

Multiple burden during COVID-19: Working from home and the distribution of unpaid work within households

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Abstract

In mid-march 2020 - given the spread of the COVID-19 pandemic - a substantial share of the workforce suddenly had to work from home. The Austrian government encouraged employers to no longer let their workers go to their offices, if possible. In this paper, we study how working from home (WFH) during the COVID-19 lockdown is related to the within household distribution of unpaid labour. In the initial weeks of the pandemic there was a prominent argument that a lockdown - forcing people to stay at home - might have positive impacts on gender inequality by equalizing the distribution of unpaid labour. Our findings suggest that this is not automatically the case. It is worth mentioning, that the lockdown represents an exceptional situation, as almost any form of paid or unpaid child care (such as schools, kindergarten or grandmothers and -fathers looking after the children) was unavailable. Unpaid work regarding child care was largely provided by mothers. We estimate a logit regression model that links the probability of men doing relatively more unpaid work (compared to the situation before the lockdown) to influences of WFH of either both, or one partner in each couple's household. Our results show significant effects of increased probabilities that men take on more unpaid work regarding household work, if themselves or both partners are WFH. As for unpaid work related to child care we do not identify similar significant findings. This again reflects on the persistent unequal distribution of unpaid labour between the sexes, which in time of the COVID-19 pandemic lockdowns, has rather deteriorated than improved.

Introduction

The responsibility and organization of childcare tasks has always been a central point of conflict between conservative and progressive forces. Conservatives locate the responsibility in the private sphere, and especially among mothers. Progressives, on the other hand, see childcare as the responsibility of the *res publica*, especially the welfare state, which is supposed to provide institutional and publicly funded childcare. This is important, first of all, from the perspective of mothers, in order to enable or facilitate participation in the labour market, and thus an independent economic basis. Secondly, this can affect their children's life course, as publicly financed early childhood care and education are considered in the literature to be crucial for strengthening the chances of children from households that are economically worse off in absolute and relative terms (Petanovitsch and Schmid 2012).

At the beginning of the COVID-19 pandemic, some economists argued that the crisis could decrease gender inequalities in unpaid work, as many men are now forced to stay at home, thus seeing how much time is needed for housework and childcare – work that is predominantly done by women. As a result, it is argued that men would be more willing to take on a larger share of unpaid work in the future. Greater gender equity has therefore been an expected consequence of the pandemic (e.g. Alon et al. 2020). In contrast, several other scientific papers on the consequences of working from home from the past show very different results regarding its impact on gender equality (e.g. Lott, 2018; Wheatley 2012). We argue that the possibility to work from home is likely to reinforce existing role models and lead to multiple burdens for women, as the pandemic, in combination with school closures and the unavailability of grandparents for childcare, leads to a shift in childcare to the private sector. We assume that home office is a central mechanism here, because studies from Germany conducted before the COVID-19 pandemic indicate that working from home does not (automatically) change gender roles and the distribution of unpaid care work, does not provide either mothers or fathers with a gain in leisure time and even increases the care work performed by mothers (Lott, 2018; Lott, 2020).

In this context we would like to discuss the following questions in this paper:

- How did working from home affect the distribution of unpaid work during the strict COVID-19 restrictions?
- How does working from home affect the quality and length of working time and is it conducive to reconciling work and family life?
- What policy recommendations regarding more flexible working hours, working places, and gender equality can be derived from the findings?

In this paper we will shortly discuss our data and subsample, present some descriptive results on the distribution of unpaid work and the advantages and disadvantages of working from home during the COVID-19 restrictions. At the end, we will analyse the results of our econometric analysis and discuss our findings.

Data and Study Sample

We collected data on the distribution of paid and unpaid work within households and changes due to COVID-19 restrictions in Austria by means of an online questionnaire, which allows us to analyse these research questions more closely. In total 2,113 participants completed our survey during the strict COVID-19 restriction between 20.04.2020 and 14.05.2020. We collected data on time use, home office arrangements, mental health conditions, potential conflicts, the economic situation and several socioeconomic and demographic characteristics. Since working from home is only available to a certain

group of people and branches, our sample focuses on higher educated women and men, who live in Vienna. Thus, our data set is not representative of the Austrian population.

As we want to analyse how working from home during the very strict COVID-19 restrictions (the so-called “lockdown”) affects the distribution of unpaid work within couples we used a subset of 620 couples who have been employed or self-employed at this time and who also filled out the questions regarding their partner (such as partner’s employment status, income, etc.). Close to 81% of our information was provided by women (n=503). Furthermore, we had to exclude all same sex couples, as the sample size was too small. Table 1 shows the composition of our sample in more detail.

Descriptive Results

In this chapter, we provide descriptive results on the distribution of household chores and childcare tasks before the lockdown and how it has changed during the strict COVID-19 restrictions. Moreover, this section includes some results on the advantages and disadvantages of working from home (WFH) and changes in the quality of working time and work place during the lockdown by gender and household type.

i) Distribution of Unpaid work

Filling out the time use survey, many respondents stated that the limitation to 24 hours was challenging because the recent period has made concurrent activities indispensable (e.g. caring for children while working in home office, at the same time and in the same room). Feedback, that current days do not have 24 hours, but rather 36 to 42 hours, reflects this overload.

