Online Appendix Accompanying:

The CoViD-19 Pandemic and Mental Health: Exploring Crucial Channels

Bettina Siflinger [α], Michaela Paffenholz [β], Sebastian Seitz [ϵ], Moritz Mendel [γ], Hans-Martin von Gaudecker [δ,ι]

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Contents

*Affiliations: [α] Department of Econometrics and OR, Tilburg University, The Netherlands; [β]: Center for Doctoral Studies in Economics, University of Mannheim, Germany; [γ] Bonn Graduate School of Economics, Bonn, Germany; [δ]: University of Bonn, Germany; [ι] IZA, Bonn, Germany; [ϵ]: University of Manchester, UK. The data collection was funded by the Deutsche Forschungsgemeinschaft (DFG, German Research Foundation) under Germany's Excellence Strategy (EXC 2126/1 – 390838866) and through CRC-TR 224 (Project C01), by the Dutch Research Council (NWO) under a Corona Fast track grant (440.20.043), and by the IZA – Institute of Labor Economics. This research would not have been possible without the help of many others at the CoViD-19 Impact Lab, a research group initiated in Bonn in Mid-March 2020. We would like to thank Jürgen Maurer for very helpful comments. Special thanks to the team at CentERdata, who made the conducting the surveys possible in record time.

A Details on the MHI-5 score

The variable of interest in our analysis is the so-called MHI-5 (Mental health inventory 5) measure. The MHI-5 is a brief, valid, and reliable international instrument for assessing mental health in adults. It is a five-item subscale of the Short Format 36 (SF-36), a comprehensive international standard to measure health. Several studies have validated the MHI-5 as a measure for depression (e.g., Thorsen et al., 2013). Participants are asked about their feelings over the past month:

- I felt very anxious
- I felt so down that nothing could cheer me up
- I felt calm and peaceful
- I felt depressed and gloomy
- I felt happy

For each item individuals can choose the following six answer categories: never, seldom, sometimes, often, mostly, continuously. For positive items (calm and peaceful, happy) the answers are coded from zero to five. Negative items are coded the other way around (five to zero). The responses are reported on a 6-point scale. They are then summed up and multiplied by four, such that the resulting score ranges from 0 to 100, whereby a higher number is associated with a better mental health. A score below 60 is associated with mental health problems (e.g. Statistics Netherlands, 2015).

Because we wanted to focus on the period during lockdown, we used the time frame of "the past seven days" in March. To investigate possible impacts of the change in time frame, we included a survey experiment in the May wave, where some individuals were asked about their feelings over both the last month and the last week.

The most relevant comparison is between the two cells on the diagonal, which are the first items that were asked. Individuals who were first asked for their mental health for the past seven days, on average have a score of 80.6. Individuals who were first asked to report their mental health in the last month have an average score of 79.4. The difference between these two levels of mental

Table A.1: Reported levels of mental health when randomly varying the order of the time frame of the mental health question, May 2020

	Order in which question was asked	
Time frame	past 7 days, past month	past month, past 7 days
past 7 days	80.6	81.1
	(14.9)	(15.5)
past month	80.5	79.4
	(14.2)	(15.5)
observations	851	859

health is not statistically significant (t-statistic= 1.56, p-value = 0.12). This answers the question whether the time frame matters in a relatively stable period of time.

B Details on the variable perceived infection risk

We elicited perceived infection in all 2020 waves. In the March 2020 wave, participants were asked on a 7-point scale about the likelihood of contracting the virus ("no chance" to "certain", plus a separate option "already infected"). In all subsequent waves, respondents were asked about the perceived probability of getting infected on a scale from 0 to 100. To make the measure comparable across waves, we transform the 7-scale likelihood from March by assigning each answer a value from 0 to 7. Despite the difference in how this subjective probability was elicited between the March and the subsequent waves, we do not expect that this has a major impact on our results. The reported probabilities are very persistent between March and May and there is no particular reason to believe that this should change dramatically in the month after.

We then re-scale the measure to range from 0 to 1 for all periods. The resulting outcome then measures the subjectively perceived infection risk. For November 2019 (pre-Covid) we set the perceived infection risk to zero because at that point in time SARS-CoVid-2 was not yet discovered.

In the basic specification, we assign the outcome "already happened" in March a 1, i.e., the same value as "certain". In robustness checks, we put it in a separate dummy variable. In other specification, we factor it out to a separate variable. For the other months, we make use of a dummy variable containing whether a doctor diagnosed an infection. This was asked separately from the infection probability since in later months it had become clear that re-infection was a real possibility. Table B.1 contains the summary statistics. The numbers are fairly low, as one would

expect. Hence, it comes as no large surprise that the results below (see Table C.6) hardly differ from those in our main specification.

Table B.1: Summary statistics for (diagnosed) Covid-19 infection

	Nov '19	**Mar '20**	**May '20**	**June '20**	**Sept '20**	**Dec '20**	**average**
Fraction infected							
men	0	0.010	0.004	0.004	0.01	0.059	0.012
women	0	0.015	0.007	0.007	0.009	0.059	0.013

Note: The results in March are different from the remaining months as in March people could self-assess whether they had Covid, whereas from May onward people were asked whether they were diagnosed with Covid. From May onward, we report the fraction of individuals who reported to have been diagnosed with Covid at least once up to that point in time.

C Additional Tables

C.1 Predicting risk factors with pre-pandemic variables

Table C.1: Estimated coefficients from OLS regression of main channels, home office hours and home office with childcare hours at the onset of the pandemic on past values of the mental health (MHI-5 score)

	infection risk	loneliness score	unemployment risk	reduced working hours	home office hours	home office with children
	(1)	(2)	(3)	(4)	(5)	(6)
Men						
MHI5 score 2019	-0.001	-0.063***	-0.000	0.001	0.005	-0.150
	(0.001)	(0.013)	(0.001)	(0.002)	(0.074)	(0.159)
MHI5 score 2018	0.000	-0.020	-0.001	-0.004**	0.045	0.144
	(0.001)	(0.012)	(0.001)	(0.002)	(0.073)	(0.145)
Hours Home Office 2019					0.819***	0.164
					(0.092)	(0.184)
Hours Childcare 2019					0.025	0.101
					(0.066)	(0.112)
joint F-test MHI-5 2018 +2019 = 0	1.22	103.09	2.21	4.58	1.12	0.00
p-value	0.27	0.00	0.14	0.03	0.29	0.96
observations	604	604	604	604	559	102
Women						
MHI5 score 2019	-0.001	-0.031***	-0.001	-0.002	0.068	-0.005
	(0.001)	(0.011)	(0.001)	(0.002)	(0.053)	(0.146)
MHI5 score 2018	0.000	-0.051***	-0.000	-0.001	0.006	-0.103
	(0.001)	(0.011)	(0.001)	(0.002)	(0.057)	(0.160)
Hours Home Office 2019					1.045***	-0.074
					(0.108)	(0.222)
Hours Childcare 2019					-0.067*	0.051
					(0.039)	(0.077)
joint F-test MHI-5 2018 +2019 = 0	0.28	113.17	2.80	6.91	3.23	0.85
p-value	0.60	0.00	0.10	0.01	0.07	0.36
observations	643	643	643	643	596	90

*** p<0.01, ** p<0.05, * p<0.1; standard error clustered on the individual level in parentheses. The table presented the estimated coefficients from OLS regressions of channels on past scores of the MHI-5 (regressors are averages from the March and November questionnaires in 2018 and 2019, respectively). Columns (1)–(3): infection risk, working hours reduction, unemployment risk in March 2020 predicted by past values of the MHI-5 score. Column (4): number of hours worked from home in March 2020 predicted by past values of the MHI-5 score and the number of home office hours and childcare hours in November 2019. Column (5): number of hours working from home while being responsible for young children (< age 12) in May 2020 predicted by past values of the MHI-5 score and number of home office hours and childcare hours in November 2019. Controls: level of education (low, medium, high), age groups (<30,30-39,40-49,≥50).

Table C.2: Estimated coefficients from multinomial logit regressions of categories of extra caregiver arrangements at the onset of the pandemic (March 2020) on past values of the mental health (MHI-5) score

	Myself	Partner	Other Arrangement
	(1)	(2)	(3)
Men			
MHI-5 score 2019	-0.019	0.019	0.041
	(0.037)	(0.025)	(0.033)
MHI-5 score 2018	0.080	-0.008	-0.001
	(0.051)	(0.024)	(0.034)
Hours Childcare 2019	-0.017	-0.012	-0.049
	(0.032)	(0.023)	(0.032)
joint F-test MHI-5	0.02	0.23	1.89
p-value	0.10	0.63	0.17
Observations		115	
Women			
MHI-5 score 2019	-0.008	0.004	-0.033
	(0.036)	(0.044)	(0.029)
MHI-5 score 2018	0.011	0.044	0.035
	(0.041)	(0.050)	(0.031)
Hours Childcare 2019	0.000	-0.001	-0.013
	(0.014)	(0.019)	(0.013)
joint F-test MHI-5	0.02	1.53	0.01
p-value	0.90	0.22	0.93
observations		108	

*** p<0.01, ** p<0.05, * p<0.1; standard error clustered on the individual level in parentheses; the table presents the estimated coefficients from multinomial logit regressions of extra childcare duties on past scores of the MHI-5 (regressors are averages from the March and November questionnaires in 2018 and 2019, respectively). and childcare hours for men and women. MHI-5 scores are averages from the March and November values in 2018 and 2019, respectively, to reduce the influence of measurement error. Childcare hours are measured in November 2019. Base category is "shared childcare duties". Controls: level of education (low, medium, high), age groups (<30,30-39,40-49,≥50).

