of time that they spend on household and parenting tasks. Our population of interest is that of working age people (20 to 65 years), whether they have a partner or not, who responded to the long questionnaire during the first wave, so 10,466 people (4,770 men and 5,696 women) and during the second wave, so 8,379 people (3,709 men and 4,670 women). Of the latter, 69% have a partner and 39% are parents of minor children (see Table A1 in the Appendix).

In the absence of reference data on the division of housework just before the pandemic,<sup>2</sup> we will compare the time spent on housework and parenting in May and November 2020. The impact on time was much less pronounced in the autumn than in the spring: in autumn, schools remained open, economic activity had largely resumed and with it, the amount of time spent doing paid work (Box 2); working full-time from home was also significantly less widespread and there were far more options for outsourcing housework. We are working on the assumption that this situation is fairly close to "normal". The comparison between May and November is therefore a way, albeit imperfect, to measure the impact of the first lockdown on time spent on household and parenting tasks. This may appear to be a strong assumption, as it is not impossible that the first lockdown had a learning effect and led to the reallocation of tasks, particularly for parents or new remote workers, which could have a lasting impact on the organisation of time within families. Without an identical measure of the amount of time spent on each task before lockdown, this is difficult to judge. This assumption of a sort of "return to normal" does appear credible, however. For example, a study carried out in the United Kingdom using data from the Understanding Society panel showed that the distribution of housework, which had become more equal during the spring lockdown, had returned to the pre-lockdown situation by September 2020 (Sánchez et al., 2021). In addition, in the French context, other events affecting paid working hours in a significant and lasting manner, such as the 35-hour reform, only had a minimal impact on time spent performing housework (Pailhé et al., 2019a) and long-term changes are generally extremely slow (Champagne et al., 2015). The bias is also well-known: if the first lockdown allowed men to participate in the long-term, measuring the difference between the two periods underestimates their greater involvement during the first lockdown.

<sup>2.</sup> The most recent French Time Use survey (enquête Emploi du temps) dated 2009-2010.

#### Box 1 – The EpiCov survey

EpiCov (*Epidémiologie et Conditions de vie liées au Covid-19* – Epidemiology and Living Conditions associated with COVID-19), a representative survey conducted by INSERM and the DREES (the statistics and research directorate of the ministry of health and social affairs) with the assistance of INSEE and *Santé publique France* (the French Health Authority) surveyed people aged 15 and over via the internet or telephone in mainland France, Martinique, Guadeloupe and Réunion in order to monitor the dynamics of the pandemic, living conditions and exposure to the virus (for a detailed description, see Warszawski *et al.*, 2021). The same people participated in the survey at several points during the pandemic. Around 135,000 people responded during the first wave (of the 371,000 people drawn at random based on tax data), which took place between 2 May and 2 June 2020, the period between the strict lockdown and the first phase of opening up (see Box 2). Around 110,000 people participated in the survey of the survey between 26 October and 30 November 2020 and 85,000 people responded to the third wave during the summer of 2021.

Only the first two waves of the survey are used here. The questionnaire included questions concerning the amount of time spent performing household chores, which were addressed to a randomly drawn sub-sample of respondents (around 10% of respondents, so 13,500 people):

Over the last seven days, how much time, on average, have you spent on common household chores (cooking, shopping, cleaning, laundry) each day?

Over the last seven days, how much time, on average, have you spent looking after your children or grandchildren under the age of 18?

In order to facilitate the response, seven response options were offered: 0 minutes; less than 30 minutes; more than 30 minutes but less than 1 hour; more than 1 hour but less than 2 hours; more than 2 hours but less than 4 hours; more than 4 hours; more than 4 hours but less than 6 hours; 6 or more hours.

#### Box 2 – The measures of restriction during the first two lockdowns

The first strict population lockdown was in place from 17 March to 11 May 2020 across the whole of the French territory. All activities deemed to be non-essential were shut down and people were asked to work from home wherever possible. Schools, nurseries and leisure and social facilities were closed and people were only permitted to leave the house to go to work, to go shopping, for health reasons or due to a family emergency and to exercise alone for no more than an hour and within a maximum radius of one kilometre from home. From 11 May, businesses reopened, as did primary and secondary schools, albeit very gradually. By 2 June, movement was no longer restricted within mainland France and bars and restaurants reopened.

The second lockdown, in place from 30 October to 15 December 2020 in mainland France, was less strict than the first. Remote working once again became the rule, but the list of essential activities was longer and many industries were permitted to continue trading. Nurseries and schools remained open. Movement was once again limited, as was the case in spring. From 28 November, people were permitted to travel within a radius of 20 km from their home and for up to three hours. "Non-essential" businesses reopened, with the exception of bars and restaurants and cultural establishments. On 15 December, people were allowed to move around during the day, but a curfew was introduced between 8 pm (6 pm in 25 departments) and 6 am. On 16 January 2021, the curfew was brought forward to 6 pm, before being gradually relaxed. It was lifted on 20 June 2021.

#### 2.2. Estimation Method

Given the specific nature of our variable of interest (time spent on housework and parenting is reported in seven bands), we estimate the regressions for each interval. The dependent variable y refers to the time spent on household chores, measured in hours per day and reported via seven bands in the EpiCov survey. If  $A_0 = 0$ ,  $A_1 = 0, A_2 = 0.5, A_3 = 1, A_4 = 2, A_5 = 4, A_6 = 6$  and  $A_7 = 24 - T - C$ , where C is the time spent parenting and T is the time spent doing paid work, with the values at the extreme ends of the ranges being referred to as "thresholds". An ordered probit model (or an interval regression, Greene & Hensher, 2010) at known thresholds (with those thresholds being observed) assumes that there is a link between the range *j* and a latent, non-observed variable  $y^*$  taking

the form  $y_i = j \Leftrightarrow A_{j-1} \le y_i^* < A_j$  and that this latent variable follows a linear model of type  $y_i^* = x_i'\beta + \varepsilon_i$ .

The main variables of interest for studying the link between available time and time spent on housework are the work situation during lockdown and the amount of time spent on paid work. The time spent doing paid work is measured across the seven days preceding the survey. We construct a professional activity situation variable for each survey, for which the modalities are as follows: not working (in education, stay-at-home parent, retired, etc.), unemployed (job seeker), full or partial technical unemployment, working on site, working full-time from home, hybrid working and miscellaneous leave (special leave of absence, sick leave, holidays, etc.). The socio-economic resources are measured by the highest level of education achieved, the standard of living decile of the household and the socio-professional category of a position<sup>3</sup> (we cannot study the impact of relative resources due to an absence of information on the partner's resources). The information on the standard of living of the household (income per consumption unit, in deciles) is taken from the 2018 tax files.<sup>4</sup>

The control variables are: age, family situation, whether the partner works outside of the home (as opposed to working full-time from home or not working), the survey period, the residential location variables (Île-de-France, other region within mainland France, overseas) and the type of accommodation (house or apartment).