If paid and unpaid work are added up, women and men worked between 11 and 15 hours per day during the lockdown period. Single mothers worked the longest hours: on average almost 15 hours a day, 9 hours of those were spent for unpaid childcare and household tasks. The results for couples with children are roughly similar: Mothers work 14.5 hours - 9.5 of those are unpaid while fathers reported 13.75 hours of work, 7 of those being unpaid. This relation is also evident in households with children under 15 where both parents are working from home during the exit restrictions. The survey responses highlight the challenge of combining home office and childcare: *“I cannot tell you how impossible it is to combine childcare and home office”*. (comment from survey participant)

The study revealed a large difference in the use of time within couples, “he” being the breadwinner and working full-time, while “she” works part-time: Those women worked 13.25 hours a day, 7.5 of those being unpaid, while men work 13 hours, 5 of those being unpaid. In households without children, however, working time - by extent and type (paid/unpaid) is distributed more equally: in those cases where both partners were working from home, each one worked 8 hours for pay and additional 3 hours unpaid on average.

We asked couple households that distributed unpaid work relatively equally before the COVID-19 pandemic about their expectations about the within household distribution of unpaid work in the future. The results reveal that 60% of those couples with a relatively equal distribution before the COVID-19 restrictions also shared domestic work roughly equal during the restrictions. According to females, in 27.8% of cases unpaid work is conducted mainly by themselves, while 11.5% of them reported that males are doing the largest share of it. The answers given by males suggest that women are responsible for the majority of unpaid work to a minor extent (22.1%), while they reported that males doing a larger share of it to a larger extent (18.6%).

Table 1: Study Sample Size by Socio-Demographic Characteristics

HOUSEHOLD / COUPLE CHARACTERISTICS										
Region										
	Burgen-land	Carinthia	Lower Austria	Upper Austria	Salz-burg	Styria	Tyrol	Vor-arlberg	Vienna	R
n	25	17	110	58	23	42	11	6	308	22
%	4.02	2.73	17.65	9.32	3.70	6.75	1.77	0.96	49.52	2.54
Household Type										
	Couple wo. children	Couple w. children 0-2 y	Couple w. children 3-5 y	Couple w. children 6-9 y	Couple w. children 10-14 y	Other				
n	264	76	104	61	61	56				
%	42.44	12.22	16.72	9.81	9.81	9.00				
Working from Home										
	Both	No one	Only Woman	Only Man						
n	400	57	114	51						
%	64.31	9.16	18.33	8.20						
INDIVIDUAL CHARACTERISTICS										
Highest Education Completed										
	Primary/Lower Secondary		Higher Secondary		Tertiary					
	♀	♂	♀	♂	♀	♂				
n	84	147	84	139	440	336				
%	13.50	23.63	13.50	22.35	70.74	54.02				
Employment Status										
	Employee		Self-Employed		Short-Time Work					
	♀	♂	♀	♂	♀	♂				
n	529	486	49	85	44	85				
%	85.05	78.14	7.88	13.67	7.07	13.67				
Working Part-Time (<35h)										
	Yes		No							
	♀	♂	♀	♂						
n	381	168	241	454						
%	61.25	27.01	38.75	72.99						

Regarding the division of child care tasks, our study reveals a clear backlash to more traditional gender roles: 50% of those families that split child care tasks relatively equal within the household before COVID-19 reported that these tasks were shared relatively equally during the COVID-19 crisis as well. 40% of females answered that they are doing the largest share of childcare work, whereas only 23.9 % of males reported that childcare is now provided at the expense of women.

Figure 1 and 2 below show the distribution of household work and childcare tasks before and during lockdown in couple households. The X-axis depicts the division of household tasks before the lockdown, where a number equal to 1 refers to the fact that “the woman did all the work”, whereas number 11 on the contrary refers to the other extreme that “the man did all the work”. Number 6 states that the unpaid work at home is split relatively equally between both partners. The differently coloured bars indicate the share of households that stated “the woman does more during lockdown” (grey-purple), “nothing changed” (blue) and “the man does more during lockdown” (green).

Regarding household work (Figure 1), we see that where the share of “male partners do more during lockdown” is the highest in households, where the woman has taken on a relatively large part of the work before the lockdown (scale no. 3 to 5). When the work was split equally before (scale no. 6), in more than half of the households nothing changed, but if something changed women were more likely to take on more tasks at home than men. Overall we can conclude that women have done more unpaid work before (right-skewed distribution of household work) and are still doing relatively more when compared to their partners during lockdown. Figure 2 depicts the same picture for childcare tasks. It reveals a similar picture: the share of men who take on more childcare tasks is only higher in households, where the mother has done relatively more before the lockdown (scale no. 2 to 4). The effect is even stronger than when only housework is considered. Nevertheless, on absolute levels, women did more childcare work during the lockdown, especially where the duties were split equally or the fathers have done a bit more before the lockdown (scale no. 5 to 10).