C.2 Full set of coefficient estimates specifications described in the main text

Table C.3: Estimated coefficients from fixed effects OLS regressions of mental health on main channels, full set of estimation results for Equation (1)

	Men		Women	
	(1)	(2)	(3)	(4)
prob: becoming infected	-0.90	-0.92	-2.44**	-2.45**
	(0.92)	(0.93)	(1.02)	(1.03)
reduced working hours: yes	-1.26***	-1.27***	-0.74	-0.71
	(0.44)	(0.44)	(0.45)	(0.46)
prob: becoming unemployed	-9.02***	-9.17***	-3.28	-3.41
	(2.10)	(2.06)	(2.13)	(2.17)
loneliness	-0.45***		-0.88***	
	(0.14)		(0.16)	
March 2020 (ref: sharing extra childcare duties)	0.03	-0.21	-0.23	-0.76
	(1.46)	(1.46)	(1.91)	(1.97)
May 2020 (ref: sharing extra childcare duties)	3.09**	2.84**	4.89***	4.37***
	(1.38)	(1.38)	(1.53)	(1.62)
June 2020 (ref: sharing extra childcare duties)	4.41***	4.36***	6.36***	6.25***
	(1.31)	(1.30)	(1.88)	(1.91)
September 2020 (ref: sharing extra childcare duties)	5.21***	5.18***	6.33***	6.17***
	(1.33)	(1.34)	(1.69)	(1.72)
December 2020 (ref: sharing extra childcare duties)	0.10	-0.02	3.33*	3.29*
	(1.49)	(1.47)	(1.92)	(1.96)
caregiver: myself x March 2020	-12.79***	-12.55***	-2.31	-1.69
	(3.15)	(3.14)	(3.08)	(3.11)
caregiver: myself x May 2020	-7.51***	-7.26***	-4.90**	-4.26*
	(2.76)	(2.73)	(2.31)	(2.34)
caregiver: myself x June 2020	-5.80**	-5.88**	-4.58	-4.30
	(2.86)	(2.88)	(3.07)	(3.15)
caregiver: myself x September 2020	-4.34	-4.51	-4.25	-3.94
	(2.76)	(2.82)	(3.09)	(3.09)
caregiver: myself x December 2020	-5.56**	-5.51**	-4.71	-4.40
	(2.68)	(2.67)	(3.54)	(3.42)
caregiver: partner x March 2020	0.22	0.52	-5.66	-5.87
	(2.34)	(2.37)	(3.98)	(4.05)
caregiver: partner x May 2020	-1.68	-1.42	-4.39	-4.53
	(2.05)	(2.06)	(2.84)	(2.93)
caregiver: partner x June 2020	-1.49	-1.51	-1.85	-2.25
	(2.25)	(2.27)	(3.50)	(3.59)
caregiver: partner x September 2020	-1.63	-1.64	-3.75	-4.00
	(1.94)	(1.96)	(3.78)	(3.86)
caregiver: partner x December 2020	1.90	1.89	-5.40	-5.46
	(2.26)	(2.28)	(3.64)	(3.66)
caregiver: other arrangement x March 2020	-8.48***	-8.33***	1.08	1.81
	(2.89)	(2.90)	(3.78)	(3.87)
caregiver: other arrangement x May 2020	-1.73	-1.60	4.09	4.77
	(2.64)	(2.66)	(3.36)	(3.45)
caregiver: other arrangement x June 2020	-3.81	-3.68	3.21	3.69
	(3.11)	(3.13)	(3.22)	(3.31)
caregiver: other arrangement x September 2020	-5.94**	-5.85**	3.68	4.11
	(2.74)	(2.77)	(3.28)	(3.35)

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Table C.3 – *Continued from previous page*

	Men		Women	
	(1)	(2)	(3)	(4)
caregiver: other arrangement x December 2020	-2.37	-2.08	1.84	2.22
	(2.83)	(2.81)	(3.88)	(4.00)
child aged 12-18 x March 2020	-4.11**	-3.89**	-5.67***	-5.26**
	(1.71)	(1.71)	(2.14)	(2.20)
child aged 12-18 x May 2020	-1.29	-1.04	-3.65**	-3.27*
	(1.57)	(1.56)	(1.79)	(1.87)
child aged 12-18 x June 2020	-1.95	-1.82	-3.56*	-3.49
	(1.50)	(1.49)	(2.10)	(2.14)
child aged 12-18 x September 2020	-2.39	-2.25	-3.47*	-3.35*
	(1.54)	(1.54)	(1.92)	(1.95)
child aged 12-18 x December 2020	1.49	1.74	-2.72	-2.63
	(1.69)	(1.68)	(2.11)	(2.14)
no child x March 2020	-2.21	-2.07	-1.30	-1.35
	(1.56)	(1.57)	(2.02)	(2.09)
no child x May 2020	-1.66	-1.51	-1.69	-1.71
	(1.49)	(1.49)	(1.67)	(1.75)
no child x June 2020	-2.12	-2.14	-2.07	-2.08
	(1.45)	(1.44)	(1.97)	(2.01)
no child x September 2020	-3.32**	-3.35**	-2.19	-2.18
	(1.48)	(1.48)	(1.82)	(1.85)
no child x December 2020	0.34	0.46	-1.63	-1.49
	(1.58)	(1.57)	(2.03)	(2.07)
single parent x March 2020	1.38	1.30	-0.94	-1.13
	(2.68)	(2.73)	(2.56)	(2.60)
single parent x May 2020	-0.17	-0.25	-2.65	-2.84
	(2.49)	(2.53)	(2.04)	(2.12)
single parent x June 2020	0.57	0.56	-3.98	-3.84
	(2.79)	(2.85)	(2.46)	(2.51)
single parent x September 2020	-0.22	-0.28	-4.76**	-4.68**
	(2.54)	(2.57)	(2.33)	(2.36)
single parent x December 2020	1.93	2.07	-1.47	-1.28
	(2.84)	(2.83)	(2.42)	(2.40)
observations	5,010	5,010	5,193	5,193
number of individuals	1,119	1,119	1,201	1,201

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; The table presents the estimated coefficients from an OLS regression with individual fixed effects of the MHI-5 score on main channels of the pandemic, see Equation (1). We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers.

Table C.4: Estimated coefficients from fixed effects OLS regressions of mental health on hours worked from home by arrangement for extra childcare duties, full set of estimation results for Equation (2)

	Men		Women	
	(1)	(2)	(3)	(4)
A. all periods				
March 2020	-1.77**	-1.85**	-2.47***	-2.82***
	(0.73)	(0.74)	(0.73)	(0.73)
May 2020	2.34***	2.25***	2.84***	2.50***
	(0.55)	(0.55)	(0.62)	(0.62)
June 2020	3.20***	3.18***	4.05***	4.03***
	(0.55)	(0.55)	(0.59)	(0.60)
September 2020	3.00***	2.99***	3.85***	3.80***
	(0.53)	(0.53)	(0.63)	(0.64)
December 2020	1.27**	1.30**	1.50**	1.62**
	(0.57)	(0.58)	(0.67)	(0.67)
hours worked from home (ref: sharing extra childcare duties)	-0.02	-0.02	0.01	0.00
	(0.03)	(0.03)	(0.05)	(0.05)
caregiver: myself x working hours home office	-0.19***	-0.19***	-0.09	-0.08
	(0.06)	(0.06)	(0.12)	(0.12)
caregiver: partner x working hours home office	0.00	0.00	-0.41***	-0.43***
	(0.06)	(0.06)	(0.13)	(0.14)
caregiver: other arrangement x hours home office	0.11	0.12	0.15	0.17
	(0.10)	(0.10)	(0.13)	(0.13)
caregiver: child aged 12-18 x working hours home office	-0.05	-0.05	-0.04	-0.03
	(0.04)	(0.04)	(0.07)	(0.07)
caregiver: no child x working hours home office	-0.02	-0.02	-0.01	-0.01
	(0.04)	(0.04)	(0.06)	(0.06)
caregiver: single parent x working hours home office	-0.10	-0.11	-0.03	-0.02
	(0.07)	(0.07)	(0.09)	(0.09)
prob: becoming infected	-0.90	-0.91	-2.31**	-2.32**
	(0.91)	(0.92)	(1.04)	(1.05)
reduced working hours: yes	-1.81***	-1.84***	-0.70	-0.71
	(0.48)	(0.48)	(0.46)	(0.47)
prob: becoming unemployed	-9.13***	-9.29***	-3.31	-3.41
	(2.09)		(2.14)	
loneliness	-0.45***		-0.83***	
	(0.14)		(0.16)	
observations	5,010	5,010	5,193	5,193
number of individuals	1,119	1,119	1,201	1,201
B. periods before the pandemic and with closed schools/childcare facilities				
March 2020	-1.28	-1.34	-1.91*	-2.29**
	(1.02)	(1.03)	(0.98)	(0.99)
May 2020	2.89***	2.80***	3.42***	3.06***
	(0.76)	(0.77)	(0.80)	(0.79)
hours worked from home (ref: sharing extra childcare duties)	0.03	0.02	-0.06	-0.08
	(0.05)	(0.05)	(0.09)	(0.09)
caregiver: myself x working hours home office	-0.23**	-0.22**	-0.08	-0.03
	(0.10)	(0.10)	(0.15)	(0.15)