The estimations were made on the basis of pooled data from the two waves, with interaction between the survey period (May vs November) and our variables of interest. Two specifications are estimated, one with working hours and the other with employment status. We routinely compare men's and women's hours, estimating the regressions for each gender. We provide a graphical representation of the predicted hours following these regressions (the results of the regressions performed for both waves together are presented in the Online Appendix, Table S-1 for time spent on housework and S-2 for time spent parenting).<sup>5</sup>

#### 3. Results

#### **3.1. Similar Situations and Comparable** Working Hours between Men and Women during the First Lockdown

Employment and work rates for men and women have been becoming more comparable in recent decades. However, prior to the pandemic, in the 20-65 age bracket, women were more likely to be not working than men.<sup>6</sup> The proportion of unemployed people does not vary by gender. The recourse to remote working, which was not widespread before the crisis, was a little more common among men (9% reported working remotely) than among women (7.5%) prior to lockdown (Figure I).

The spring 2020 lockdown made working conditions that were previously the exception much more common, such as technical unemployment or the possibility of working full-time from home. In May 2020, in the seven days preceding the first questionnaire, 12.4% of men and 11.5% of women (or 17.4% and 18.1% respectively of those actively employed prior to lockdown) were affected by full technical unemployment,<sup>7</sup> 16.6% of men and 16.0% of women of working age (or 21.5% and 24.1% respectively of those actively employed prior to lockdown) were working full-time from home and 33.5% of men and 25.3% of women (or 42.5% and 37.0% of those actively employed prior to lockdown) were working exclusively on site, a situation that has become less frequent, but is still more common among men than women.

During the second lockdown in autumn 2020, which was less strict, interruptions to economic activity were less frequent and there were more opportunities to work on site (48.8% of men and 40.9% of women, or 61.1% and 56.7% respectively of those actively employed before the health crisis and who work exclusively on-site). Full technical unemployment was significantly less common (2% of those actively employed before the health crisis). Full-time remote working also became less common, having been replaced by hybrid working, with employees alternating between working on-site some days and working from home on other days. We should also note the more frequent leaves, since the second wave of the survey was conducted in part during the All Saints' school holidays. Once again, we observed relatively few differences between the genders with regard to working conditions (except for among those who do not work).

Figure II shows the average time spent on paid work each day. Around 30% of men and 35% of women did not work or no longer worked at all during May 2020. The proportion of respondents who did not work during the seven days preceding the survey was smaller in autumn 2020 (21% and 25%, respectively), but remained high due to the school holidays. Average working hours had increased significantly in the autumn when compared with the figures for spring,<sup>8</sup> for both men and women alike. In November, more than 70% of men reported doing more than six hours of paid work per day (41% more than eight hours), compared with 55% in May 2020 (28% more than eight hours). Men are more likely

<sup>3.</sup> The detailed profession is filled in during the second wave of the survey.
4. The information regarding standard of living is missing for around 6% of respondents and the information regarding the socio-professional category is missing for around 8% of those surveyed. For these cases, we have created a "missing income" modality and a "missing social category" modality; indeed, removing these observations could result in bias within the sample if they are not randomly distributed across the opoplation.

<sup>5.</sup> Link to the Online Appendix at the end of the article.

<sup>6.</sup> All of the differences between men and women were tested using a Student's test.

<sup>7.</sup> Those who reported having been in technical unemployment since the start of lockdown and who had not worked during the previous seven days were considered to be experiencing technical unemployment.

The time distributions differ significantly if a Kolmogorov–Smirnov test for equality of distribution is performed.



Figure I – Occupational status of men and women aged between 20 and 65 before and during the periods of lockdown in spring and autumn 2020

Notes: The question about the pre-lockdown period does not provide for a leave category.

Reading Note: In May 2020, 33.5% of men and 25.3% of women aged between 20 and 65 worked at their place of work during the previous seven days. Sources: INSERM/DREES, EpiCov survey, waves 1 and 2-2020.

to be working long hours of more than eight hours per day than women. It should be noted that the working hours of men and women were comparable during the first lockdown, as the distribution of working hours was fairly similar. The distributions differed more during the second lockdown, when both men and women had resumed their professional activities, with men often working longer hours than women.

#### **3.2.** More Time Spent on Housework During the First Lockdown for both Men and Women

During the first lockdown, the amount of time spent on routine housework was high: 28% of men and 51% of women spent more than two hours per day on it, and almost one in five women even reported spending more than four hours a day on housework (Figure III). Parents spent particularly large amounts of time on household chores, with 58% of mothers and 32% of fathers devoting more than two hours per day to these tasks. That time reduced significantly<sup>9</sup> between May and November 2020. For example, 28% of men spent more than two hours per day doing housework in May compared with 23% in November, and the number of men spending less than one hour on housework per day in November increased significantly (45%

compared with 40% in May). This is also the case for women, with short durations being more common during the second lockdown (23% compared with 16% during the first). The drop in time spent on housework between these two periods is smaller for women than for men: the proportion of those dedicating more than two hours per day fell from 51% to 44%.

# **3.3.** The Amount of Time Spent on Housework Depends on the Work Situation

All else being equal, the time dedicated to household chores decreases in line with time spent on paid work for both men and women alike, regardless of the period in question (Figure IV). The availability in terms of time usually affects the amount of time spent on household chores. This is because those who work more hours are more productive (and spend less time than average on performing an identical task), are less exacting when it comes to the quality of housework and have the option to outsource housework (home help or purchase of substitute products such as ready meals), or because other unobserved characteristics are simultaneously linked to the two types of time. In both May and November 2020,

<sup>9.</sup> According to a Kolmogorov-Smirnov test for equality of distribution.



Figure II – Distribution of working hours of men and women during the spring and autumn of 2020 (hours per day)

Reading Note: The shaded histogram shows the distribution of working hours in May 2020; the transparent histogram relates to November 2020. In May 2020, 28% of men worked an average of between six and eight hours per day. This share increased to 32% in November 2020. Sources and coverage: INSERM/DREES, EpiCov survey, waves 1 and 2-2020; people aged between 20 and 65.