Figure 1: Distribution of household chores between women and men

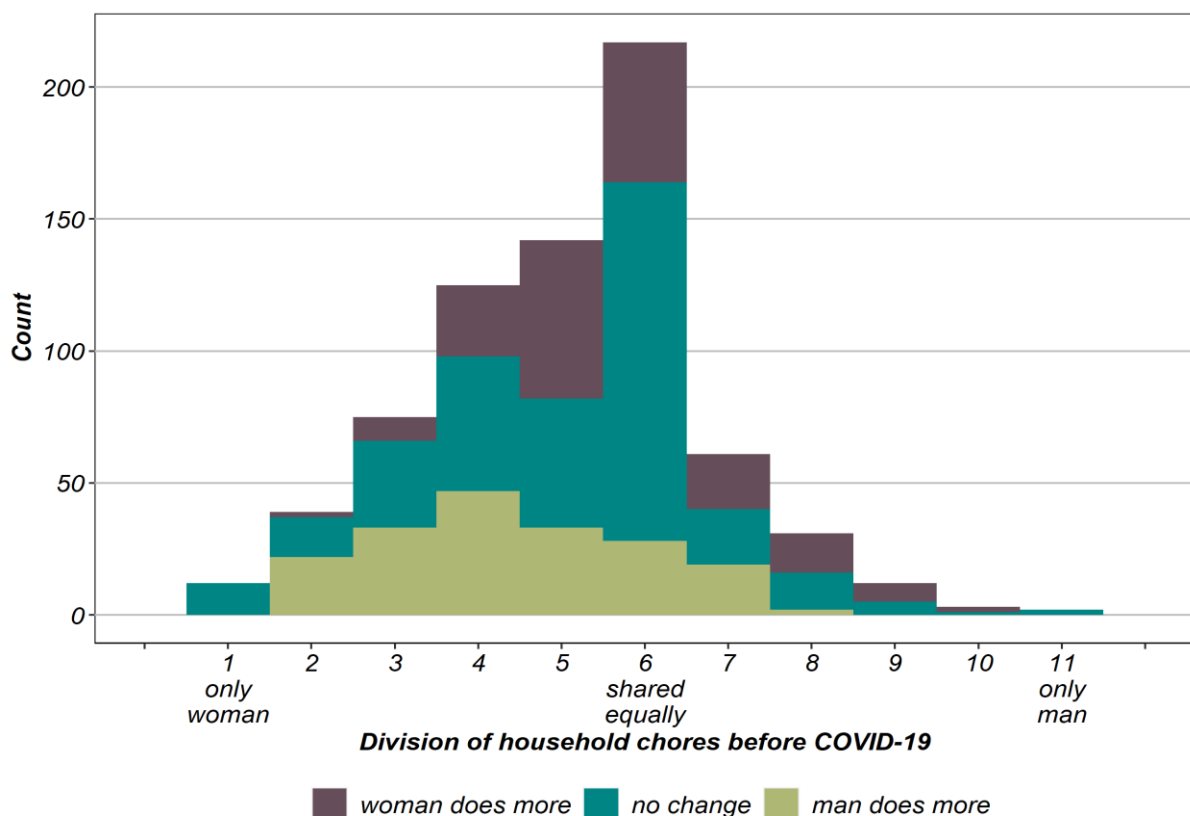
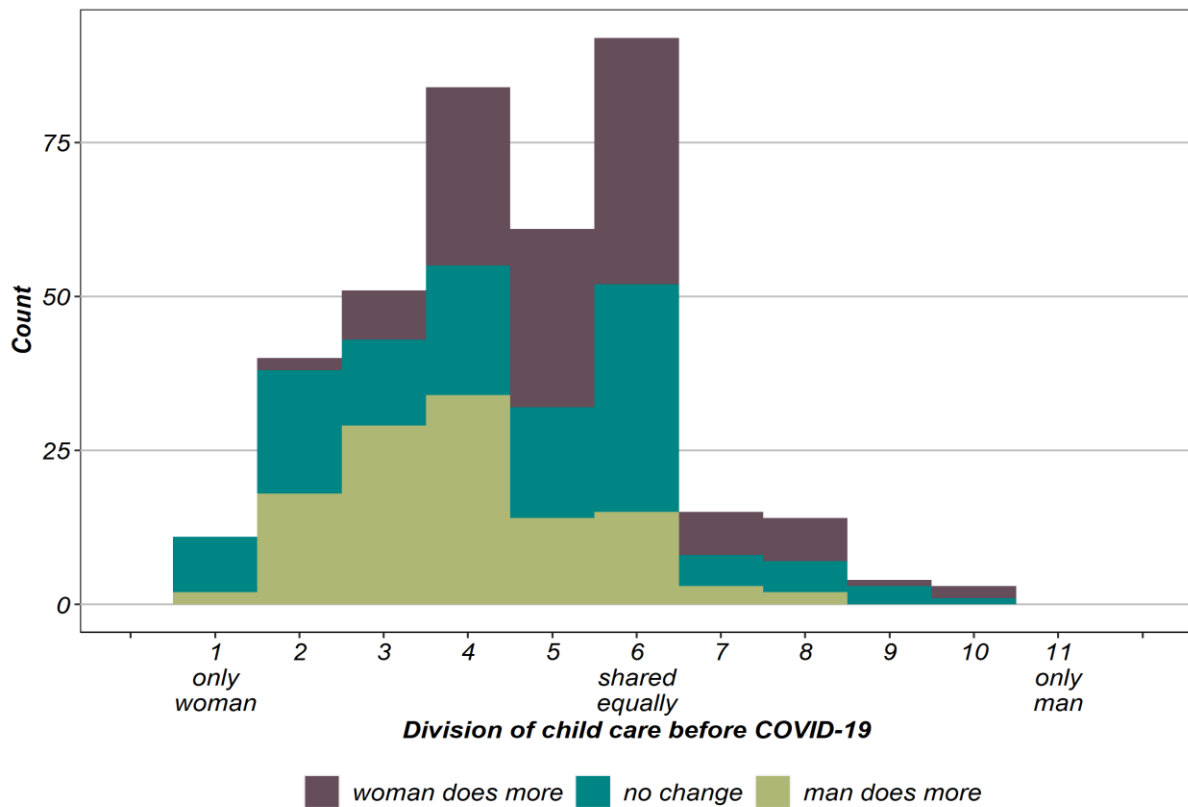