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Table C.4 – *Continued from previous page*

	Men		Women	
	(1)	(2)	(3)	(4)
caregiver: partner x working hours home office	-0.08	-0.06	-0.77***	-0.77***
	(0.10)	(0.10)	(0.21)	(0.22)
caregiver: other arrangement x hours home office	0.00	0.01	0.39**	0.42**
	(0.15)	(0.15)	(0.18)	(0.20)
child aged 12-18 x working hours home office	-0.11*	-0.09	0.03	0.05
	(0.06)	(0.06)	(0.11)	(0.11)
no child x working hours home office	-0.10*	-0.08	0.10	0.10
	(0.05)	(0.05)	(0.09)	(0.09)
single parent x working hours home office	-0.12	-0.13	0.08	0.10
	(0.08)	(0.08)	(0.13)	(0.12)
prob: becoming infected	-1.56	-1.71	-3.64**	-3.71**
	(1.56)	(1.56)	(1.78)	(1.80)
reduced working hours: yes	-2.78***	-2.81***	-1.92**	-2.00**
	(0.83)	(0.83)	(0.80)	(0.80)
prob: becoming unemployed	-10.04***	-10.44***	-2.18	-2.10
	(2.96)	(2.93)	(3.00)	(3.06)
loneliness	-0.70***		-1.13***	
	(0.25)		(0.28)	
observations	2,605	2,605	2,741	2,741
number of individuals	1,099	1,099	1,179	1,179

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; Panel A shows the results obtained from OLS regressions with individual fixed effects of the MHI-5 score on interactions between home office hours and extra care duties for men and women for the full sample period, see Equation (2). Panel B shows the results from corresponding fixed effects OLS regressions when we restrict our sample to November 2019 and the first Covid wave from March to May 2020. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers.

Table C.5: Estimated coefficients from fixed effects OLS regressions of mental health on hours worked from home while simultaneously taking care of young children, Equation (3)

	Men	Women
	(1)	(2)
hours in home office with children	0.393*	-0.703**
	(0.207)	(0.282)
(hours in home office with children)^2	-0.011*	0.023**
	(0.006)	(0.010)
prob: becoming infected	0.655	1.114
	(2.046)	(2.375)
reduced working hours: yes	-2.392**	-1.032
	(1.091)	(1.123)
prob: becoming unemployed	-7.471**	-4.097
	(3.749)	(4.852)
loneliness	-0.448*	-1.009***
	(0.230)	(0.249)
observations	1,218	1,204
number of individuals	609	602
survey month fixed effects	yes	yes

*** p<0.01, ** p<0.05, * p<0.1; standard error clustered on the individual level in parentheses. The table presents the estimated coefficients from OLS regressions with individual fixed effects of the MHI-5 score on the hours in home office with children and its quadratic, see Equation (3). The estimation is based on a sample of 609 men and 602 women who participated in the survey in November 2019 and May 2020. In all specifications, we control for survey month fixed effects.

C.3 Adding prior CoViD-19 infection to main specification

Table C.6: Estimated coefficients from fixed effects OLS regressions of mental health on main channels and "Had Covid" identifier, full set of estimation results for Equation (1)

	Men		Women	
	(1)	(2)	(3)	(4)
prob: becoming infected	-0.90	-1.33	-2.44**	-2.26**
	(0.92)	(0.95)	(1.02)	(0.99)
reduced working hours: yes	-1.26***	-1.26***	-0.74	-0.66
	(0.44)	(0.44)	(0.45)	(0.45)
prob: becoming unemployed	-9.02***	-9.04***	-3.28	-3.62*
	(2.10)	(2.09)	(2.13)	(2.13)
loneliness	-0.45***	-0.45***	-0.88***	-0.85***
	(0.14)	(0.14)	(0.16)	(0.16)
Had Covid: Yes		-2.04		-0.71
		(1.30)		(1.74)
March 2020 (ref: sharing extra childcare duties)	0.03	0.20	-0.23	-0.35
	(1.46)	(1.46)	(1.91)	(1.90)
May 2020 (ref: sharing extra childcare duties)	3.09**	3.21**	4.89***	4.79***
	(1.38)	(1.38)	(1.53)	(1.53)
June 2020 (ref: sharing extra childcare duties)	4.41***	4.50***	6.36***	6.29***
	(1.31)	(1.31)	(1.88)	(1.87)
September 2020 (ref: sharing extra childcare duties)	5.21***	5.35***	6.33***	6.24***
	(1.33)	(1.34)	(1.69)	(1.68)
December 2020 (ref: sharing extra childcare duties)	0.10	0.33	3.33*	3.27*
	(1.49)	(1.50)	(1.92)	(1.92)
caregiver: myself x March 2020	-12.79***	-13.09***	-2.31	-2.28
	(3.15)	(3.26)	(3.08)	(3.08)
caregiver: myself x May 2020	-7.51***	-7.48***	-4.90**	-4.88**
	(2.76)	(2.75)	(2.31)	(2.31)
caregiver: myself x June 2020	-5.80**	-5.77**	-4.58	-4.56
	(2.86)	(2.86)	(3.07)	(3.07)
caregiver: myself x September 2020	-4.34	-4.34	-4.25	-4.22
	(2.76)	(2.76)	(3.09)	(3.09)
caregiver: myself x December 2020	-5.56**	-5.54**	-4.71	-4.72
	(2.68)	(2.73)	(3.54)	(3.54)
caregiver: partner x March 2020	0.22	0.27	-5.66	-5.64
	(2.34)	(2.35)	(3.98)	(3.98)
caregiver: partner x May 2020	-1.68	-1.64	-4.39	-4.36
	(2.05)	(2.05)	(2.84)	(2.84)
caregiver: partner x June 2020	-1.49	-1.46	-1.85	-1.83
	(2.25)	(2.25)	(3.50)	(3.50)
caregiver: partner x September 2020	-1.63	-1.64	-3.75	-3.72
	(1.94)	(1.94)	(3.78)	(3.79)
caregiver: partner x December 2020	1.90	1.94	-5.40	-5.35
	(2.26)	(2.27)	(3.64)	(3.65)
caregiver: other arrangement x March 2020	-8.48***	-8.44***	1.08	1.24
	(2.89)	(2.89)	(3.78)	(3.79)
caregiver: other arrangement x May 2020	-1.73	-1.70	4.09	4.05
	(2.64)	(2.63)	(3.36)	(3.36)
caregiver: other arrangement x June 2020	-3.81	-3.79	3.21	3.16
	(3.11)	(3.11)	(3.22)	(3.23)

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Table C.6 – *Continued from previous page*

	Men		Women	
	(1)	(2)	(3)	(4)
caregiver: other arrangement x September 2020	-5.94**	-5.94**	3.68	3.63
	(2.74)	(2.74)	(3.28)	(3.27)
caregiver: other arrangement x December 2020	-2.37	-2.33	1.84	1.84
	(2.83)	(2.85)	(3.88)	(3.88)
child aged 12-18 x March 2020	-4.11**	-4.21**	-5.67***	-5.37**
	(1.71)	(1.72)	(2.14)	(2.14)
child aged 12-18 x May 2020	-1.29	-1.25	-3.65**	-3.62**
	(1.57)	(1.57)	(1.79)	(1.79)
child aged 12-18 x June 2020	-1.95	-1.91	-3.56*	-3.54*
	(1.50)	(1.49)	(2.10)	(2.10)
child aged 12-18 x September 2020	-2.39	-2.38	-3.47*	-3.43*
	(1.54)	(1.54)	(1.92)	(1.92)
child aged 12-18 x December 2020	1.49	1.58	-2.72	-2.71
	(1.69)	(1.70)	(2.11)	(2.11)
no child x March 2020	-2.21	-2.23	-1.30	-1.38
	(1.56)	(1.56)	(2.02)	(2.02)
no child x May 2020	-1.66	-1.64	-1.69	-1.70
	(1.49)	(1.49)	(1.67)	(1.67)
no child x June 2020	-2.12	-2.08	-2.07	-2.07
	(1.45)	(1.45)	(1.97)	(1.97)
no child x September 2020	-3.32**	-3.31**	-2.19	-2.19
	(1.48)	(1.48)	(1.82)	(1.82)
no child x December 2020	0.34	0.36	-1.63	-1.59
	(1.58)	(1.58)	(2.03)	(2.03)
single parent x March 2020	1.38	1.40	-0.94	-0.79
	(2.68)	(2.68)	(2.56)	(2.54)
single parent x May 2020	-0.17	-0.15	-2.65	-2.64
	(2.49)	(2.48)	(2.04)	(2.04)
single parent x June 2020	0.57	0.60	-3.98	-3.98
	(2.79)	(2.79)	(2.46)	(2.46)
single parent x September 2020	-0.22	-0.21	-4.76**	-4.74**
	(2.54)	(2.54)	(2.33)	(2.33)
single parent x December 2020	1.93	1.91	-1.47	-1.43
	(2.84)	(2.84)	(2.42)	(2.42)
observations	5,010	5,000	5,193	5,177
number of individuals	1,119	1,119	1,201	1,199

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; The table presents the estimated coefficients from OLS regressions with individual fixed effects of the MHI-5 score on main channels of the pandemic, see Equation 1. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers. We include an identifier for "Had Covid" in the specification presented in Columns (2) and (4), which takes the value 1 if an individual has been diagnosed with Covid-19 for all months following the diagnosis. Including this identifier, we have to drop the individuals responding "already had Covid-19" for the perceived infection risk in March 2020, which results in a smaller sample size.