Figure III – Changes in the amount of time spent doing housework during the lockdowns (hours per day)

Sources: INSERM/DREES, EpiCov survey, waves 1 and 2-2020.

where men and women spent the same amount of time doing paid work, on average, women spent more time on housework than men. For example, during the first lockdown, women who spent between six and eight hours per day on paid work also spent more than two hours doing housework. Men in the same situation only spent an hour and a half on housework. Regardless of the amount of time spent on paid work, but in particular where this exceeded six hours per day, the amount of time spent on housework was higher during the first lockdown than during the second. This gap clearly reveals the surplus of household chores during the spring of 2020, particularly cooking as a result of the closure of canteens and restaurants, and housework due to the more continuous presence of adults and children in the home or the increased sanitary measures to be taken. This difference between the two periods with equivalent working time is significantly more marked for women, which demonstrates their greater over-investment during the first lockdown. The type of professional activity is also linked to the amount of time spent on housework (Figure IV). Men and women who do not have a job, whether they be not working, unemployed or in technical unemployment due to a cessation of business brought about by the health crisis, or on leave at the time of the survey, report a higher average amount of time spent on household chores than those who are actively employed.



Figure IV - Time spent doing housework according to working hours and occupational status

Sources: INSERM/DREES, EpiCov survey, waves 1 and 2-2020.

This discrepancy is more pronounced for women than for men. The amount of time spent on household chores is fairly similar for those who are working, whether that be on site, full-time from home or alternating between the two. It therefore does not appear that the commuting time reclaimed by remote workers has been reassigned to household chores.

With the given work situation and other characteristics, on average, people devoted an equivalent amount of time to household chores during the first and second lockdowns, with the exception of those working on site, who devoted more time to household chores during the first lockdown, particularly women working on site who even spent more time on household chores than women who were working from home. They may also have had to do more laundry and cleaning so as not to risk infecting other household members. This fairly surprising finding could stem from the unobserved characteristics of these on-site workers during the first lockdown. For example, some may have non-standard schedules, allowing them to perform more tasks during the day, or a need to over-invest in the household during a period in which they were the only ones not at home all the time. This finding could also be linked to the possible difficulty in accounting for time spent on household chores when the boundaries between the professional and private spheres become blurred. For example, those working from home could have performed household chores in short bursts, such as during tea breaks, or while working. This porosity between activities makes it more difficult to quantify the amount of time spent on household chores and may result in this being under-reported by homeworkers. The available data, which are less precise than the data from the French Time Use survey (Box 3) do not support these interpretation paths. Aside from women who work on site, the minor differences observed between the two lockdown periods in the amount of time spent on household chores for those with an equivalent work situation demonstrate that the changes in their working conditions have broadly contributed to the changes in their involvement in housework.

## **3.4. An Excessive Domestic Burden for Women with Young Children**

The family configuration (couple life, family size and the age of children) influences both the amount of housework to be done and the possibility of sharing tasks between the various members of the household (Figure V). Ordinarily, the presence of children increases the amount of housework required, particularly when they are young. This phenomenon was also observed during the health crisis. Women who were living with a partner and had one or more children under the age of 12 reported the highest average amount of time spent on housework, followed by those living with a partner, but whose voungest child is over 12, then single mothers. Women living with a partner devote more time to domestic chores than those who do not live with a partner, taking on more than the additional chores associated with the fact that they are living with another person. The circumstances surrounding the first lockdown exacerbated these differences: mothers performed even more household chores, particularly those with children under the age of 12 (all else being equal, on average, they devoted almost three hours per day to housework) and single mothers (two and a half hours on average). Mothers and women living with a partner but without children spent almost half an hour more each day on housework during the spring than in the autumn. However, the amount of time spent on housework by single women without children did not change during the health crisis.

During the first lockdown, men living with a partner and fathers of young children participated far more than usual with the housework, spending more than two hours per day on this, compared with one and a half hours during the second lockdown, the same as men living with a partner but without children. In other family configurations, it was primarily the women who took on the additional household chores required as a result of the increased needs of the other members of the household. During the second lockdown, the participation of men was no longer dependent on their family situation, as is usually observed (Champagne et al., 2015). Therefore, the over-investment of fathers has not continued, and the assumption of a return to normal appears to have been confirmed.

### **3.5.** No Social Gradient for Women during the First Lockdown

Regardless of the standard of living and the period in question (May or November 2020), the amount of time spent on household chores by women was higher than that of men (Figure VI). All else being equal, there was no significant difference in the amount of time spent on housework by women during the first lockdown based on their standard of living. Conversely, during the second lockdown, the amount of time spent on household chores fell in line with the standard

#### Box 3 – Measuring time on the basis of self-declarations

Different methods can be used to measure the amount of time spent on household and parenting activities (Solaz, 2009).

Activity diaries, used by Time use surveys, are the most reliable and objective method. People use the activity booklets to make a note of the way they used their time over one or two days using time intervals (usually 5 or 10 minutes). A duration is obtained by adding together the amounts of time spent on the various household activities performed throughout the day. This collection method is not particularly sensitive to memory and social desirability biases and limits measurement errors. However, such surveys are fairly costly, and response rates are sometimes low due to the significant amount of effort required on the part of the respondent.

Another method that can be used is to ask the respondent how much time they think they spend on average doing housework or a particular task. The findings are less precise and undoubtedly objective, but are less costly to obtain. This is the method that was used for the EpiCov survey used for this study.

Methodological studies comparing the two types of measurements have observed that self-reported times may be greater than those measured using activity diaries (Bianchi *et al.*, 2000). It is likely that respondents are including time spent doing housework simultaneously with other activities (Juster & Stafford, 1991; Kan, 2008). The discrepancy between the two measurements may be greater when working hours are irregular and when the amount of time spent on housework is small (Robinson, 1985; Gershuny *et al.*, 2005). Gender-based differences do not appear to be consistent. Women are better than men at reporting the amount of time they spend on housework in Britain (Kan, 2008), but this is not the case in Norway or Denmark (Bonke, 2005).



Figure V – Time spent doing housework according to family configuration and the period in question

Sources: INSERM/DREES, EpiCov survey, waves 1 and 2-2020.

of living, and was significantly reduced when compared with the first lockdown for women in the wealthiest households. The latter were no doubt – once again – able to outsource a certain number of chores; something that was almost impossible during the first lockdown. For men, on the other hand, the average time spent on household chores varied little based on their standard of living during both the first and second lockdowns. Regardless of their standard of living, the amount of time that they spent on housework during the first lockdown was higher than that observed during the autumn, but did not vary significantly based on their standard of living.