Figure 2: Distribution of childcare tasks between women and men



ii) Working From Home (WFH)

During the lockdown, the home became the center of our daily routine: work, studying and leisure activities took place within the same location, unavoidably. Some aspects of this time were perceived more positively and others more negatively, depending on whom you asked. This also applies to working from home (WFH), i.e. the relocation of the workplace into one's own home. In our survey, we asked respondents to evaluate their current situation while working remotely to find out how well WFH works under the exceptional circumstances of the COVID-19 pandemic. 419 couples without children and 330 couples with children (younger than 15), who worked either completely or at least partially from home, completed our question module about WFH. The corresponding questions covered different aspects such as advantages and disadvantages of WFH, different childcare forms during WFH and the quality of working time and work place.

WFH entails both advantages and disadvantages. Not having to commute every day and better reconciliation of family and work life are usually conceived as benefits from WFH. At the same time, the contact to supervisors, managers or colleagues might be more limited. Another potential drawback is the blurring of boundaries between work and leisure time. In our survey we asked women and men working remotely, how much they agree or disagree with statements regarding WFH. They were able to tick "Strongly agree", "Somewhat agree", "Somewhat disagree" or "Strongly disagree". Figure 3 and 4 show the findings by household type and gender (for men and women living in couple households with children under 15 years old and couples without children). The smaller the distance on the axis to the center, respondents on average agreed less with the statement. A clear picture emerges from Figure 3: mothers in couple households with children found it more difficult to concentrate while WFH, to complete tasks better at home than at the office, and to reconcile work and family life. Fathers found these aspects on average easier than their partners did. In contrast, the communication with supervisors, recognition of their own work performance by them, as well as the contact with colleagues, does not depend on the household type that strongly. Figure 4 shows the difference between male and

female respondents living in couple households without children. The differences between men and women, especially in the category of “concentration” for example, vanish almost. It seems therefore not random to conclude that due to the closing of childcare facilities and schools, it was mainly mothers who took over childcare duties, which is why they experienced WFH to be more difficult on average.

iii) Changes in the quality of working time and work place

The blurring of boundaries between work and leisure time therefore becomes more prevalent when WFH. This is confirmed by the indicator for quality of working time and work place, as shown in Figure 6 and 7. Again the experience differs by household type. Couple households with children under 15 had a similar experience to single parents. Fewer mothers had their own room to work from, worked less often during agreed working hours and had more difficulties separating work from leisure time (Figure 6). Here again, we also see that gender differences prevail. Mothers indicated that they had more difficulties with the blurring of boundaries between work and leisure time than fathers. Men more often had their own room, where they could close the door to work during official working hours, as compared to women. Couple households without children found it easier to separate work from free time, and were also less likely to work on weekends or do overtime while WFH.

Combining child care and work during the lockdown was a difficult task. Out of 529 respondents with children under 15, 25% of women stated that their partner took care of the children during their working hours, 30% said that the children took care of themselves, while 38% stated that they supervised the children in the same room while working. For men this picture is rather different, as shown in Figure 5. 51% of men reported that their partner was looking after the children, 27% that the children were keeping themselves busy and only 19 % stated that they were supervising their children in the same room. These results might at least partially explain why women have more difficulties to concentrate on their work compared to men.