C.4 Results for balanced sample

Table C.7: Estimated coefficients from fixed effects OLS regressions of mental health on main channels, full set of estimates for Equation (1), balanced sample

	Men	Women
	(1)	(2)
prob: becoming infected	-1.91*	-0.69
	(1.14)	(1.40)
reduced working hours: yes	-1.27**	-0.60
	(0.55)	(0.64)
prob: becoming unemployed	-9.65***	-4.62
	(2.92)	(2.93)
loneliness	-0.70***	-0.85***
	(0.17)	(0.22)
March 2020 (ref: sharing extra childcare duties)	-0.20	-4.21
	(1.90)	(3.38)
May 2020 (ref: sharing extra childcare duties)	5.68***	2.57
	(1.80)	(2.23)
June 2020 (ref: sharing extra childcare duties)	4.40***	6.70**
	(1.68)	(2.69)
September 2020 (ref: sharing extra childcare duties)	4.64***	4.11*
	(1.74)	(2.16)
December 2020 (ref: sharing extra childcare dutiesg)	-0.01	2.97
	(2.02)	(2.93)
caregiver: myself x March 2020	-11.95***	-5.62
	(4.32)	(5.06)
caregiver: myself x May 2020	-8.07**	-4.76
	(3.58)	(3.17)
caregiver: myself x June 2020	-3.71	-8.33*
	(3.56)	(4.42)
caregiver: myself x September 2020	-3.50	-2.83
	(3.97)	(4.76)
caregiver: myself x December 2020	-3.65	-10.27*
	(3.44)	(6.11)
caregiver: partner x March 2020	1.34	-4.40
	(3.46)	(5.53)
caregiver: partner x May 2020	-3.17	-1.74
	(2.31)	(3.27)
caregiver: partner x June 2020	-1.39	-1.41
	(2.78)	(4.51)
caregiver: partner x September 2020	0.21	1.78
	(2.38)	(3.49)
caregiver: partner x December 2020	4.38	-5.15
	(2.98)	(4.89)
caregiver: other arrangement x March 2020	-3.49	7.64
	(3.44)	(5.06)
caregiver: other arrangement x May 2020	-3.68	8.71**
	(3.31)	(4.16)
caregiver: other arrangement x June 2020	-4.12	4.62
	(4.19)	(4.07)
caregiver: other arrangement x September 2020	-4.99	6.02
	(3.51)	(3.99)

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Table C.7 – *Continued from previous page*

	Men	Women
	(1)	(2)
caregiver: other arrangement x December 2020	-3.06	4.71
	(3.51)	(4.89)
child aged 12-18 x March 2020	-3.19	-4.17
	(2.16)	(3.60)
child aged 12-18 x May 2020	-2.91	-2.48
	(2.00)	(2.52)
child aged 12-18 x June 2020	-1.11	-5.13*
	(1.86)	(2.94)
child aged 12-18 x September 2020	-0.92	-2.80
	(1.95)	(2.45)
child aged 12-18 x December 2020	2.43	-2.98
	(2.23)	(3.12)
no child x March 2020	-2.98	1.02
	(2.02)	(3.45)
no child x May 2020	-4.98***	-0.43
	(1.91)	(2.32)
no child x June 2020	-2.38	-3.57
	(1.82)	(2.77)
no child x September 2020	-3.41*	-1.25
	(1.87)	(2.29)
no child x December 2020	0.27	-2.26
	(2.09)	(3.00)
single parent x March 2020	1.69	-0.34
	(3.47)	(4.07)
single parent x May 2020	-0.43	-1.45
	(3.01)	(2.75)
single parent x June 2020	2.05	-6.58**
	(3.11)	(3.27)
single parent x September 2020	0.43	-4.46
	(3.24)	(3.07)
single parent x December 2020	5.84*	-2.78
	(3.39)	(3.53)
observations	2,880	2,730
number of individuals	480	455

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; The table presents the estimated coefficients from an OLS regression with individual fixed effects of the MHI-5 score on main channels of the pandemic, see Equation 1. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers.

Table C.8: Estimated coefficients from fixed effects OLS regressions of mental health on hours worked from home by arrangement for extra childcare duties, full set of estimates for Equation (2), balanced sample

	Men	Women
	(1)	(2)
A. all periods		
Mar 2020	-1.58*	-4.80***
	(0.90)	(0.96)
May 2020	2.98***	1.83**
	(0.67)	(0.77)
June 2020	3.58***	2.96***
	(0.65)	(0.74)
Sept 2020	3.16***	2.60***
	(0.64)	(0.80)
Dec 2020	2.05***	0.53
	(0.72)	(0.89)
working hours home office (ref: sharing extra childcare duties)	0.02	0.00
	(0.04)	(0.06)
caregiver: myself x working hours home office	-0.27***	-0.12
	(0.08)	(0.17)
caregiver: partner x working hours home office	-0.07	-0.57***
	(0.10)	(0.08)
caregiver: other arrangement x working hours home office	0.29***	0.16
	(0.08)	(0.19)
child aged 12-18 x working hours home office	-0.11**	-0.00
	(0.05)	(0.08)
no child x working hours home office	-0.10**	0.00
	(0.05)	(0.06)
single parent x working hours home office	-0.06	-0.02
	(0.07)	(0.13)
prob: becoming infected	-2.18*	-0.30
	(1.12)	(1.42)
reduced working hours: yes	-1.92***	-0.71
	(0.57)	(0.63)
prob: becoming unemployed	-9.82***	-4.56
	(2.92)	(2.97)
loneliness	-0.68***	-0.82***
	(0.17)	(0.21)
observations	2,880	2,730
number of individuals	480	455
B. during lockdown of schools/childcare		
Mar 2020	-1.56	-3.34***
	(1.25)	(1.26)
May 2020	3.23***	3.06***
	(0.92)	(1.01)
working hours home office (ref: sharing extra childcare duties)	0.07	-0.07
	(0.06)	(0.12)
caregiver: myself x working hours home office	-0.29**	-0.14
	(0.12)	(0.20)

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Table C.8 – *Continued from previous page*

	Men	Women
	(1)	(2)
caregiver: partner x working hours home office	-0.13	-0.68***
	(0.14)	(0.14)
caregiver: other arrangement x working hours home office	0.22*	0.47**
	(0.13)	(0.23)
child aged 12-18 x working hours home office	-0.12*	0.04
	(0.07)	(0.14)
no child x working hours home office	-0.16**	0.08
	(0.07)	(0.12)
single parent x working hours home office	-0.08	0.12
	(0.09)	(0.17)
prob: becoming infected	-1.75	-2.63
	(2.00)	(2.34)
reduced working hours: yes	-3.26***	-1.79*
	(1.04)	(1.09)
prob: becoming unemployed	-11.92***	-4.67
	(3.65)	(4.03)
loneliness	-0.95***	-1.28***
	(0.32)	(0.35)
observations	1,440	1,365
number of individuals	480	455

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; Panel A shows the results obtained from OLS regressions with individual fixed effects of the MHI-5 score on interactions between home office hours and extra care duties for men and women for the full sample period, see Equation (2). Panel B shows the results from corresponding fixed effects OLS regressions when we restrict our sample to November 2019 and the first Covid wave from March to May 2020. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers.

