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COVID-19 and the gender gap in work hours

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Caitlyn Collins, Department of Sociology, Washington University in St Louis, 1 Brookings Drive, St. Louis, Missouri 63130, USA. Email: c.collins@wustl.edu School and day care closures due to the COVID-19 pandemic have increased caregiving responsibilities for working parents. As a result, many have changed their work hours to meet these growing demands. In this study, we use panel data from the US Current Population Survey to examine changes in mothers' and fathers' work hours from February through April 2020, the period of time prior to the widespread COVID-19 outbreak in the United States and through its first peak. Using person-level fixed effects models, we find that mothers with young children have reduced their work hours four to five times more than fathers. Consequently, the gender gap in work hours has grown by 20-50 per cent. These findings indicate yet another negative consequence of the COVID-19 pandemic, highlighting the challenges it poses to women's work hours and employment.

KEYWORDS

COVID-19, family, gender, motherhood, work

1 | INTRODUCTION

The COVID-19 pandemic has fundamentally altered everyday ways of life across the globe. The direct health implications of the pandemic are profound: hundreds of thousands have died and millions have tested positive for COVID-19 (World Health Organization, 2020). Nearly every country has been hit. Beyond the disastrous health consequences, the pandemic has also ravaged national economies with soaring unemployment and work, school and day care closures. The rapid growth in unemployment in the United States happened at unprecedented rates, with peak unemployment reaching 14.7 per cent in April. This is the highest rate since 1933 during the Great Depression (Bureau of Labor Statistics, 2020). For workers fortunate enough to remain

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employed, time and financial pressures are particularly acute on top of caregiving responsibilities – especially for those with children living at home. Working parents are simultaneously juggling paid work with caregiving demands, but we know very little about how families are managing these incompatible tasks at this unprecedented time.

In this article, we assess how dual-earner, heterosexual married couples with children have adjusted their work time during the pandemic. This question is important as these couples must negotiate how to allocate childcare, homeschooling and the increase in housework along with the demands of their employers. We test arguments that the pandemic will help equalize certain aspects of gender equality as men increase their contributions to childcare and household labour (Schulte, 2020). The care work involved in childrearing has historically fallen to mothers (Thistle, 2006). Yet, stay-at-home orders incentivized many employers to allow workers to telecommute when able to perform work at home. For men working from home, the invisible labour of childcare and housework may be newly noticeable. Fathers cannot as easily ignore the demands of childcare when day care and schools are cancelled and one's temporary office also serves as children's play space and virtual classroom. Among those who remain employed during the pandemic, this may lead to greater equality in work hours. The increased visibility and the heightened childcare demands brought by school and day care closures may lead men to make greater contributions to family labour, particularly among those who are able to telecommute. Anecdotally, couples describe tackling childcare workloads in shifts to allow each parent uninterrupted paid work time (Miller, 2020; Schulte, 2020). In this article, we examine the role of telecommuting provisions in shaping parents' working hours. It is possible that the increased prevalence of telecommuting may facilitate greater equality in task-sharing and the gendered division of labour at home. Thus, we pay careful attention to those couples who were the most likely to telecommute as the pandemic spread. If the pandemic has equalized men's and women's caregiving and work contributions, we should see no differences in work time for dual-earner telecommuting couples.

However, if fathers do not increase their household contributions, the pandemic may further exacerbate gender gaps in childcare and housework at the cost of women's work commitments. Previous research has shown that women and men equally perceive domestic tasks needing to be done, but men are more likely to ignore these responsibilities, leaving them to be done by women partners (Thébaud, Kornrich, & Ruppanner, 2019). From this perspective, the increased visibility of care work and housework may do little to motivate men's contributions to family labour. Instead, the loss of childcare support through day care and school may increase women's unpaid domestic labour, causing further disruptions to their jobs and work life. Thus, our main focus is on what happens to the gender gap in work hours — whether it is static, narrows or widens — to empirically test arguments that the pandemic will equalize gender relations in time use.

In this article, we analyse the most recent data from the US Current Population Survey (CPS) to examine whether the pandemic is reshaping household gender relations or if long-standing patterns of gender inequality are only becoming worse. We leverage the panel design of the CPS to examine whether and to what extent mothers and fathers have cut back their work hours between February and April 2020 – the period of time prior to the widespread COVID-19 outbreak and through its first peak in April, at which point most US states were under stay-at-home orders. Focusing on differences between mothers and fathers to understand whether work hours were reduced, we provide an initial test of whether parents are equally scaling back work commitments to meet increased family care needs, or if mothers are reducing their hours of employment much more than fathers.