Figure 5 Predominant child care form during WFH by Gender

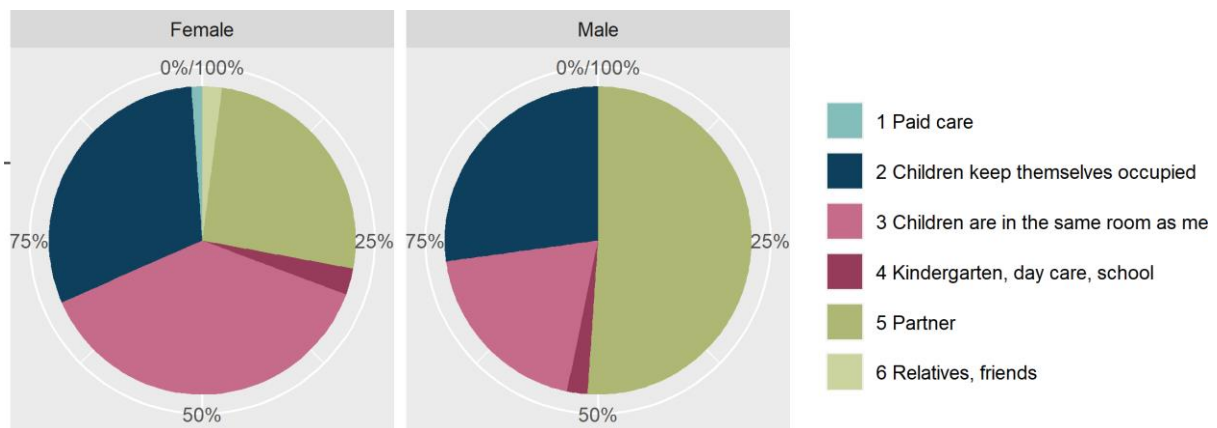


Figure 3: Average agreement to advantages and disadvantages of WFH for couples with children younger than 15 years old, separated by gender

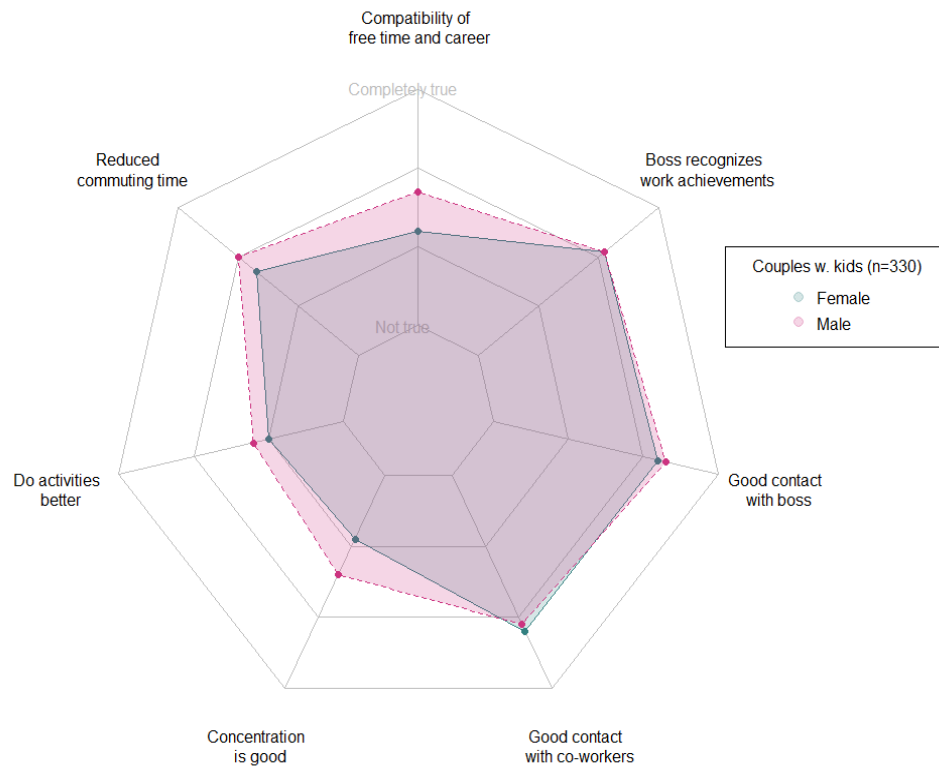


Figure 4: Average agreement to advantages and disadvantages of WFH for couples without children, separated by gender