The findings are similar for other social stratification indicators, such as their level of education or their socio-professional category (Figure VI). During the first lockdown, the amount of time devoted to household chores was the same for those who have a secondary level of education and those with university degrees. Women with a qualification below spent more time on housework. In November, the social gradient was much steeper. Those with the highest level of





Sources: INSERM/DREES, EpiCov survey, waves 1 and 2-2020.

education devoted less time (around 20 minutes less per day) to housework than during the first lockdown. For men, the same was true of income: their degree of participation in household chores remained the same, regardless of their level of education. On average, they devoted a little more than an hour and a half per day to housework (so an hour less than women). No significant difference was observed between the first and second lockdowns with the exception of men with secondary level education, who participated less during the second one.

During the first lockdown, and still while checking individual, professional and family characteristics, no changes were observed in the average amount of time spent on household chores by women according to their socioprofessional category, which is at odds with what is observed outside of the context of the pandemic, where the amount of time spent on housework decreases as their position in the social hierarchy increases (Brousse, 2015). However, this social gradient re-emerges during the second lockdown. Women in management positions and intellectual professions spent significantly less time performing housework, as was the case for associate professionals and white-collar workers, albeit to a lesser extent. The social gradient was more pronounced among men than among women during the first lockdown, and was more stable: tradespeople and managers spent less time on household chores than associate professionals, white-collar

workers and manual labourers. In other words, the spring lockdown did not bring about any differences in participation in household chores for men depending on their social categories; however, it erased social categories for women.

#### 3.6. Significant and Unevenly Shared Parenting Time during the First Lockdown

The time devoted to children, or parenting time, was particularly high during the first lockdown for both fathers and mothers with at least one minor child. They had to ensure that school work was monitored, organise activities for their children, keep an eye on their screen time and respond to their constant demands (Thierry *et al.*, 2021). Childcare was more time-consuming for mothers. For example, almost 30% of fathers and more than 40% of mothers reported having spent more than six hours per day looking after their children, more than 10 percentage points higher than during the second lockdown, when childcare services and schools remained open (Figure VII).

As was the case for time spent on housework, parenting time appears to fit around time spent on paid work, with a clearly inversely proportional relationship between parenting time and time spent on paid work for both men and women, plateauing for those who work at least six hours per day (Figure VIII). Mothers who work at least six hours per day devoted more than four hours per day to their children during



Figure VII - Changes in parenting time during the lockdowns

Sources: INSERM/DREES, EpiCov survey, waves 1 and 2-2020.



Figure VIII - Parenting time according to working hours and occupational status

Sources: INSERM/DREES, EpiCov survey, waves 1 and 2-2020.

the first lockdown. This stability of parenting time in the case of typical working hours is linked to the fact that the care that women provide cannot be compressed. Although men participated more in parenting during the first lockdown, their degree of investment was largely determined by their working hours: the more hours they worked, the less they helped out, and there was no plateau as was the case for women. This finding is consistent with what has been observed in other national contexts. In other words, parenting time is less flexible for women than it is for men. Regardless of their professional constraints, women devoted more time to their children. Nevertheless, fathers also took on double the amount of daily work during the first lockdown. Parenting time decreased significantly in November 2020 when compared with the spring, regardless of the amount of time spent doing paid work, following the same trend as was observed for housework. The lower limit was around two and a half hours per day for men, regardless of whether they spend between six and eight hours per day on paid work, or more.

Among those who do not work, no difference was observed in the time devoted to children, regardless of whether they were unemployed or on leave, particularly during the first lockdown (Figure VIII). Parenting time is longer and men experiencing technical unemployment or on leave during the first lockdown took advantage of the time this freed up in order to look after their children, approximately five hours per day on average. Based on their working conditions, men working full-time from home devoted more time to their children during the first lockdown, although the differences between them and those working on site were not significant. Regardless of their working conditions, working fathers and mothers alike devoted more time to their children during the first lockdown than during the second (one hour more per day for those working full-time from home).

This parenting time is, of course, strongly linked to the family configuration, particularly when the children are young<sup>10</sup> (Figure IX). The care and educational supervision that a child requires varies depending on their age. During the pandemic, mothers living with a partner with at least one child under 12 and single mothers devoted significantly more time to their children than mothers living with a partner with one or more older children, regardless of the period, but more so during the first lockdown. Parenting time was particularly long during the first lockdown for mothers of children under 12, who spent five and a half hours a day looking after their children on average, compared with less than four and a half hours a day in November. Single mothers also devoted a great deal of time to their children, but there were no significant differences between the two periods, and they spent slightly less time than mothers living with a partner. The latter finding is unexpected, since single mothers are not able to rely on a partner to reduce the burden of looking after children. The smaller amount of parenting time spent by mothers who live alone when compared with those living with a partner during the first lockdown could be linked to the fact that the children from single-parent families were older<sup>11</sup> or more independent.

The same trends are observed for men: the differences in time between the two periods are

large for fathers of preschool or primary school children, while the differences are small for other family configurations. For both men and women alike, the time devoted to children over the age of 12 did not change between the two lockdowns, since they are more independent when it comes to school work and leisure time.

In normal times, social differences are usually a little less marked for parenting time than for time spent doing housework: the women with the highest levels of education spend just as much time or even more time with their children, while they spend less time on housework than those that are not as well-educated (Sayer et al., 2004). This relationship between the level of education and parenting time was also observed during the first lockdown: all else being equal, women with a secondary and higher education spent more time with their children than those with a lower level of education, with all mothers with a tertiary qualification spending the same amount of time with their children on average (Figure X), which demonstrates the value placed on education and good parenting standards by the most highly educated people during the first lockdown, that were relaxed during the second lockdown. The relationship between the level of education and parenting time therefore follows an inverse U curve. The trends among men are different, with very little difference being observed based on their qualification and among the most educated; however, those who a priori have more egalitarian standards participated less than the others during the first lockdown, which is at odds with what is usually observed (with the exception of men without qualifications). This lesser involvement by the most educated men during the first lockdown, a phenomenon that was also observed in Germany (Kreyenfeld & Zinn, 2021) may result from their more demanding professional constraints (tasks associated with managing a team remotely, for example). Finally, it is for those with a secondary education and those who have completed two years of higher education that the difference in parenting time between the two periods is the greatest, which is indicative of their greater involvement during the spring lockdown.

While there is no income gradient for parenting time for men, the differences are more marked for women, particularly during spring 2020. All

<sup>10.</sup> This parenting time is also linked to the number of children (Pailhé et al., 2019b) but we have decided to focus on the age of the eldest child to limit crossover and keep the number of subgroups reasonable.

<sup>11.</sup> Our models do not check the age of the children in single-parent households for staffing reasons.