Examining the full population of dual-earner and married heterosexual parents from February to April 2020, we find that mothers of children aged less than 13 had a larger reduction in work hours than fathers during the COVID-19 peak. Using person-level fixed effects models that control for stable characteristics of mothers and fathers, we discover that mothers' work hours fell over five times as much as fathers' between March and April 2020. Mothers scaled back their work hours by about 5 per cent (two hours a week), while fathers' work hours remained largely stable. To put this in context, this is nearly double the reduction in work hours experienced by women in the United States during the 2007–2009 Great Recession, where women's weekly work hours fell by just over 30 minutes per week (Landivar, 2012).

In addition to examining the general population of dual-earner married heterosexual parents, we also investigate changes in work hours among a sample of parents where both mothers and fathers are employed in telecommutingcapable occupations (those where at least 50 per cent of workers stated they were able to telecommute, as reported by Alon, Doepke, Olmstead-Rumsey, & Tertilt, 2020).1 We examine this sub-population because these parents have comparable working conditions that allow them to simultaneously perform paid work and childcare in their homes.2 Although we are unable to determine exactly which respondents in our data telecommuted, these individuals are the most likely to have done so during the pandemic. Therefore, by focusing on this sub-group, we explore whether working from home at a time of increased caregiving demands in the context of day care and school closures had an equivalent impact on mothers' and fathers' work time.

Among telecommuting-capable parents with children aged 1 through 5, we find that the reduction in hours worked per week between February and April is nearly 4.5 times larger for mothers than fathers. This indicates that even when both parents are able to work from home and may be more directly exposed to childcare and housework demands, mothers are scaling back to meet these responsibilities to a greater extent than fathers. Ultimately, our analyses reveal that gender inequality in parents' work hours has worsened during the pandemic amongst mothers and fathers with young children, even among those who were able to telecommute.

This study provides early evidence that the pandemic has increased gender inequality in the labour force with troubling consequences for mothers. Despite the increased necessity and visibility of domestic labour brought about by school and work closures in the face of COVID-19, fathers appear to not have reduced their employment contributions as much as mothers. Instead, mothers have scaled back their hours to meet new caregiving demands. Not only does this mean that the gender gap in domestic labour is increasing, but it also highlights another mechanism that may undermine women's career advancement. Scaling back work hours is part of a 'downward spiral' that often leads to labour force exits (Glass & Riley, 1998, p. 1426), as inflexible employers disallow changes to work hours or penalize employees unable to meet work expectations in the face of growing care demands (Blair-Loy, 2003; Stone, 2007). As states reopen and onsite work resumes, mothers may also be at higher risk for job loss as schools and day cares may not reopen or resume normal schedules and employers will be facing a historic recession and may look for ways to cost save. If women scale back their work hours but men do not in the pandemic's aftermath, future merit-based opportunities and pay rises may disproportionately benefit men whose work commitments remained high during the pandemic. The future is unknown, but our results indicate mothers are bearing the brunt of the pandemic and may face long-term employment penalties as a consequence. For this reason, it is critical for employers, managers and other leaders to recognize the gendered implications of the pandemic on workers to avoid this consequential mistake: the loss of women workers.

2 | DATA

We used individual-level data from the CPS, accessed through the Integrated Public Use Microdata Series (Flood, King, Rodgers, Ruggles, & Warren, 2020). The CPS is the most comprehensive source of data for monthly labour statistics in the United States. Each month, approximately 60,000 households are surveyed from all 50 states and the District of Columbia. Sampled households are included for four consecutive months, omitted for eight months, then surveyed again for four consecutive months. Respondents are restricted to the civilian population aged 16 years or older who do not reside in institutionalized settings. We use data spanning February through April 2020 in order to examine the period of time prior to the COVID-19 outbreak in the United States through its first peak in April, at which point most states were under social distancing guidelines that included work stoppages, telecommuting orders (when possible) and stay-at-home mandates.