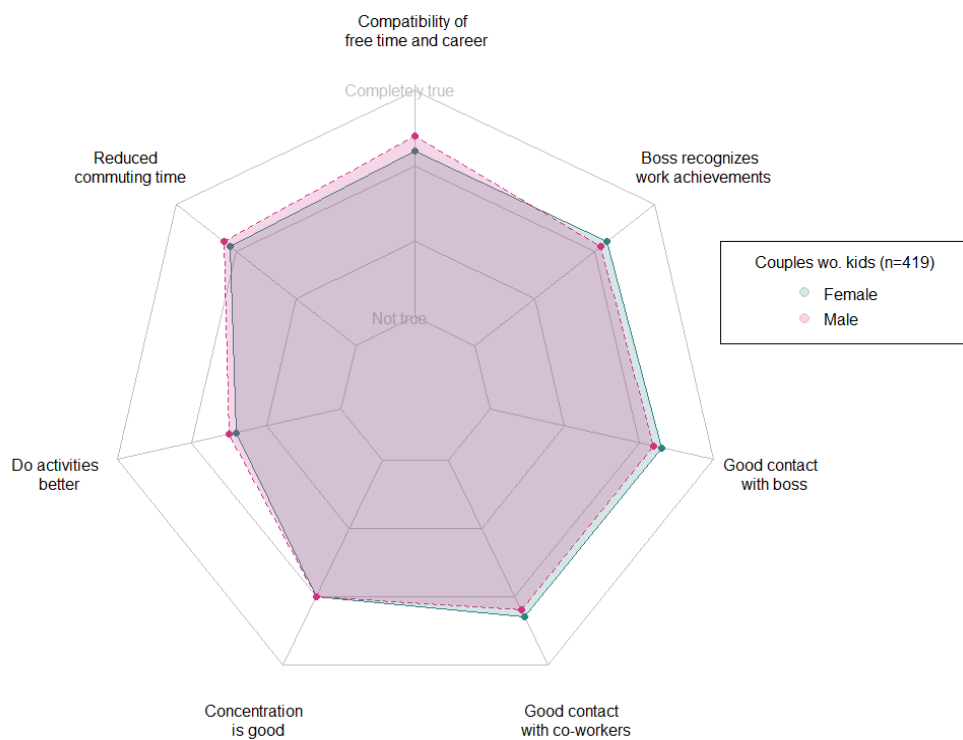


Figure 6: Average agreement on statements regarding the quality of WFH with children younger than 15 years old, separated by gender

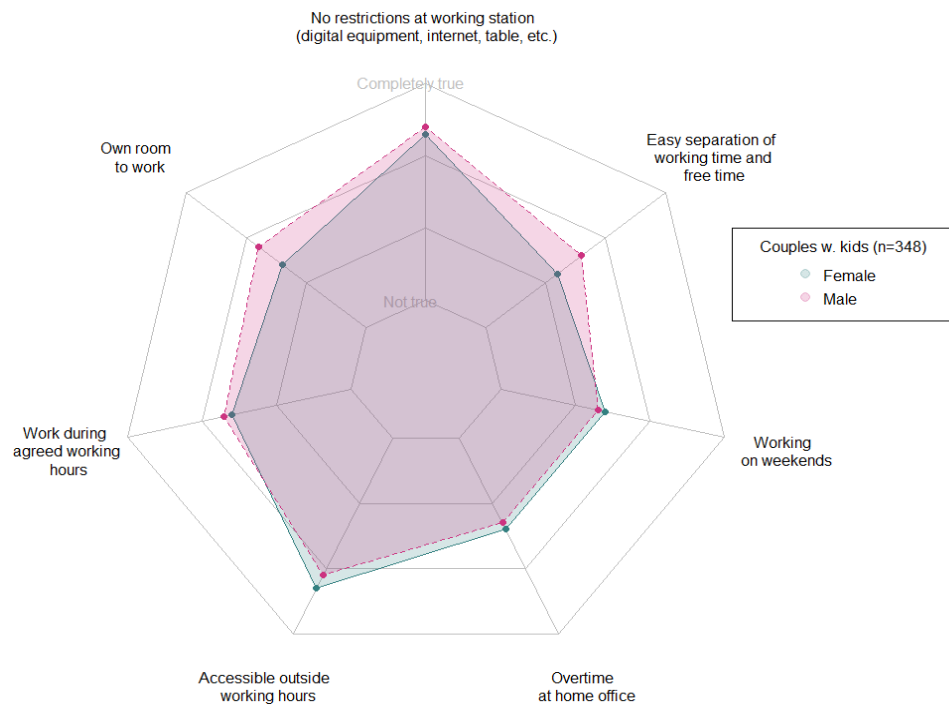
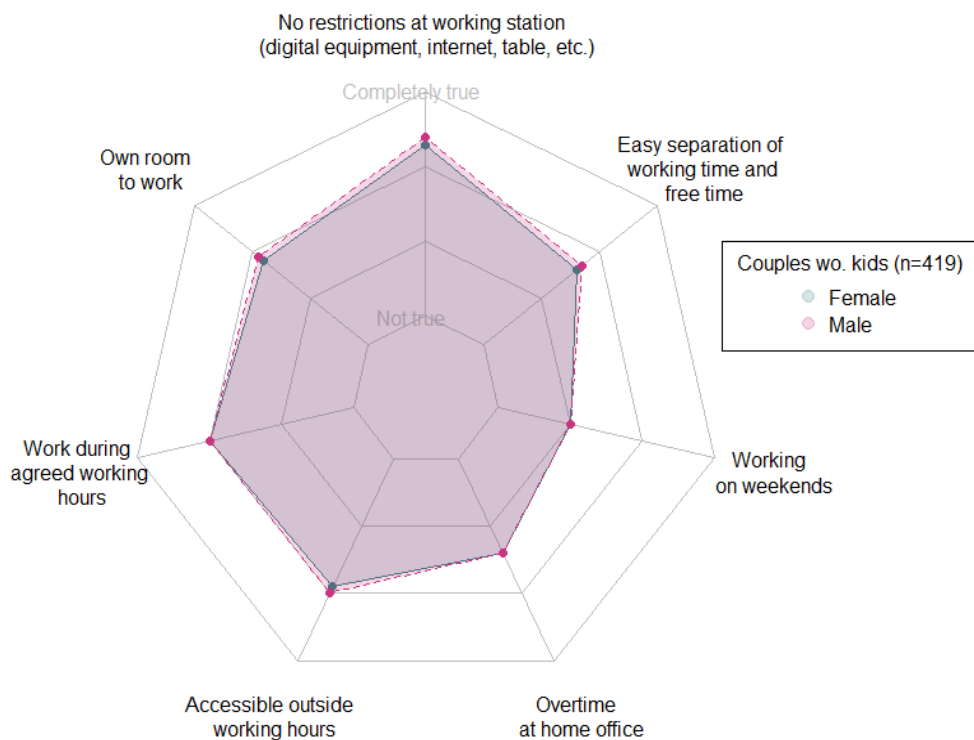