C.5 Alternative calibrations of job loss expectations

Table C.9: Estimated coefficients from fixed effects OLS regressions of mental health on main channels, full set of estimates for Equation (1), original job loss expectation

	Men	Women
	(1)	(2)
prob: becoming infected	-0.96	-2.45**
	(0.93)	(1.02)
reduced working hours: yes	-1.28***	-0.75*
	(0.44)	(0.45)
prob: becoming unemployed	-6.15***	-1.72
	(1.58)	(1.72)
loneliness	-0.47***	-0.88***
	(0.14)	(0.16)
Mar 2020 (ref: sharing extra childcare duties)	-0.49	-0.43
	(1.48)	(1.92)
May 2020 (ref: sharing extra childcare duties)	2.55*	4.70***
	(1.41)	(1.56)
June 2020 (ref: sharing extra childcare duties)	3.87***	6.16***
	(1.33)	(1.89)
September 2020 (ref: sharing extra childcare duties)	4.66***	6.15***
	(1.36)	(1.71)
December 2020 (ref: sharing extra childcare duties)	-0.41	3.14
	(1.50)	(1.94)
caregiver: myself x March 2020	-12.83***	-2.32
	(3.25)	(3.10)
caregiver: myself x May 2020	-7.42***	-4.87**
	(2.76)	(2.31)
caregiver: myself x June 2020	-5.69**	-4.54
	(2.90)	(3.07)
caregiver: myself x September 2020	-4.20	-4.26
	(2.81)	(3.11)
caregiver: myself x December 2020	-5.35*	-4.67
	(2.75)	(3.56)
caregiver: partner x March 2020	0.51	-5.54
	(2.35)	(3.98)
caregiver: partner x May 2020	-1.39	-4.26
	(2.06)	(2.84)
caregiver: partner x June 2020	-1.21	-1.71
	(2.26)	(3.50)
caregiver: partner x September 2020	-1.37	-3.66
	(1.95)	(3.79)
caregiver: partner x December 2020	2.11	-5.30
	(2.26)	(3.66)
caregiver: other arrangement x March 2020	-8.30***	1.18
	(2.89)	(3.78)
caregiver: other arrangement x May 2020	-1.49	4.19
	(2.67)	(3.37)
caregiver: other arrangement x June 2020	-3.59	3.32
	(3.15)	(3.23)
caregiver: other arrangement x September 2020	-5.70**	3.78
	(2.81)	(3.28)
caregiver: other arrangement x December 2020	-2.25	1.97
	(2.85)	(3.89)
child aged 12-18 x March 2020	-3.91**	-5.58***
	(1.72)	(2.15)
child aged 12-18 x May 2020	-1.08	-3.56**
	(1.59)	(1.80)
child aged 12-18 x June 2020	-1.75	-3.45
	(1.52)	(2.10)
child aged 12-18 x September 2020	-2.13	-3.37*

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Table C.9 – *Continued from previous page*

	Men	Women
	(1)	(2)
	(1.55)	(1.93)
child aged 12-18 x December 2020	1.70	-2.60
	(1.70)	(2.12)
no child x March 2020	-2.08	-1.23
	(1.57)	(2.03)
no child x May 2020	-1.52	-1.60
	(1.51)	(1.68)
no child x June 2020	-1.97	-1.97
	(1.47)	(1.98)
no child x September 2020	-3.16**	-2.12
	(1.50)	(1.83)
no child x December 2020	0.44	-1.55
	(1.58)	(2.04)
single parent x March 2020	1.26	-0.86
	(2.69)	(2.58)
single parent x May 2020	-0.26	-2.55
	(2.55)	(2.06)
single parent x June 2020	0.47	-3.88
	(2.84)	(2.47)
single parent x September 2020	-0.40	-4.70**
	(2.58)	(2.35)
single parent x December 2020	1.85	-1.36
	(2.87)	(2.43)
observations	5,010	5,193
number of individuals	1,119	1,201

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; The table presents the estimated coefficients from an OLS regression with individual fixed effects of the MHI-5 score on main channels of the pandemic, see Equation 1. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers. No re-scaling of the original job loss expectations for November 2019.

Table C.10: Estimated coefficients from fixed effects OLS regressions of mental health on main channels, full set of estimates for Equation (1), Nov. 2019 job loss expectation with mean 0.5%

	Men	Women
	(1)	(2)
prob: becoming infected	-0.88	-2.43**
	(0.92)	(1.02)
reduced working hours: yes	-1.26***	-0.74
	(0.44)	(0.45)
prob: becoming unemployed	-9.09***	-3.45
	(2.12)	(2.14)
loneliness	-0.45***	-0.88***
	(0.14)	(0.16)
Mar 2020 (ref: sharing extra childcare duties)	0.16	-0.16
	(1.46)	(1.91)
May 2020 (ref: sharing extra childcare duties)	3.23**	4.96***
	(1.38)	(1.54)
June 2020 (ref: sharing extra childcare duties)	4.54***	6.43***
	(1.31)	(1.88)
Sept 2020 (ref: sharing extra childcare duties)	5.35***	6.40***
	(1.33)	(1.69)
Dec 2020 (ref: sharing extra childcare duties)	0.24	3.40*
	(1.49)	(1.92)
caregiver: myself x March 2020	-12.83***	-2.33
	(3.14)	(3.08)
caregiver: myself x May 2020	-7.56***	-4.93**
	(2.74)	(2.31)
caregiver: myself x June 2020	-5.84**	-4.61
	(2.85)	(3.07)
caregiver: myself x September 2020	-4.39	-4.28
	(2.76)	(3.09)
caregiver: myself x December 2020	-5.60**	-4.75
	(2.67)	(3.54)
caregiver: partner x March 2020	0.15	-5.70
	(2.34)	(3.98)
caregiver: partner x May 2020	-1.75	-4.43
	(2.05)	(2.84)
caregiver: partner x June 2020	-1.56	-1.89
	(2.25)	(3.50)
caregiver: partner x September 2020	-1.70	-3.79
	(1.94)	(3.78)
caregiver: partner x December 2020	1.83	-5.45
	(2.26)	(3.63)
caregiver: other arrangement x March 2020	-8.54***	1.04
	(2.89)	(3.78)
caregiver: other arrangement x May 2020	-1.79	4.05
	(2.63)	(3.36)
caregiver: other arrangement x June 2020	-3.87	3.17
	(3.10)	(3.23)
caregiver: other arrangement x September 2020	-6.01**	3.64
	(2.73)	(3.28)
caregiver: other arrangement x December 2020	-2.44	1.80
	(2.83)	(3.89)
child aged 12-18 x March 2020	-4.17**	-5.71***
	(1.71)	(2.14)
child aged 12-18 x May 2020	-1.35	-3.69**
	(1.56)	(1.79)
child aged 12-18 x June 2020	-2.01	-3.59*
	(1.49)	(2.10)
child aged 12-18 x September 2020	-2.46	-3.51*
	(1.53)	(1.92)
child aged 12-18 x December 2020	1.43	-2.76

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Table C.10 – *Continued from previous page*

	Men	Women
	(1)	(2)
	(1.70)	(2.11)
no child x March 2020	-2.26	-1.33
	(1.56)	(2.02)
no child x May 2020	-1.70	-1.72
	(1.48)	(1.67)
no child x June 2020	-2.16	-2.11
	(1.44)	(1.98)
no child x September 2020	-3.37**	-2.23
	(1.47)	(1.82)
no child x December 2020	0.29	-1.67
	(1.58)	(2.03)
single parent x March 2020	1.39	-0.98
	(2.68)	(2.56)
single parent x May 2020	-0.15	-2.69
	(2.47)	(2.04)
single parent x June 2020	0.59	-4.03
	(2.78)	(2.46)
single parent x September 2020	-0.21	-4.80**
	(2.53)	(2.33)
single parent x December 2020	1.94	-1.51
	(2.84)	(2.42)
observations	5,010	5,193
number of individuals	1,119	1,201

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; The table presents the estimated coefficients from an OLS regression with individual fixed effects of the MHI-5 score on main channels of the pandemic, see Equation 1. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers. Job loss expectations in November 2019 are re-scaled to have mean 0.5%.

Table C.11: Estimated coefficients from fixed effects OLS regressions of mental health on main channels, full set of estimates for Equation (1), Nov. 2019 job loss expectation with mean 3%

	Men	Women
	(1)	(2)
prob: becoming infected	-0.93	-2.44**
	(0.92)	(1.02)
reduced working hours: yes	-1.26***	-0.74*
	(0.44)	(0.45)
prob: becoming unemployed	-8.54***	-2.90
	(2.00)	(2.07)
loneliness	-0.46***	-0.88***
	(0.14)	(0.16)
March 2020 (ref: sharing extra childcare duties)	-0.16	-0.32
	(1.46)	(1.91)
May 2020 (ref: sharing extra childcare duties)	2.89**	4.81***
	(1.39)	(1.54)
June 2020 (ref: sharing extra childcare duties)	4.21***	6.27***
	(1.32)	(1.88)
September 2020 (ref: sharing extra childcare duties)	5.01***	6.24***
	(1.34)	(1.69)
December 2020 (ref: sharing extra childcare duties)	-0.10	3.24*
	(1.49)	(1.93)
caregiver: myself x March 2020	-12.76***	-2.29
	(3.17)	(3.09)
caregiver: myself x May 2020	-7.46***	-4.88**
	(2.77)	(2.31)
caregiver: myself x June 2020	-5.74**	-4.55
	(2.88)	(3.07)
caregiver: myself x September 2020	-4.28	-4.23
	(2.77)	(3.10)
caregiver: myself x December 2020	-5.49**	-4.68
	(2.70)	(3.55)
caregiver: partner x March 2020	0.33	-5.60
	(2.34)	(3.98)
caregiver: partner x May 2020	-1.57	-4.33
	(2.05)	(2.84)
caregiver: partner x June 2020	-1.39	-1.79
	(2.25)	(3.50)
caregiver: partner x September 2020	-1.53	-3.70
	(1.94)	(3.78)
caregiver: partner x December 2020	1.99	-5.35
	(2.26)	(3.65)
caregiver: other arrangement x March 2020	-8.40***	1.13
	(2.89)	(3.78)
caregiver: other arrangement x May 2020	-1.63	4.14
	(2.65)	(3.36)
caregiver: other arrangement x June 2020	-3.72	3.26
	(3.13)	(3.22)
caregiver: other arrangement x September 2020	-5.84**	3.72
	(2.76)	(3.28)
caregiver: other arrangement x December 2020	-2.30	1.90
	(2.84)	(3.88)
child aged 12-18 x March 2020	-4.03**	-5.62***
	(1.71)	(2.14)
child aged 12-18 x May 2020	-1.20	-3.61**
	(1.57)	(1.79)
child aged 12-18 x June 2020	-1.87	-3.51*
	(1.50)	(2.10)
child aged 12-18 x September 2020	-2.29	-3.42*
	(1.54)	(1.93)
child aged 12-18 x December 2020	1.58	-2.67