Figure IX – Parenting time according to family configuration and period

Sources: INSERM/DREES, EpiCov survey, waves 1 and 2-2020.

else being equal, the parenting time devoted to children was higher during the first lockdown for women belonging to the wealthiest households (above the 6<sup>th</sup> standard of living decile). These are also the women for whom the amount of time devoted to children fell the most between the first and second lockdowns, most likely as a result of heavier use of paid childcare or outsourced activities (extra-curricular activities, for example) at that time.

For men, there are clear differences based on socio-professional category: whether during the first or second lockdown, white-collar workers report the highest parenting times, followed by associate professionals. These differences across socio-professional categories are less marked among women, with the exception of manual labourers, who devoted less time on average to their children during the first lockdown, with equivalent activity, perhaps because their partner was not working (manual labourers, with whom they are often paired as a result of social homogamy, were the most likely to have been experiencing technical unemployment), or because they are less well-equipped for supervising their children's school work since, on average, they have a poor level of education. With the notable exception of female manual labourers, the socio-professional category has no impact: both men and women alike devoted significantly more time to their children during the first lockdown than during the second. Those who are in managerial or intermediate

professions saw the largest reduction in the amount of time they devoted to their children between the first and second lockdowns. Regardless of the social stratification indicator used, it was the most privileged mothers who increased their parenting time the most during the first lockdown, whether that be because some had time when they would normally have been at work freed up, because their child's normal (extra-curricular) activities were no longer possible, because they over-invested in caring for their children to prevent them from spending too much time in front of a screen (CAFC, 2021).

\* \*

The lockdown measures and restrictions on movement put in place to combat the COVID-19 pandemic disrupted daily schedules and brought about an increase in housework and parenting. The amount of time that was devoted to these tasks was particularly high during the first lockdown in spring 2020, and that increased housework and parenting workload involved both men and women alike. The decline in time dedicated to household activities in the autumn, which was more marked among men, appears to indicate a rapid return to normal, as Sánchez *et al.* (2021) observed in the United Kingdom. The restructuring of people's time brought about



Figure X – Parenting time according to socio-economic variables (income, educational level and socio-professional category) and the period in question

Sources: INSERM/DREES, EpiCov survey, waves 1 and 2-2020.

by the first lockdown therefore does not appear to have had a lasting impact and our starting assumption of a return to normal in the autumn appears plausible.

Looking after children, and in particular the youngest ones, was especially time-consuming for parents: the equivalent of more than one part-time job. Some time devoted to children cannot be reduced, particularly during the times when schools were closed. However, the length of that time also reveals the weight of good parenting standards, such as that of parental availability to ensure the best possible development of the child (Hays, 1996; Lareau, 2011). The monitoring of school work presented a particular challenge for parents, they invested heavily in their children's education over long periods of time to provide schooling within the home (CAFC, 2021; Thierry et al., 2021). This parenting time varied more than the amount of time spent doing housework during the lockdowns. It was very high during the first lockdown, but reduced during the second lockdown in the autumn of 2020 due to the fact that schools remained open and it was once again possible to outsource.

As studies conducted in other national contexts have shown, the time spent performing household and parenting tasks was highly sensitive to people's occupational status and working hours, with this being the same during the first and second lockdowns. Time availability, the assignment of which was exogenous during the first lockdown, played a key role in the amount of time allocated to household chores. However, contrary to the theoretical predictions, this difference in time spent on household chores based on occupational status does not have the same impact on men and women. Indeed, it was more marked for men than for women. This greater flexibility of time spent doing housework around time spent doing paid work has only been observed for men within the context of the pandemic, the increase in time spent on household chores in the event of unemployment generally being higher for women than for men. The exceptional period of the first lockdown, which was marked by a complete retreat into the home, increased needs and a change in the conditions under which paid work was carried out, which may even have involved the complete stoppage of work, resulted in men investing an unprecedented amount of time in household chores. Due to their initial low investment, men had a greater margin for increase, whereas women were already close to the limit of what it is possible to do.

The increase in time spent on household tasks was seen in all socio-professional categories. During the first lockdown, women belonging to higher social classes performed more housework than normal, to the point that the social differences usually observed in the performance of domestic tasks were eliminated during this period. The extra time spent on housework by the most educated women when compared with the least educated was greater for French women than for German women, but less than for Spanish women (Farré et al., 2021; Kreyenfeld & Zinn, 2021). Those with the highest level of education typically rely more heavily than others on outsourcing housework, and their standards as regards home maintenance are more flexible. They were the least affected by the lockdown measures (CAFC, 2021). Parenting time, which usually depends little on the level of education. was actually higher for mothers with the highest levels of education during the first lockdown.

In spite of the occupational status of both men and women becoming more similar - and the reduced potential for outsourcing housework - women continued to perform the bulk of household chores. The amount of time spent by men on household chores has certainly increased, but to a lesser extent, such that the gender-based distribution of housework has only been slightly affected as a result of this exceptional situation. Gender-based differences were still prominent: with the same working hours or with identical occupational statuses, the differences between men and women remained. Although the amount of available time played a part in this, gender roles still explain a large proportion of the time spent on household chores, both during lockdown and in normal times. In addition, these findings indicate that gender-based differences are more resistant to change than social differences.

Although, in terms of available time, working hours remain a key factor in determining the amount of time invested in household and parental tasks, the differences between the sexes remain, even when their work situation is the same. The available time theory alone therefore cannot explain the allocation of time that was observed during lockdown. The fact that the most educated women and those in higher social classes participated particularly heavily in housework during the first lockdown suggests that their resources did not allow them to negotiate greater involvement by their partners. However, in the absence of couple-level data that would allow for the examination of the distribution of the relative financial resources of each partner, it is not possible to test the relative

resources theory in this case. Finally, the fact that the gender-based differences persist far more than social differences demonstrates that the weight of gender norms is heavy, even in situations where the professional activities of men and women are more evenly matched. This joins many other studies that demonstrate the resilience of gender norms, in keeping with the theories based on gender roles. This resilience is particularly evident when it comes to the types of tasks that are performed by men and women (Blair & Lichter, 1991; Tai & Treas, 2013). Men generally perform occasional tasks, which may be organised based on their availability, while women are more likely to take on the less pleasant, more time-consuming, repetitive and routine tasks. This need for permanent availability is added to by all of the work they do in organising family life and anticipating and taking care of the needs of others, which was especially burdensome during the lockdown periods. □

#### Link to the Online Appendix:

 $https://www.insee.fr/en/statistiques/fichier/6477744/ES_Pailhe-et-al_Annexe-en-ligne_Online-appendix.pdf$ 

#### BIBLIOGRAPHY

Adams-Prassl, A., Boneva, T., Golin, M. & Rauh, C. (2020). Inequality in the impact of the coronavirus shock: Evidence from real time surveys. *Journal of Public Economics*, 189, article 104245. https://doi.org/10.1016/j.jpubeco.2020.104245