Figure 7: Average agreement on statements regarding the quality of WFH without children, separated by gender



Econometric Analysis

In the following chapter we will introduce our estimation strategy to analyse the effect of working from home on the distribution of unpaid work during the COVID-19 restrictions using a logit model. Thereafter, we will present and discuss our preliminary regression results.

Model and Estimation Strategy

Under “normal” circumstances, without any COVID-19 restrictions, it is not possible to establish a clear relationship between working from home (WFH) and the distribution of unpaid work, as people could select themselves into the treatment group of people working from home (selection problem). Thus, it would not be clear if the option of flexible work arrangements is a cause or a consequence of parents’ involvement in house and care work. Working from home may be endogenous to unpaid work and correlated with the error term, leading to biased (OLS-)estimates.

The COVID-19 restrictions offer the unique opportunity of a natural experiment, as teleworking arrangements have been introduced by law for some sectors. Consequently, WFH can be considered as randomly assigned and exogenous. Thus, we performed a logit regression to investigate the effect of working from home on the distribution of unpaid work within households (see Equation 1).

$$Y_i = \beta_0 + \beta_1 WFH + \beta_2 D_i + \beta_3 X_i + e_i \quad (1)$$

Our **dependent variable (Y)** indicates if the male partner within a couple took on a bigger share of unpaid work during the lockdown than before. This dummy variable is created by a question from our survey, indicating the distribution of unpaid work before and during the lockdown within a couple on a scale from one to eleven. This variable turns one if the man proportionally took on more unpaid work than before, but we do not account for the size of the effect. The main **explanatory variable** considered in this article is working from home (WFH), a factor variable specifying if both, no one, only the woman or only the man was working from home during the lockdown. In addition, we control for the initial distribution of unpaid work before the lockdown (D) and other characteristics (X) like age of the youngest child, education and working full- or part time.

Preliminary Regression Results

Table 2 shows the beta coefficients and significance levels of our logit regressions. We analysed the impact of working from home (WFH) on the distribution of housework (HW) for all couples in model (1) and on the distribution of childcare tasks (CC) for all couples with children younger than 15 years in model (2). Our dependent variables are dummy variables indicating if the male partner within a couple took on more housework or childcare tasks during the COVID-19 restrictions than before. Our (preliminary) regression results of model (1) indicate that if both partners are working from home, on average men seem to do more housework than before compared to those couples where no one is working from home. We also see a significant positive effect for couples where only the man is working from home. To give some insights about the magnitude of the effect, Table 3 shows the predicted probabilities of our WFH-variable. We can see that, if both partners are working from home the probability that the male partner does more housework increases by 69.5%, compared to couples where no one was working from home during the lockdown. If only the male partner is working from home this probability increases by 80.2%.

Additionally, we can see a significant negative effect on the probability that men did more housework during the lockdown, if the distribution of housework was already equally distributed or if the man took on a bigger share than his female partner before the lockdown, compared to those couples where the woman did the majority of household chores.

Model (2) only includes couples with children (younger than 15) and shows the effect of WFH on the distribution of childcare tasks. We can see that the positive effect of both partners working from home on the probability that the man took on more childcare tasks during the lockdown is not significant. This result indicates that if both partners are working from home on average men do more housework than before the lockdown, but this holds not true for child caring. We only see a significant positive effect for the case where only the man is working from home. In addition, the results show again a significant negative effect if the distribution of housework was already equally distributed or if the male partner took on a bigger share of the childcare tasks before the lockdown .

Table 2: Did men take on more housework (HW) or childcare tasks (CC) during the COVID-19 restrictions than before?