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Table C.11 – *Continued from previous page*

	Men	Women
	(1)	(2)
	(1.69)	(2.11)
no child x March 2020	-2.16	-1.26
	(1.56)	(2.02)
no child x May 2020	-1.60	-1.64
	(1.49)	(1.67)
no child x June 2020	-2.06	-2.02
	(1.45)	(1.97)
no child x September 2020	-3.25**	-2.15
	(1.48)	(1.82)
no child x December 2020	0.40	-1.58
	(1.58)	(2.03)
single parent x March 2020	1.35	-0.89
	(2.68)	(2.57)
single parent x May 2020	-0.19	-2.60
	(2.51)	(2.04)
single parent x June 2020	0.54	-3.93
	(2.81)	(2.46)
single parent x September 2020	-0.26	-4.72**
	(2.55)	(2.33)
single parent x December 2020	1.91	-1.41
	(2.85)	(2.42)
observations	5,010	5,193
number of individuals	1,119	1,201

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; The table presents the estimated coefficients from an OLS regression with individual fixed effects of the MHI-5 score on main channels of the pandemic, see Equation 1. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers. Job loss expectations in November 2019 are re-scaled to have mean 3%.

Table C.12: Estimated coefficients from fixed effects OLS regressions of mental health on hours worked from home by arrangement for extra childcare duties, full set of estimates for Equation (2), original job-loss expectations

	Men	Women
	(1)	(2)
A. all periods		
March 2020	-2.13***	-2.60***
	(0.74)	(0.73)
May 2020	1.96***	2.73***
	(0.56)	(0.62)
June 2020	2.81***	3.95***
	(0.54)	(0.59)
September 2020	2.62***	3.74***
	(0.53)	(0.63)
December 2020	0.89	1.41**
	(0.57)	(0.68)
working hours home office (ref: sharing extra childcare duties)	-0.03	0.01
	(0.03)	(0.05)
caregiver: myself x working hours home office	-0.19***	-0.09
	(0.06)	(0.12)
caregiver: partner x working hours home office	0.00	-0.41***
	(0.06)	(0.13)
caregiver: other arrangement x working hours home office	0.12	0.15
	(0.10)	(0.13)
caregiver: child aged 12-18 x working hours home office	-0.05	-0.04
	(0.04)	(0.07)
caregiver: no child x working hours home office	-0.02	-0.01
	(0.04)	(0.06)
caregiver: single parent x working hours home office	-0.10	-0.03
	(0.07)	(0.09)
prob: becoming infected	-0.97	-2.32**
	(0.92)	(1.04)
reduced working hours: yes	-1.86***	-0.72
	(0.48)	(0.46)
prob: becoming unemployed	-6.58***	-1.86
	(1.59)	(1.73)
loneliness	-0.46***	-0.83***
	(0.14)	(0.16)
observations	5,010	5,193
number of individuals	1,119	1,201
B. during spring lockdown (schools/childcare closed)		
March 2020	-1.58	-1.96**
	(1.03)	(0.98)
May 2020	2.56***	3.40***
	(0.77)	(0.80)
working hours home office (ref: sharing extra childcare duties)	0.03	-0.06
	(0.05)	(0.09)
caregiver: myself x working hours home office	-0.24**	-0.08

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Table C.12 – *Continued from previous page*

	Men	Women
	(1)	(2)
	(0.10)	(0.15)
caregiver: partner x working hours home office	-0.07	-0.77***
	(0.10)	(0.21)
caregiver: other arrangement x working hours home office	0.01	0.39**
	(0.14)	(0.18)
caregiver: child aged 12-18 x working hours home office	-0.11*	0.03
	(0.06)	(0.11)
caregiver: no child x working hours home office	-0.09*	0.10
	(0.05)	(0.09)
caregiver: single parent x working hours home office	-0.12	0.08
	(0.08)	(0.13)
prob: becoming infected	-1.61	-3.67**
	(1.56)	(1.78)
reduced working hours: yes	-2.87***	-1.95**
	(0.84)	(0.80)
prob: becoming unemployed	-5.35***	-0.33
	(2.01)	(2.12)
loneliness	-0.73***	-1.12***
	(0.25)	(0.28)
observations	2,605	2,741
number of individuals	1,099	1,179

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; Panel A shows the results obtained from OLS regressions with individual fixed effects of the MHI-5 score on interactions between home office hours and extra care duties for men and women for the full sample period, see Equation (2). Panel B shows the results from corresponding fixed effects OLS regressions when we restrict our sample to November 2019 and the first Covid wave from March to May 2020. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers. No re-scaling of the original job loss expectations for November 2019.

Table C.13: Estimated coefficients from fixed effects OLS regressions of mental health on hours worked from home by arrangement for extra childcare duties, full set of estimates for Equation (2), Nov. 2019 job loss expectations with mean 0.5%

	Men	Women
	(1)	(2)
A. all periods		
March 2020	-1.69**	-2.44***
	(0.74)	(0.73)
May 2020	2.42***	2.87***
	(0.56)	(0.62)
June 2020	3.28***	4.09***
	(0.55)	(0.59)
September 2020	3.09***	3.88***
	(0.53)	(0.63)
December 2020	1.35**	1.54**
	(0.57)	(0.67)
working hours home office (ref: sharing extra childcare duties)	-0.02	0.01
	(0.03)	(0.05)
caregiver: myself x working hours home office	-0.19***	-0.09
	(0.06)	(0.12)
caregiver: partner x working hours home office	0.00	-0.41***
	(0.06)	(0.13)
caregiver: other arrangement x working hours home office	0.11	0.15
	(0.10)	(0.13)
caregiver: child aged 12-18 x working hours home office	-0.05	-0.04
	(0.04)	(0.07)
caregiver: no child x working hours home office	-0.02	-0.01
	(0.04)	(0.06)
caregiver: single parent x working hours home office	-0.10	-0.03
	(0.07)	(0.09)
prob: becoming infected	-0.89	-2.30**
	(0.91)	(1.04)
reduced working hours: yes	-1.80***	-0.70
	(0.48)	(0.46)
prob: becoming unemployed	-9.10***	-3.45
	(2.11)	(2.14)
loneliness	-0.45***	-0.83***
	(0.14)	(0.16)
observations	5,010	5,193
number of individuals	1,119	1,201
B. during spring lockdown (schools/childcare closed)		
March 2020	-1.20	-1.88*
	(1.03)	(0.98)
May 2020	2.98***	3.45***
	(0.76)	(0.80)
working hours home office (ref: sharing extra childcare duties)	0.04	-0.06
	(0.05)	(0.09)
caregiver: myself x working hours home office	-0.23**	-0.08

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Table C.13 – *Continued from previous page*

	Men	Women
	(1)	(2)
	(0.10)	(0.15)
caregiver: partner x working hours home office	-0.08	-0.77***
	(0.10)	(0.21)
caregiver: other arrangement x working hours home office	-0.00	0.39**
	(0.15)	(0.18)
child aged 12-18 x working hours home office	-0.11*	0.03
	(0.06)	(0.11)
no child x working hours home office	-0.10*	0.10
	(0.05)	(0.09)
single parent x working hours home office	-0.12	0.08
	(0.08)	(0.13)
prob: becoming infected	-1.53	-3.63**
	(1.56)	(1.78)
reduced working hours: yes	-2.76***	-1.91**
	(0.83)	(0.80)
prob: becoming unemployed	-10.34***	-2.55
	(3.00)	(3.03)
loneliness	-0.70***	-1.13***
	(0.25)	(0.28)
observations	2,605	2,741
number of individuals	1,099	1,179

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; Panel A shows the results obtained from OLS regressions with individual fixed effects of the MHI-5 score on interactions between home office hours and extra care duties for men and women for the full sample period, see Equation (2). Panel B shows the results from corresponding fixed effects OLS regressions when we restrict our sample to November 2019 and the first Covid wave from March to May 2020. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers. Job loss expectations in November 2019 are re-scaled to have mean 0.5%.