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We use two analytical samples to examine gender differences in hours worked from February through April 2020. First, we examine the full population of those who remained employed in jobs with regular hours during the past year. This sample includes only heterosexual married parents where both were employed because we are interested in gender dynamics occurring within families. To control for stable respondent characteristics (discussed below), we leveraged the panel component of the CPS and restricted our sample to respondents who were consecutively surveyed in February, March and April. We also excluded respondents who did not work at all in the past week and top-coded work hours at 60.3 This sample provides a representative and inclusive set of households in the United States where gender dynamics may be observed to test whether the conditions of the pandemic have increased or decreased gender inequality between mothers and fathers.

We also make use of a second analytical sample that restricts respondents to mothers and fathers with comparable work settings. In addition to the characteristics noted above, we limit this second sample to only respondents where both married mothers and married fathers were employed in telecommuting-capable occupations. This allows us to test how household gender dynamics play out in settings where spouses are under similar working conditions and where the work of childcare and housework is equally visible to both parents. We identify telecommuting occupations as those where at least 50 per cent of workers stated they were able to telecommute, as reported by Alon et al.'s (2020) analysis of American Time Use Survey data from 2017 to 2018. These occupations are reported in Table 1.

We split each sample into three groups according to the age of the youngest child: 1 through 5, 6 through 12 and 13 through 17. This allows us to account for the ways that the demands of schooling and childcare differ by children's age. We omit parents of children under one year old as these individuals may be on parental leave. The CPS is a household survey, and all parents in the same home are included in the data. Therefore, our sample of heterosexual married couples has an equal number of mothers and fathers. In total, our sample includes: 7296 personmonths (2432 respondents), 2388 (796 respondents) with children aged 1 through 5, 2928 (976 respondents) with children aged 6 through 12 and 1980 (660 respondents) with children aged 13 through 17. Among those employed in telecommuting-capable occupations, our sample includes 2808 personmonths (936 respondents), 1140 (380 respondents) with children aged 1 through 5, 990 (330 respondents) with children aged 6 through 12 and 19 and 19 through 17.

For each subsample, we examine changes in work hours from month to month to infer whether the pandemic and associated day care and school closures were associated with a greater work disruption to mothers or fathers. We expect reductions in work hours to be smaller for parents whose youngest child is older than 12, as these children are usually more independent. In contrast, work-hour reductions are likely the most pronounced among parents with children younger than six years old who require close supervision. We also anticipate that parents of children aged 6 through 12 will have a larger reduction in work hours compared with parents of older children due to homeschooling demands that require parental involvement, as opposed to the more self-guided homeschooling approaches for older children.

TABLE 1	List of telecommuting	occupations, a	as identified by	Alon et al.	(2020)
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Life, physical and social science occupations
Arts, design, entertainment, sports and media
Management, business, science and arts
Legal
Business operations specialists
Architecture and engineering
Financial specialists
Computer and mathematical

3 | ANALYTIC STRATEGY

To test whether changes in work hours are similar for mothers and fathers with the onset of the pandemic, we run a series of fixed effects regression models predicting the number of hours respondents worked in the past week. Leveraging the panel design of the CPS that consecutively surveyed a set of respondents in each month, we include person-level fixed effects controlling for unobserved person-level characteristics that may be associated with work hours. This approach effectively models within-person changes in hours worked during the period of study.

We use hours worked in the past week as our dependent variable because we are interested in disturbances to paid work related to the COVID-19 pandemic. Hours worked last week should show more immediate pandemic-related changes than the alternative work-hour measure, usual hours worked. Our focal independent variable is month, capturing changes in work hours from February to March and April. Coefficients for this predictor shed light on how work hours changed from the month prior to the widespread COVID-19 outbreak in the United States, to its expansion in March, and its first peak in April. Our models include three additional covariates to control for additional changing person-level characteristics. First, we control for reported usual hours worked per week over the past year to account for job commitments prior to the pandemic. Including this control variable allows us to focus on the degree to which recent work hours deviated from usual work hours as a result of the pandemic. Two additional control variables measure whether respondents changed occupations or industries between months included in our sample period.

We report six independent fixed effects regression models for each subsample, predicting work hours in the past week independently for mothers and fathers, and for parents of children aged 1–5, 6–12 and 13–17. This allows us to simultaneously model the changes in work hours for mothers and fathers while also accounting for variation in the effects of control variables between these sub-populations. We then conduct Hausman tests to determine whether the changes in work hours associated with each month significantly differ between mothers and fathers.