Akerlof, G. A. & Kranton, R. E. (2000). Economics and identity. *The Quarterly Journal of Economics*, 115(3), 715–753. https://doi.org/10.1162/003355300554881

Alon, T., Doepke, M., Olmstead-Rumsey, J. & Tertilt, M. (2020). The Impact of COVID-19 on Gender Equality. NBER, *Working Paper* N° 26947. Retrieved April 16, 2021. http://www.nber.org/papers/w26947.pdf

Andrew, A., Cattan, S., Costa Dias, M., Farquharson, C., Kraftman, L., Krutikova, S., ... & Sevilla, A. (2020). The gendered division of paid and domestic work under lockdown. IFS, *Working Paper* N° W21/17. https://ifs.org.uk/publications/15497

Barhoumi, M., Jonchery, A., Lombardo, P., Le Minez, S., Mainaud, T., Raynaud, E., Pailhé, A., Solaz, A. & Pollak, C. (2020). Les inégalités sociales à l'épreuve de la crise sanitaire : un bilan du premier confinement. Insee, *France, portrait social* - édition 2020, pp. 3–36.

https://www.insee.fr/fr/statistiques/4797670?sommaire=4928952

Becker, G. S. (1985). Human capital, effort, and the sexual division of labor. *Journal of Labor Economics*, 3(1, Part 2), S33-S58. https://doi.org/10.1086/298075

Behrman, J. R. (1997). Intrahousehold distribution and the family. In: *Handbook of Population and Family Economics*, Vol. 1 Part A, pp. 125–187. https://doi.org/10.1016/S1574-003X(97)80021-9

**Berk, S. (1985).** *The gender factory. The apportionment of work in American households.* New York: Plenum. https://doi.org/10.1007/978-1-4613-2393-8

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

Biroli, P., Bosworth, S., Della Giusta, M., Di Girolamo, A., Jaworska, S. & Vollen, J. (2021). Family life in lockdown. *Frontiers in psychology*, 12. https://doi.org/10.3389/fpsyg.2021.687570

Blair, S. L. & Lichter, D. T. (1991). Measuring the division of household labor: Gender segregation of housework among American couples. *Journal of Family Issues*, 12(1), 91–113. https://doi.org/10.1177/019251391012001007

**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. IZA *Discussion Papers* N° 14375. https://www.econstor.eu/handle/10419/236406

Bonke, J. (2005). Paid work and unpaid work: Diary information versus questionnaire information. *Social Indicators Research*, 70(3), 349–368. https://doi.org/10.1007/s11205-004-1547-6

Boring, A. & Moroni, G. (2021). Turning back the clock: Beliefs in gender norms during lockdown. LIEPP *Working Paper*. https://www.sciencespo.fr/women-business/fr/node/75981.html

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

Brousse, C. (2015). Travail professionnel, tâches domestiques, temps « libre ». Économie et statistique, 478-480, 119–154. https://doi.org/10.3406/estat.2015.10560

Champagne, C., Pailhé, A. & Solaz, A. (2015). Le temps domestique et parental des hommes et des femmes : quels facteurs d'évolutions en 25 ans ? *Économie et statistique*, 478-480, 209–242. https://doi.org/10.3406/estat.2015.10563

Champeaux, H. & Marchetta, F. (2021). Couples in Lockdown, 'La Vie En Rose'? Evidence from France. CEPR, Covid Economics series, *Working paper*. https://hal.uca.fr/hal-03149087

Chiappori, P. A. (1997). Introducing household production in collective models of labor supply. *Journal of Political Economy*, 105(1), 191–209. https://doi.org/10.1086/262071

**CAFC, Collectif d'Analyse des Familles Confinées (2021).** *Familles confinées. Le cours anormal des choses.* Vulaines-sur-Seine: Éditions du Croquant.

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. & Churchill, B. (2021). Dual-earner parent couples' work and care during COVID-19. *Gender, Work & Organization*, 28, 66–79. https://doi.org/10.1111/gwao.12497

Cunningham, M. (2001). Parental influences on the gendered division of housework. *American Sociological Review*, 66(2), 184–203. https://doi.org/10.2307/2657414

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/s11150-020-09502-1

**Dominguez-Folgueras, M. (2021).** Difficult Times: The Division of Domestic Work under Lockdown in France. *Social Sciences* 10: 219. https://doi.org/10.3390/socsci10060219

Farré, L., Fawaz, Y., González, L. & Graves, J. (2021). Gender Inequality in Paid and Unpaid Work During Covid-19 Times. *Review of Income and Wealth*, online 17 December 2021. https://doi.org/10.1111/roiw.12563

Gershuny, J., Bittman, M. & Brice, J. (2005). Exit, Voice, and Suffering: Do Couples Adapt to Changing Employment Patterns? *Journal of Marriage and Family*, 67, 656–665. https://doi.org/10.1111/j.1741-3737.2005.00160.x

Greene, W. H. & Hensher, D. A. (2010). *Modeling ordered choices: A primer*. Cambridge University Press. https://doi.org/10.1111/j.1741-3737.2005.00160.x

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

Hank, K. & Steinbach, A. (2021). The virus changed everything, didn't it? Couples' division of housework and childcare before and during the Corona crisis. *Journal of Family Research*, 33(1). 99–114. https://doi.org/10.20377/jfr-488.

Hays, S. (1996). The cultural contradictions of motherhood. New Haven: Yale University Press.

**Hipp, L. & Bünning, M. (2020).** Parenthood as a Driver of Increased Gender Inequality during COVID-19? Exploratory Evidence from Germany. *European Societies*, 23, 658–673. https://www.tandfonline.com/doi/full/10.1080/14616696.2020.1833229

Hupkau, C. & Petrongolo, B. (2020). Work, Care and Gender during the COVID-19 Crisis. *Fiscal Studies*, 41(3), 623–651. https://doi.org/10.1111/1475-5890.12245

**Jauneau, Y. & Vidalenc, J. (2020).** Durée travaillée et travail à domicile pendant le confinement: Des différences marquées selon les professions. *Insee focus* N° 207. https://www.insee.fr/fr/statistiques/4801229

Juster, F. T. & Stafford, F. P. (1991). The Allocation of Time: Empirical Findings, Behavioral Models, and Problems of Measurement. *Journal of Economic Literature*, 29(2), 471-522. https://www.jstor.org/stable/2727521

Kan, M. Y. (2008). Measuring housework participation: The gap between "stylised" questionnaire estimates and diary-based estimates. *Social Indicators Research*, *86*(3), 381–400. https://doi.org/10.1007/s11205-007-9184-5

Kan, M. Y., Sullivan, O. & Gershuny, J. (2011). Gender convergence in domestic work: Discerning the effects of interactional and institutional barriers from large-scale data. *Sociology*, 45(2), 234–251. https://doi.org/10.1177/0038038510394014

Kreyenfeld, M. & Zinn, S. (2021). Coronavirus and care: How the coronavirus crisis affected fathers' involvement in Germany. *Demographic Research*, 44, 99–124. https://doi.org/10.4054/DemRes.2021.44.4

Lareau, A. (2011). *Unequal childhoods: Class, race, and family life* (2<sup>nd</sup> ed.). Berkley and Los Angeles: Univ of California Press. http://www.jstor.org/stable/10.1525/j.ctt1ppgj4.