Table C.14: Estimated coefficients from fixed effects OLS regressions of mental health on hours worked from home by arrangement for extra childcare duties, full set of estimates for Equation (2), Nov. 2019 job loss expectations with mean 3%

	Men	Women
	(1)	(2)
A. all periods		
March 2020	-1.89***	-2.52***
	(0.73)	(0.73)
May 2020	2.21***	2.80***
	(0.55)	(0.61)
June 2020	3.07***	4.01***
	(0.54)	(0.59)
September 2020	2.87***	3.80***
	(0.53)	(0.63)
December 2020	1.14**	1.46**
	(0.57)	(0.67)
working hours home office (ref: sharing extra childcare duties)	-0.02	0.01
	(0.03)	(0.05)
caregiver: myself x working hours home office	-0.19***	-0.09
	(0.06)	(0.12)
caregiver: partner x working hours home office	0.00	-0.41***
	(0.06)	(0.13)
caregiver: other arrangement x working hours home office	0.12	0.15
	(0.10)	(0.13)
caregiver: child aged 12-18 x working hours home office	-0.05	-0.04
	(0.04)	(0.07)
caregiver: no child x working hours home office	-0.02	-0.01
	(0.04)	(0.06)
caregiver: single parent x working hours home office	-0.10	-0.03
	(0.07)	(0.09)
prob: becoming infected	-0.93	-2.31**
	(0.91)	(1.04)
reduced working hours: yes	-1.82***	-0.71
	(0.48)	(0.46)
prob: becoming unemployed	-8.78***	-2.97
	(2.00)	(2.08)
loneliness	-0.45***	-0.83***
	(0.14)	(0.16)
observations	5,010	5,193
number of individuals	1,119	1,201
B. during spring lockdown (schools/childcare closed)		
March 2020	-1.39	-1.94**
	(1.03)	(0.98)
May 2020	2.76***	3.40***
	(0.76)	(0.80)
working hours home office (ref: sharing extra childcare duties)	0.03	-0.06
	(0.05)	(0.09)
caregiver: myself x working hours home office	-0.23**	-0.08

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Table C.14 – *Continued from previous page*

	Men	Women
	(1)	(2)
	(0.10)	(0.15)
caregiver: partner x working hours home office	-0.07	-0.76***
	(0.10)	(0.21)
caregiver: other arrangement x working hours home office	0.01	0.39**
	(0.15)	(0.18)
child aged 12-18 x working hours home office	-0.11*	0.03
	(0.06)	(0.11)
no child x working hours home office	-0.09*	0.10
	(0.05)	(0.09)
single parent x working hours home office	-0.12	0.08
	(0.08)	(0.13)
prob: becoming infected	-1.60	-3.65**
	(1.56)	(1.78)
reduced working hours: yes	-2.80***	-1.93**
	(0.83)	(0.80)
prob: becoming unemployed	-9.01***	-1.55
	(2.75)	(2.83)
loneliness	-0.71***	-1.13***
	(0.25)	(0.28)
observations	2,605	2,741
number of individuals	1,099	1,179

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; Panel A shows the results obtained from OLS regressions with individual fixed effects of the MHI-5 score on interactions between home office hours and extra care duties for men and women for the full sample period, see Equation (2). Panel B shows the results from corresponding fixed effects OLS regressions when we restrict our sample to November 2019 and the first Covid wave from March to May 2020. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers. Job loss expectations in November 2019 are re-scaled to have mean 3%.

C.6 Binary indicator for mental health problems as dependent variable

Table C.15: Estimated coefficients from fixed effects OLS regressions of mental health (MHI-5 score<60) on main channels

	Men		Women	
	(1)	(2)	(3)	(4)
prob: becoming infected	-0.004	-0.003	0.039	0.039
	(0.025)	(0.025)	(0.031)	(0.032)
reduced working hours: yes	0.037***	0.037***	0.015	0.015
	(0.013)	(0.013)	(0.014)	(0.014)
prob: becoming unemployed	0.244***	0.247***	0.141**	0.143**
	(0.062)	(0.062)	(0.063)	(0.064)
loneliness	0.008*		0.018***	
	(0.004)		(0.005)	
March 2020 (ref: sharing extra childcare duties)	-0.031	-0.027	0.016	0.026
	(0.045)	(0.045)	(0.066)	(0.067)
May 2020 (ref: sharing extra childcare duties)	-0.025	-0.020	-0.124**	-0.113**
	(0.046)	(0.046)	(0.056)	(0.057)
June 2020 (ref: sharing extra childcare duties)	-0.048	-0.047	-0.150***	-0.148**
	(0.042)	(0.042)	(0.058)	(0.057)
September 2020 (ref: sharing extra childcare duties)	-0.032	-0.032	-0.190***	-0.187***
	(0.044)	(0.044)	(0.057)	(0.057)
December 2020 (ref: sharing extra childcare duties)	0.041	0.043	-0.136**	-0.136**
	(0.051)	(0.050)	(0.062)	(0.062)
extra childcare: myself x March 2020	0.309***	0.305***	-0.005	-0.018
	(0.111)	(0.111)	(0.108)	(0.108)
extra childcare: myself x May 2020	0.062	0.058	0.135	0.122
	(0.076)	(0.075)	(0.085)	(0.085)
extra childcare: myself x June 2020	0.217**	0.218**	0.114	0.108
	(0.096)	(0.096)	(0.093)	(0.093)
extra childcare: myself x September 2020	0.115	0.118	0.104	0.098
	(0.072)	(0.072)	(0.089)	(0.087)
extra childcare: myself x December 2020	0.009	0.008	0.199*	0.193*
	(0.076)	(0.076)	(0.109)	(0.106)
extra childcare: partner x March 2020	0.047	0.042	0.282**	0.287**
	(0.070)	(0.070)	(0.119)	(0.119)
extra childcare: partner x May 2020	0.071	0.067	0.052	0.055
	(0.065)	(0.065)	(0.062)	(0.064)
extra childcare: partner x June 2020	-0.017	-0.016	0.030	0.038
	(0.070)	(0.070)	(0.084)	(0.085)
extra childcare: partner x September 2020	0.022	0.022	0.126	0.131
	(0.074)	(0.074)	(0.098)	(0.099)
extra childcare: partner x December 2020	-0.012	-0.011	0.264***	0.265***
	(0.081)	(0.081)	(0.102)	(0.102)
extra childcare: other arrangement x March 2020	0.200***	0.198***	-0.029	-0.043
	(0.074)	(0.074)	(0.113)	(0.114)
extra childcare: other arrangement x May 2020	0.124*	0.122*	0.009	-0.005
	(0.073)	(0.073)	(0.099)	(0.101)
extra childcare: other arrangement x June 2020	0.152**	0.150**	0.019	0.009
	(0.071)	(0.072)	(0.094)	(0.096)
extra childcare: other arrangement x September 2020	0.100	0.099	-0.001	-0.010

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Table C.15 – *Continued from previous page*

	Men		Women	
	(1)	(2)	(3)	(4)
	(0.075)	(0.076)	(0.098)	(0.099)
extra childcare: other arrangement x December 2020	0.041	0.036	0.103	0.095
	(0.074)	(0.073)	(0.119)	(0.121)
child aged 12-18 x March 2020	0.115**	0.111**	0.042	0.033
	(0.048)	(0.048)	(0.072)	(0.072)
child aged 12-18 x May 2020	0.009	0.005	0.100*	0.092
	(0.049)	(0.049)	(0.061)	(0.061)
child aged 12-18 x June 2020	0.031	0.029	0.135**	0.134**
	(0.045)	(0.044)	(0.064)	(0.063)
child aged 12-18 x September 2020	-0.016	-0.018	0.139**	0.136**
	(0.047)	(0.047)	(0.061)	(0.061)
child aged 12-18 x December 2020	-0.031	-0.035	0.107	0.105
	(0.055)	(0.054)	(0.066)	(0.066)
no child x March 2020	0.041	0.039	0.009	0.011
	(0.047)	(0.048)	(0.069)	(0.069)
no child x May 2020	-0.018	-0.021	0.088	0.088
	(0.049)	(0.049)	(0.059)	(0.060)
no child x June 2020	0.006	0.006	0.108*	0.109*
	(0.046)	(0.046)	(0.060)	(0.060)
no child x September 2020	-0.018	-0.017	0.137**	0.137**
	(0.047)	(0.047)	(0.060)	(0.060)
no child x December 2020	-0.051	-0.053	0.124*	0.122*
	(0.053)	(0.053)	(0.066)	(0.066)
single parent x March 2020	0.010	0.011	0.001	0.004
	(0.076)	(0.077)	(0.086)	(0.086)
single parent x May 2020	-0.070	-0.069	0.117	0.121
	(0.082)	(0.083)	(0.073)	(0.074)
single parent x June 2020	-0.039	-0.039	0.090	0.087
	(0.080)	(0.081)	(0.075)	(0.075)
single parent x September 2020	-0.089	-0.088	0.158**	0.157**
	(0.072)	(0.072)	(0.075)	(0.076)
single parent x December 2020	-0.126	-0.128	0.102	0.098
	(0.080)	(0.080)	(0.074)	(0.073)
observations	5,010	5,010	5,193	5,193
number of individuals	1,119	1,119	1,201	1,201

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level. The table presents the estimated coefficients from linear probability regressions with individual fixed effects of the probability of mental health problems (MHI-5 score < 60) on main channels of the pandemic, see Equation (1). We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers.