In the results section, we first report trends for the full sample of employed heterosexual married couples to illustrate patterns across a wider population. Then, we explore the subsample of parents where both are employed in telecommuting-capable occupations as a test of how work hours have changed under the pandemic among parents with similar employment obligations that allow for household and caregiving tasks to be equally visible and accessible to mothers and fathers.

4 | RESULTS

4.1 | Employed married parents

Table 2 reports the results of the fixed effects models for the sample of CPS parents in heterosexual marriages with both parents employed during the period of study. In addition, Figure 1 illustrates predicted work hours and the gender gap in hours worked calculated from these fixed effects models. In general, we observe differences between mothers and fathers in hours worked across all groups of parents and in all months of data. Even prior to the pandemic, mothers worked between four and five hours less per week than fathers. Mothers and fathers of older children aged 13 through 17 tended to put in slightly more hours than parents with younger children, consistent with the fact that older children are more independent and parents may be at a more advanced career stage, requiring more work hours.

Examining differences between months, we find little significant change in work hours from February to March, suggesting that the effects of the pandemic were not felt as acutely by that time.4 By April, however, the pandemic and associated day care/school closures were in full swing, and our results indicate significant reductions in work hours, particularly for mothers. Mothers of younger children aged 1–5, those aged 6–12 and older children aged 13–17 each experienced a reduction of between 1.5 and 2 hours worked per week between February and April. The smallest reduction in work hours was among mothers with older children, while the largest is observed among

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	Children aged 1-	5	Models 1 and	Children aged 6-	12	Models 3 and	Children aged 1	3-17	Models 5 and
	Mothers	Fathers	2 coef. sig. differ. (0.05	Mothers	Fathers	4 coef. sig. differ. (0.05	Mothers	Fathers	6 coef. sig. differ. (0.05
	1	2	level)?	3	4	level)?	5	6	level)?
Month (February)									
March	-0.07 (0.40)	0.56 (0.50)	No	-0.60 (0.45)	-0.27 (0.46)	No	0.10 (0.51)	0.05 (0.43)	No
April	-1.77*** (0.51)	-0.45 (0.58)	Yes	-1.85*** (0.54)	-0.23 (0.48)	Yes	-1.47* (0.63)	-1.19* (0.53)	No
Fixed effects	Person	Person		Person	Person		Person	Person	
Constant	8.77** (3.29)	12.80* (5.07)	Yes	8.96* (4.41)	5.74* (2.53)	No	5.57* (2.65)	11.38*** (3.23)	No
N person-months	1194	1194		1464	1464		066	066	
R-squared	0.65	0.45		0.60	0.50		0.54	0.52	
Note. Models include	controls for usual h	nours worked, cha	ange in occupation	and change in indus	stry. Standard er	rors in parentheses			

TABLE 2 Dual-eamer married heterosexual households: person-level fixed effects models predicting changes in work hours, February through April 2020

*p < 0.05, **p < 0.01, ***p < 0.001.

FIGURE 1 Gender gap in hours worked among married, employed parents. *Source*. Current Population Survey, February, March and April 2020



mothers with children aged 6 through 12, whose work hours declined by nearly two hours. These findings suggest that the homeschooling demands of these younger, primary school-aged children have contributed to mothers' reduced work hours. Mothers of children aged 1–5 also scaled back their work hours by 1.8 hours, suggesting that the caregiving demands of young children also subtract from mothers' work time.

In contrast to mothers' work-hour reductions, we observed very little change in fathers' weekly work hours. Only among those with older children aged 13 through 17 did fathers' work hours show a significant reduction, declining by about 1.2 hours. Although work-hour demands tend to increase among older parents, so does flexibility and authority, and fathers of older children may be higher in the occupational hierarchy and thus have the power to reduce work time (Landivar, 2017). Interestingly, we did not observe a significant change in work hours among fathers of younger children, despite the fact that the caregiving and homeschooling demands for these children are much greater. Across all models, fathers' predicted work hours did not fall below 40 hours per week, indicating that while the pandemic had a major toll on all aspects of society, most fathers in heterosexual, dual-earner households continued to put in a full work week. Financial stress and the need to protect primary earners, most often fathers, may have instead exacerbated gender inequality in the division of paid and unpaid labour.