Pailhé, A., Solaz, A. & Souletie, A. (2019a). How do women and men use extra time? Housework and childcare after the French 35-hour workweek regulation. *European Sociological Review*, 35(6), 807–824. https://doi.org/10.1093/esr/jcz039 Pailhé, A., Solaz, A. & Stanfors, M. (2021). The great convergence: Gender and unpaid work in Europe and the United States. *Population and Development Review*, 47(1), 181–217. https://doi.org/10.1111/padr.12385

Pailhé A., Solaz, A. & Tanturri, M. T. (2019b). The Time Cost of Raising Children in Different Fertility Contexts: Evidence from France and Italy. *European Journal of Population*, 35, 223–261. https://doi.org/10.1007/s10680-018-9470-8

Petts, R. J., Carlson, D. L. & Pepin, J. R. (2021). A gendered pandemic: Childcare, homeschooling, and parents' employment during COVID-19. *Gender, Work & Organization*, 28(S2), 515–534. https://doi.org/10.1111/gwao.12614

**Presser, H. B. (1994).** Employment schedules among dual-earner spouses and the division of household labor by gender. *American Sociological Review*, 59(3), 348–364. https://doi.org/10.2307/2095938

**Robinson, J. P. (1985).** The validity and reliability of diaries versus alternative time use measures. In: Juster FT & Stafford FP (eds.), *Time, Goods, and Well-being*, pp. 33–62. Ann Arbor: University Press of Michigan.

Safi, M., Coulangeon, P., Ferragina, E., Godechot, O., Helmeid, E., Pauly, S., Recchi, E. *et al.* (2020). La France confinée. Anciennes et nouvelles inégalités. In: Lazar, M., Plantin, G. & Ragot, X. (Eds.), *Le monde d'aujourd'hui*, pp. 95–116. Paris: Presses de Sciences Po. https://doi.org/10.3917/scpo.lazar.2020.01.0093

Sánchez, A. R., Fasang, A. E. & Harkness, S. (2021). Gender division of housework during the COVID-19 pandemic. *Demographic Research*, 45, 1297–1316. https://doi.org/10.4054/DemRes.2021.45.43

Sayer, L. C., Bianchi, S. M. & Robinson, J. P. (2004). Are parents investing less in children? Trends in mothers' and fathers' time with children. *American Journal of Sociology*, 110(1), 1–43. https://doi.org/10.1086/386270

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, 523–549. https://doi.org/10.1111/cars.12315

Shelton, B. A. & John, D. (1996). The division of household labour. *Annual Review of Sociology*, 22(1), 299–322. https://doi.org/10.1146/annurev.soc.22.1.299

Sevilla, A. & Smith, S. (2020). Baby steps: The gender division of childcare during the COVID-19 pandemic. *Oxford Review of Economic Policy*, *36*(Supplement\_1), S169–S186. https://doi.org/10.1093/oxrep/graa027

**Solaz, A. (2009).** « Histoire conjugale et division du travail au sein du couple », dans A. Régnier-Loilier (dir.), *Portraits de famille : l'enquête Étude des relations familiales et intergénérationnelles*, pp. 265–288. Paris: Ined.

Tai, T. & Treas, J. (2013). Housework Task Hierarchies in 32 Countries, *European Sociological Review*, 29 (4), 780–791. https://doi.org/10.1093/esr/jcs057

Thierry, X., Geay, B., Pailhé, A., Berthomier, N., Camus, J., Cauchi-Duval, N., Lanoë, J.-L. *et al.* (2021). Les enfants à l'épreuve du premier confinement. *Population & Sociétés*, N° 585.

https://www.ined.fr/fr/publications/editions/population-et-societes/enfants-a-epreuve-du-premier-confinement/ 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

Warszawski, J., Bajos, N., Barlet, M. *et al.* (2021). A national mixed-mode seroprevalence random populationbased cohort on SARS-CoV-2 epidemic in France: the socio-epidemiological EpiCov study. https://www.medrxiv.org/content/10.1101/2021.02.24.21252316v1

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

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(sup1), S576–S588. https://doi.org/10.1080/14616696.2020.1832700