Table C.16: Estimated coefficients from fixed effects OLS regressions of mental health (MHI-5 score<60) on hours worked from home by arrangement for extra childcare duties

	Men		Women	
	(1)	(2)	(3)	(4)
A. all periods				
March 2020	0.026	0.027	0.041*	0.049**
	(0.019)	(0.019)	(0.023)	(0.023)
May 2020	-0.031**	-0.029*	-0.035*	-0.028
	(0.015)	(0.015)	(0.019)	(0.019)
June 2020	-0.036***	-0.036**	-0.048***	-0.047***
	(0.014)	(0.014)	(0.017)	(0.017)
September 2020	-0.045***	-0.045***	-0.067***	-0.066***
	(0.014)	(0.014)	(0.018)	(0.019)
December 2020	-0.003	-0.003	-0.018	-0.021
	(0.015)	(0.015)	(0.020)	(0.020)
hours worked from home (ref: sharing extra childcare duties)	-0.001	-0.001	-0.001	-0.001
	(0.001)	(0.001)	(0.002)	(0.002)
caregiver: myself x working hours home office	0.005**	0.005**	0.003	0.003
	(0.002)	(0.002)	(0.003)	(0.003)
caregiver: partner x working hours home office	0.002	0.002	0.008	0.009
	(0.002)	(0.002)	(0.005)	(0.005)
caregiver: other arrangement x working hours home office	-0.002	-0.002	-0.003	-0.004
	(0.002)	(0.002)	(0.003)	(0.003)
caregiver: child aged 12-18 x working hours home office	0.002**	0.002*	0.001	0.001
	(0.001)	(0.001)	(0.002)	(0.002)
caregiver: no child x working hours home office	0.001	0.001	0.001	0.001
	(0.001)	(0.001)	(0.002)	(0.002)
caregiver: single parent x working hours home office	0.002	0.002	0.001	0.001
	(0.003)	(0.003)	(0.003)	(0.003)
prob: becoming infected	-0.002	-0.002	0.037	0.037
	(0.025)	(0.025)	(0.032)	(0.032)
reduced working hours: yes	0.042***	0.042***	0.011	0.011
	(0.014)	(0.014)	(0.015)	(0.015)
prob: becoming unemployed	0.249***	0.251***	0.141**	0.143**
	(0.062)	(0.061)	(0.063)	(0.063)
loneliness	0.008**		0.018***	
	(0.004)		(0.005)	
observations	5,010	5,010	5,193	5,193
number of individuals	1,119	1,119	1,201	1,201
B. during spring lockdown (schools/childcare closed)				
March 2020	0.042	0.043*	0.006	0.017
	(0.026)	(0.026)	(0.031)	(0.031)
May 2020	-0.027	-0.026	-0.065***	-0.055**
	(0.020)	(0.020)	(0.025)	(0.025)
working hours home office (ref: sharing extra childcare duties)	-0.000	-0.000	0.002	0.003
	(0.002)	(0.002)	(0.003)	(0.003)
caregiver: myself x working hours home office	0.004*	0.004*	0.002	0.001
	(0.002)	(0.002)	(0.004)	(0.004)
caregiver: partner x working hours home office	-0.001	-0.001	0.011**	0.011**

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Table C.16 – *Continued from previous page*

	Men		Women	
	(1)	(2)	(3)	(4)
	(0.003)	(0.003)	(0.005)	(0.005)
caregiver: other arrangement x working hours home office	-0.002	-0.003	-0.009*	-0.010*
	(0.004)	(0.004)	(0.005)	(0.005)
child aged 12-18 x working hours home office	0.002	0.002	-0.002	-0.003
	(0.002)	(0.002)	(0.003)	(0.003)
no child x working hours home office	0.001	0.000	-0.003	-0.003
	(0.002)	(0.002)	(0.003)	(0.003)
single parent x working hours home office	-0.001	-0.001	-0.002	-0.002
	(0.002)	(0.002)	(0.004)	(0.004)
prob: becoming infected	-0.056	-0.053	0.081	0.083
	(0.043)	(0.043)	(0.054)	(0.055)
reduced working hours: yes	0.075***	0.076***	0.045*	0.047*
	(0.025)	(0.025)	(0.024)	(0.024)
prob: becoming unemployed	0.263***	0.271***	0.179**	0.176*
	(0.090)	(0.089)	(0.089)	(0.090)
loneliness	0.014*		0.030***	
	(0.008)		(0.008)	
observations	2,605	2,605	2,741	2,741
number of individuals	1,099	1,099	1,179	1,179

*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level; The table presents the estimated coefficients from linear probability regressions with individual fixed effects of the probability of mental health problems (MHI-5 score < 60) on interactions between home office hours and extra care duties for men and women for the full sample period, see Equation (2). Panel A shows the estimated coefficients for all survey waves from November 2019 to December 2020. Panel B shows the estimated coefficients when we restrict our sample to November 2019 and the first Covid wave from March to May 2020. We control for a full set of interactions between survey month and categories of caregiver arrangements and household structure. The reference period is November 2019, the reference category are parents who share the extra childcare that becomes necessary during the closure of school and daycare centers.

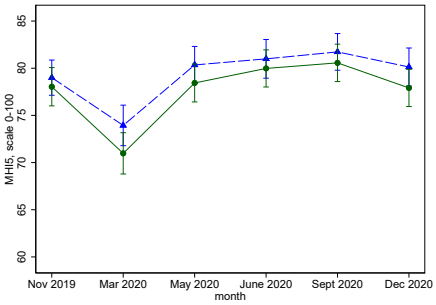
Table C.17: Estimated coefficients from OLS regressions of mental health (MHI-5 score<60) based on the specification presented in Table 7 in Zamarro and Prados (2021)

	MHI-5 score<60
March 2020	-0.195***
	(0.015)
May 2020	-0.258***
	(0.015)
June 2020	-0.283***
	(0.016)
Home Office: yes	-0.015
	(0.014)
Female	0.044**
	(0.018)
Female x Kids x March	0.038
	(0.024)
Female x Kids x May	0.012
	(0.030)
Female x Kids x June	-0.021
	(0.036)
Male x Kids x March	0.040
	(0.025)
Male x Kids x May	0.059*
	(0.030)
Male x Kids x June	0.064**
	(0.032)
Observations	3,842

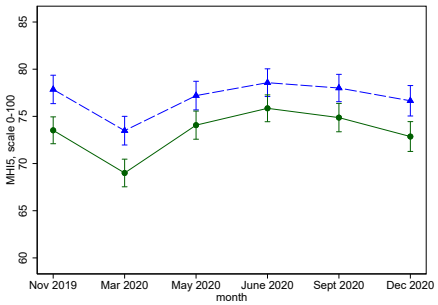
*** p<0.01, ** p<0.05, * p<0.1; standard errors clustered on the individual level. The table presents the estimated coefficients from a linear probability regression (without a constant) of the probability of mental health problems (MHI-5 score<60) on gender, children in household<18, survey fixed effects and their interactions, and working from home. The specification is taken from Table 7 in Zamarro and Prados, 2021.

D Additional Figures

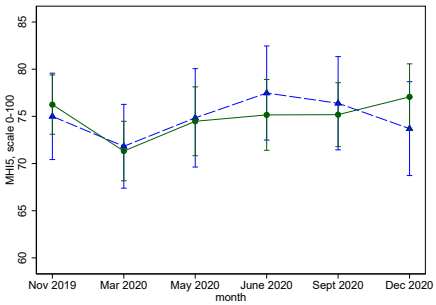
Figure D.1: Evolution of mental health by household structure



(a) youngest child between 12-18 years old



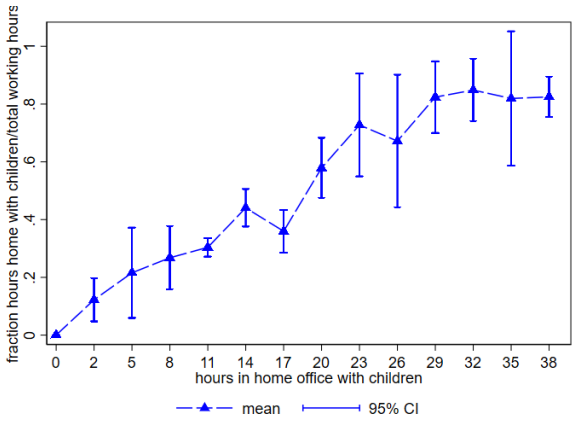
(b) no children in household



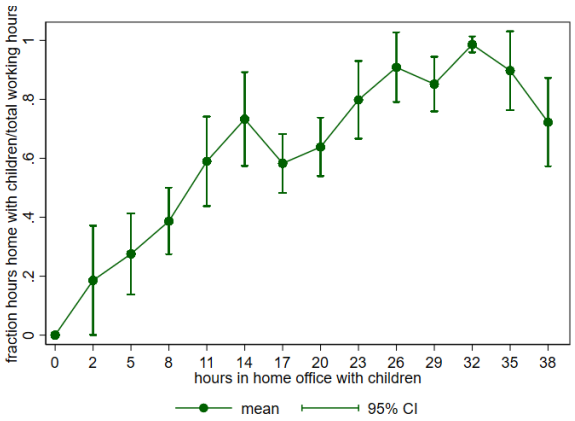
(c) single parent

Note: Each panel shows the evolution of mental health separately for men (blue, dashed, triangles) and women (green, solid, circles). Means are estimated on the sample of the working population and conditional on the primary form of care arrangement as stated in March or April 2020. Vertical bars depict 95-% confidence intervals. Similar trajectories for two-parent households by caregiver are in the main text, Figure 3

Figure D.2: Mean fraction of home office hours with children relative to total working hours



(a) Men



(b) Women

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