Comparing mothers' and fathers' work hours, Hausman tests confirm that the reduction in work hours between February and April was significantly larger for mothers than fathers among parents with children aged 1–5 and children aged 6–12. Consequently, the gender gap in hours worked grew during the COVID-19 pandemic. In February, mothers of children aged 6–12 were predicted to work about 4.7 hours less than fathers of children this age. By

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TABLE 3

	Children aged 1	-5		Children aged	6-12		Children aged	13-17	
	Mothers	Fathers	Models 1 and 2 coef. sig. differ.	Mothers	Fathers	Models 3 and 4 coef. sig. differ.	Mothers	Fathers	Models 5 and 6 coef. sig. differ.
	1	2	(0.05 level)?	3	4	(0.05 level)?	5	6	(0.05 level)?
Month (February)									
March	0.53 (0.58)	1.20 (0.79)	No	0.39 (0.79)	-0.08 (0.69)	No	0.36 (0.93)	0.78 (0.67)	No
April	-2.60** (0.84)	-0.56 (0.97)	Yes	-1.50 (1.01)	-0.40 (0.85)	No	-0.57 (0.89)	-0.33 (0.87)	No
Fixed effects	Person	Person		Person	Person		Person	Person	
Constant	13.04* (6.05)	20.51* (10.07)	No	8.44 (6.33)	0.51 (3.42)	No	4.30 (4.44)	5.38 (3.59)	No
N person-months	570	570		495	495		339	339	
R-squared	0.62	0.36		0.69	0.52		0.52	0.60	
Note. Models include	controls for usual	hours worked, cha	nge in occupation and	d change in indu	stry. Standard er	rors in parentheses.			

 $p_{p} < 0.05,$ **p < 0.01,***p < 0.001,

April, this gap grew by one third to 6.3 hours. Similarly, among parents with young children aged 1–5, the gender gap in hours worked grew from 4.9 hours in February to 6.2 hours in April. This constitutes an increase of over 25 per cent in the gender gap in hours worked. To put this in context, the gender gap in work hours *declined* by nearly 45 minutes during the 2007-2009 recession (Landivar, 2012), whereas between the short period of February to April 2020, this gap increased by one hour and 18 minutes for parents with children aged 1–5 and one hour and 36 minutes for parents with children aged 6–12.

These trends indicate that the pandemic is exacerbating gender inequality. Mothers appear to be taking on a larger burden of childcare and homeschooling at the expense of paid work time, as evidenced by their larger reduction in work hours compared with fathers. It is possible, however, that the trends observed in Figure 1 and Table 2 may partly reflect gender differences in work-hour reductions set by employers in onsite jobs that have experienced cutbacks (e.g., work-hour reductions in retail and food services). Thus, our next set of models apply fixed effects to predict changes in work hours among telecommuting-capable parents where both are able to work from home and may be less vulnerable to involuntary cuts to work hours.

4.2 | Telecommuting-capable married parents

Table 3 reports the results of fixed effects models examining within-person change in hours worked among parents employed in telecommuting-capable occupations.5 Corresponding to these results, Figure 2 illustrates the predicted



FIGURE 2 Gender gap in hours worked among heterosexual parents, both employed in telecommuting-capable occupations. *Source*. Current Population Survey, February, March and April 2020 weekly hours worked from these models for mothers and fathers as well as the calculated gender gap in hours worked by youngest child's age. Our findings are consistent with those observed in the more inclusive sample. However, the predicted changes to work hours are not nearly as large among mothers and fathers with older children aged 13–17. Among parents of younger children, we find that the reduction in hours worked between February and April is between 4 and 4.5 times larger for mothers than fathers. In households where the youngest child is aged 6–12, Table 3 reports a reduction of 1.5 work hours per week for mothers and 0.4 hours per week for fathers between February and April. Although the coefficients for these monthly differences are non-significant, the effect size for mothers is similar to what was observed in the more inclusive sample of working parents (Table 2). Among parents with young children aged 1–5, we find that mothers in telecommuting-capable occupations had a statistically significant reduction of 2.6 work hours between February and April, a change of about 7 per cent in weekly hours worked. In contrast, changes in fathers' work hours during this period were non-significant and predicted to be about 30 minutes, a difference of about 1 per cent. Viewed together, these findings indicate that mothers with young children reduced their hours over four times as much as fathers. Hausman tests confirm that the reduction in work hours was significantly larger for mothers than fathers.