				-
	Women	Men	Mothers	Fathers
Time spent on housework (hours)				
0	0.005 (0.070)	0.034 (0.182)	0.002 (0.049)	0.028 (0.166)
0-0.5	0.035 (0.183)	0.115 (0.319)	0.018 (0.133)	0.107 (0.309)
0.5-1	0.148 (0.355)	0.279 (0.449)	0.113 (0.317)	0.252 (0.434)
1-2	0.336 (0.472)	0.322 (0.467)	0.331 (0.470)	0.337 (0.473)
2-4	0.319 (0.466)	0.170 (0.375)	0.351 (0.477)	0.192 (0.394)
4-6	0.091 (0.287)	0.046 (0.209)	0.097 (0.297)	0.051 (0.220)
6+	0.068 (0.252)	0.034 (0.182)	0.087 (0.282)	0.032 (0.177)
Time spent parenting (hours)	· · ·	· · · ·		
0	0.028 (0.164)	0.038 (0.192)	0.026 (0.160)	0.035 (0.185)
0-0.5	0.033 (0.178)	0.064 (0.244)	0.033 (0.178)	0.065 (0.246)
0.5-1	0.064 (0.244)	0.111 (0.314)	0.064 (0.245)	0.109 (0.312)
1-2	0.142 (0.349)	0.203 (0.403)	0.142 (0.349)	0.206 (0.405)
2-4	0.224 (0.417)	0.245 (0.430)	0.228 (0.419)	0.245 (0.430)
4-6	0.151 (0.358)	0.120 (0.325)	0.151 (0.358)	0.120 (0.325)
6+	0.359 (0.480)	0.219 (0.414)	0.357 (0.479)	0.219 (0.414)
Time spent working (hours)				
0	0.430 (0.495)	0.362 (0.480)	0.356 (0.479)	0.225 (0.418)
<2	0.019 (0.136)	0.017 (0.130)	0.016 (0.126)	0.018 (0.134)
2-4	0.035 (0.184)	0.026 (0.158)	0.040 (0.196)	0.023 (0.151)
4-6	0.065 (0.247)	0.052 (0.222)	0.069 (0.254)	0.061 (0.239)
6-8	0.234 (0.423)	0.243 (0.429)	0.265 (0.441)	0.289 (0.453)
8-10	0.159 (0.366)	0.221 (0.415)	0.185 (0.388)	0.278 (0.448)
10+	0.058 (0.234)	0.080 (0.271)	0.069 (0.253)	0.106 (0.308)
Age			(=====)	()
<30	0.164 (0.371)	0.156 (0.363)	0.058 (0.234)	0.036 (0.186)
30-39	0.225 (0.417)	0.195 (0.396)	0.403 (0.490)	0.312 (0.463)
40-49	0.238 (0.426)	0.246 (0.431)	0.425 (0.494)	0.456 (0.498)
50-59	0.245 (0.430)	0.256 (0.436)	0.114 (0.317)	0.182 (0.386)
60+	0.127 (0.333)	0.147 (0.354)	0.001 (0.031)	0.015 (0.120)
Standard of living decile				(0.120)
D1	0 096 (0 295)	0 079 (0 270)	0 095 (0 293)	0 062 (0 240)
D2-D3	0.142 (0.349)	0 119 (0 323)	0.159 (0.366)	0.125 (0.331)
D4-D5	0.168 (0.373)	0 158 (0 365)	0 178 (0 383)	0 179 (0 384)
D6-D7	0 203 (0 403)	0 211 (0 408)	0 234 (0 424)	0 241 (0 428)
D8-D9	0.200 (0.400)	0.246 (0.430)	0.219 (0.424)	0.241 (0.420)
D10	0.111 (0.314)	0.128 (0.335)	0.082(0.274)	0.200 (0.407)
Standard of living missing	0.053(0.223)	0.060(0.237)	0.033 (0.178)	0.100 (0.300)
Qualification	0.000 (0.220)	0.000 (0.201)	0.000 (0.170)	0.000 (0.172)
Primany	0 097 (0 296)	0 000 (0 208)	0.069(0.254)	0 074 (0 262)
<baccalaureate< td=""><td>0.165 (0.371)</td><td>0.243 (0.429)</td><td>0.139 (0.346)</td><td>0.074 (0.202)</td></baccalaureate<>	0.165 (0.371)	0.243 (0.429)	0.139 (0.346)	0.074 (0.202)
Baccalaureate	0.216 (0.411)	0.243 (0.423)	0.103(0.340)	0.201 (0.403)
2 years of higher education	0.210(0.411)	0.133(0.400)	0.190(0.390)	0.201 (0.401)
4 years of higher education	0.355 (0.476)	0.272 (0.443)	0.335 (0.430)	0.300 (0.401)
	0.109(0.373)	0.107 (0.390)	0.195 (0.590)	0.212 (0.409)
Couple without children	0 335 (0 170)	0 313 (0 175)		
Couple with abildren <12 years	0.000 (0.472)	0.343 (0.473)	0.000 (0.000)	0.000 (0.000)
Couple with children >12 years	0.242 (0.420)	0.200 (0.407)	0.094 (0.491)	0.037 (0.400)
Single percent for $ u  <  z $ years	0.030(0.237)	0.031 (0.200)	0.220 (0.420)	0.230 (0.423)
	0.070(0.204)	0.031 (0.172)	0.170 (0.303)	0.007 (0.250)
Uther	0.251 (0.433)	0.277 (0.448)	0.000 (0.000)	0.000 (0.000)

Table A1 – Description of the samples (first model), frequencies (standard error)

\_\_\_\_\_

→

	Women	Men	Mothers	Fathers
Socio-professional category				
Farmer, craftsman, trader	0.043 (0.203)	0.093 (0.290)	0.048 (0.214)	0.102 (0.302)
Manager	0.188 (0.390)	0.275 (0.447)	0.207 (0.405)	0.316 (0.465)
Intermediate occupation	0.275 (0.447)	0.227 (0.419)	0.283 (0.451)	0.235 (0.424)
White-collar worker	0.357 (0.479)	0.120 (0.325)	0.355 (0.479)	0.110 (0.313)
Manual worker	0.057 (0.232)	0.218 (0.413)	0.047 (0.211)	0.209 (0.406)
SC missing	0.080 (0.271)	0.068 (0.251)	0.059 (0.236)	0.028 (0.166)
Housing	· · ·			
Apartment	0.331 (0.470)	0.315 (0.465)	0.280 (0.449)	0.228 (0.420)
House	0.659 (0.474)	0.674 (0.469)	0.712 (0.453)	0.767 (0.423)
Other	0.010 (0.101)	0.011 (0.105)	0.008 (0.089)	0.005 (0.072)
Region				
Overseas	0.034 (0.181)	0.032 (0.177)	0.040 (0.197)	0.031 (0.173)
Île-de-France	0.168 (0.374)	0.178 (0.382)	0.165 (0.371)	0.170 (0.375)
Other region	0.798 (0.402)	0.790 (0.408)	0.795 (0.404)	0.800 (0.400)
Partner working outside the	0.349 (0.477)	0.305 (0.461)	0.510 (0.500)	0.443 (0.497)
home				
Strict lockdown	0.453 (0.498)	0.461 (0.499)	0.448 (0.497)	0.446 (0.497)
Survey wave 2	0.436 (0.496)	0.425 (0.494)	0.429 (0.495)	0.415 (0.493)
Employment situation				
Not working	0.200 (0.400)	0.156 (0.363)	0.107 (0.309)	0.030 (0.172)
Unemployed	0.070 (0.255)	0.066 (0.248)	0.069 (0.253)	0.042 (0.200)
Technical unemployment	0.073 (0.261)	0.075 (0.263)	0.079 (0.270)	0.080 (0.272)
On site	0.339 (0.473)	0.404 (0.491)	0.364 (0.481)	0.479 (0.500)
Full-time remote working	0.133 (0.339)	0.127 (0.333)	0.161 (0.368)	0.153 (0.360)
Hybrid working	0.098 (0.298)	0.107 (0.309)	0.119 (0.324)	0.143 (0.350)
On leave	0.086 (0.280)	0.066 (0.248)	0.101 (0.301)	0.073 (0.260)
Ν	10,093	8,313	4,096	3,055

#### Table A1 – (contd.)