	<i>Dependent variable:</i>	
	Yes (HW)	Yes (CC)
	(1)	(2)
WFH: Both	0.822* (0.442)	0.689 (0.568)
WFH: Only Woman	0.426 (0.471)	-0.309 (0.629)
WFH: Only Man	1.398*** (0.603)	1.375** (0.677)
Hhtyp: Couple w. child 3-5y	0.241 (0.347)	0.163 (0.340)
Hhtyp: Couple w. child 6-9y	0.453 (0.387)	0.173 (0.387)
Hhtyp: Couple w. child 10-14y	-0.250 (0.420)	-0.311 (0.412)
Hhtyp: Couple wo. children	-0.005 (0.323)	
Hhtyp: Other	0.158 (0.406)	-0.871 (0.568)
Part-time: Woman	-0.126 (0.220)	0.017 (0.360)
Part-time: Man	0.409* (0.210)	0.618** (0.296)
Primary/Lower Secondary Educ: Woman	-0.270 (0.383)	0.307 (0.513)
Tertiary Educ: Woman	-0.086 (0.278)	-0.584 (0.413)
Primary/Lower Secondary Educ: Man	-0.096 (0.306)	-0.728 (0.444)
Tertiary Educ: Man	-0.135 (0.241)	-0.281 (0.331)
Distribution of HW: Equal	-1.158*** (0.254)	
Distribution of HW: Man more	-0.645** (0.289)	
Distribution of CC: Equal		-1.416*** (0.362)
Distribution of CC: Man more		-1.181** (0.548)
Constant	-1.316** (0.598)	-0.317 (0.773)
Observations	622	329
Log Likelihood	-338.800	-186.700
Akaike Inf. Crit.	711.600	405.400

Note:

*p<0.1; **p<0.05; ***p<0.01

Table 3: Predicted probabilities of the variable “Working from Home” (WFH)

	<i>Dependent variable:</i>	
	Yes (HW) (1)	Yes (CC) (2)
WFH: Both	0.695*	0.666
WFH: Only Woman	0.605	0.423
WFH: Only Man	0.802***	0.798**
Observations	622	329

Discussion and Conclusion

In the last couple of years, many social scientists, like Lott (2018, 2020) or Wheatley (2012), argued about the effects of working from home and analysed if it would be a promising instrument to improve the reconciliation of family and work. Thus, the debate was reopened during the strict COVID-19 restrictions as now many more people have been forced to work from home. Some scientists, like Alon et al. 2020, argued that it would be possible that men would do more unpaid work, while others feared that women have to deal with the additional household and childcare tasks alone. While our results give insights on how couples coped with the situation of working from home (WFH) and unpaid work, such as household tasks and child care duties, the findings cannot be transferred 1:1 to WFH under “normal” conditions. Nevertheless, the (preliminary) results of this paper can provide a better understanding of the distribution of unpaid work within couples and how it changed during the lockdown.

Our descriptive results show that unpaid work, especially childcare tasks, are not equally distributed within most couples in our sample whether before nor during the lockdown, as many women still take on a bigger share of the household chores and childcare responsibilities. Nevertheless, our econometric results indicate that men proportionally took on more housework during the lockdown than before, when both were working from home (compared to those couples where nobody was working from home). This doesn’t mean that men on average did more housework than their female partners, only that they took on a bigger share than before. In addition, our econometric results do not give any information about how much more or which household chores were done by male partners, but our descriptive results indicate that the steps towards a more equal distribution have been rather small. Furthermore, we can’t find a significant effect of both partners working from home on the probability that fathers took on more childcare responsibilities than before. This has only been the case for couples, where fathers have been working from home alone.

Nevertheless, WFH seems to have individual advantages and disadvantages, but they differ between women and men and different household types. Working remotely during the lockdown was very challenging, especially for families with children and here again, especially for women. Mothers were more likely to find themselves working overtime, on weekends, with blurred boundaries between work, leisure and family time. Fathers were more likely to state that on average their concentration at home is good and they have their own room to work from. When couples without kids were asked about their experiences with WFH, the gender gaps almost vanish: both of them regard WFH on average equally good or bad.

The notion that gender roles prevail also during unusual times like in lockdown, can be confirmed rather than rejected from our survey results. The division of responsibilities for child care tasks and the right “to work in peace” is not equally split among couples. Mothers needed to watch the kids during their

working time, fathers had their partners to rely on doing that. WFH should therefore not be regarded as a promising and automatic instrument to improve the reconciliation between family and career. Even though it might help some families to better combine child care responsibilities and work, working remotely during times where childcare facilities are closed, it still puts more burden on mothers, respectively.

Our results can be a good reference point for policy implications regarding alternative concepts of work and to promote more gender equality. Nevertheless, it has to be mentioned that our findings have been collected during special times. They may therefore not be completely applicable to “normal” circumstances, but despite that, they still give valuable insights to existing barriers for couple households WFH and the division of unpaid work. Unfortunately, the last elaborated time use survey of Statistics Austria has been conducted in 2008/09. Current attempts to collect data on this issue have been turned down so far. It is therefore crucial to mention the importance of adequate data access and collection by conducting a new time use survey. It makes unpaid work, which is often taken for granted, visible, also during “non-crisis” years.

WHF is often said to be a promising tool to improve the reconciliation between work and family life; as one could see, this does not hold true for all families during lockdown. Our results once again stress the importance of the expansion of high-quality and affordable childcare facilities, to ensure more gender equality at home and at the labour market. By providing institutional and publicly funded childcare, welfare states enhance gender equality, counteract dependencies within couples by facilitating full participation in the labour market and also strengthen the chances of children - especially from households that are economically worse off.

Literature

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