Our examination of parents where both were capable of telecommuting during the pandemic suggests that the increased visibility of care work did not result in fathers' increased participation in caregiving. Instead, the greater childcare and family demands brought on by day care and school closures throughout the pandemic appear to have caused a major reduction in work hours for mothers, while fathers' work commitments were relatively unchanged.

5 | CONCLUSION

In this article, we identify how the pandemic impacted dual-earner parents' employment. The results indicate that, overall, mothers have reduced work time significantly more than fathers. This is especially true for those with primary school-age or younger children in the home for whom caregiving and homeschooling demands are most intense. Drawing upon the reports of dual-earner, married heterosexual couples, our results indicate that mothers' work hours are more vulnerable to reductions than fathers' when both are employed. Telecommuting may have buffered mothers from more extensive job loss as schools and day cares closed. Yet, amongst telecommuters, mothers with young children in the home (ages 1–5) report work time reductions. This is perhaps not surprising since the physical caregiving demands of preschool children are unrelenting. However, it is important to note that our sample includes couples where *both* parents are telecommuting and thus have similar working conditions. We know that young children are more likely to disrupt mothers' sleep and leisure than fathers' (Maume, Sebastian, & Bardo, 2010). Even in US households where parents aim for equal parenting, it's typical that for children, 'If something needs to get fixed, mom is the name they know' (Collins, 2020, p. 21). Under COVID-19 conditions, paid work may provide another arena through which young children fragment mothers' more than fathers' employment time. Given the long-term economic rewards associated with paid work, this article identifies one mechanism through which the pandemic is exacerbating gender inequalities.

Our results indicate that mothers' employment is disproportionately affected relative to fathers'. It is beyond the scope of this article to identify whether mothers' work-hour reductions are a consequence of their assuming a larger share of the domestic work (see Miller, 2020), employers' greater time demands on fathers than mothers, or whether in times of crisis families tend to revert to more traditional gender roles in the household division of labour. What is clear from robust government-collected data is that the pandemic is driving mothers to scale back employment.

The long-term consequences of this health and economic shock are not yet known. We may see that mothers are able to increase their work time when children return to day care and schools reopen. We are cautious about this optimism as employers will be looking for ways to save money and it may be at the expense of mothers who have already weakened their labour market attachment. Furthermore, schools may not reopen on full schedules and many

day care facilities may have ceased operations or operate on reduced capacity (Malik, Hamm, Lee, Davis, & Sojourner, 2020). Childcare demands and increased homeschooling expectations are likely to linger in many states into the next school year. To avoid long-term losses in women's labour force participation, employers should offer flexibility to keep mothers attached to employment, including allowing employees to work shorter hours. Further,

fathers should be encouraged to provide more hours of care for their children, which may mean sacrificing paid work hours to do so.

DECLARATION OF CONFLICTING INTERESTS

The authors declared no potential conflicts of interests with respect to the authorship and/or publication of this article.

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ENDNOTES

- ¹ Alon et al.'s (2020) identification of telecommuting-capable occupations used data from the 2017-2018 American Time Use Survey. The CPS data we analyse in this study does not include questions on whether respondents telecommuted. Therefore, our use of previously identified telecommuting-capable occupations provides the closest approximation for analysing households with parents who have telecommuted during the pandemic.
- ² Telecommuting occupations are defined broadly, therefore, it is possible that women and men are in different jobs within the same occupational category with varying access to telecommuting. Nonetheless, focusing on occupations that have been defined as telecommuting-capable is particularly relevant in the context of the COVID-19 pandemic when telecommuting was necessary for many workers. In addition, these occupational definitions for telecommuting are the closest measure of telecommuting we can use in our data.
- ³ Work hours were top-coded to 60 due to the outsized influence of a few outlier observations in this small sample. Topcoding to 60 hours a week retained 98 per cent of the sample.
- ⁴ The reference week in CPS is the week that includes the 12th of the month. Many stay-at-home orders and school closures did not go into effect until mid- to late-March.
- ⁵ As noted above, we define telecommuting-capable occupations according to Alon et al.'s analysis of 2017–2018 American Time Use Survey data. Due to stay-at-home orders, telecommuting became much more common during the COVID-19 pandemic and likely included a wider range of occupations. We are unable to specifically identify respondents who telecommuted in our data. Therefore, we use occupations previously identified as telecommuting-capable because these are the most likely to have transitioned to full-time telecommuting during the pandemic.

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