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**Article — Published Version**

## Parenthood as a driver of increased gender inequality during COVID-19? Exploratory evidence from Germany

European Societies

**Provided in Cooperation with:**

WZB Berlin Social Science Center

*Suggested Citation:* Hipp, Lena; Bünning, Mareike (2021) : Parenthood as a driver of increased gender inequality during COVID-19? Exploratory evidence from Germany, European Societies, ISSN 1469-8307, Taylor & Francis, London, Vol. 23, Iss. S1, pp. S658-S673, <https://doi.org/10.1080/14616696.2020.1833229>

This Version is available at:

<https://hdl.handle.net/10419/226174>

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## Online Appendix

### Appendix A

**Variable overview:** time invariant independent variables (N for one wave = 4,429)

	N	%
<b>Age groups 25-54</b>		
25-34	1,424	32
35-44	1,960	44
45-54	1,045	24
<b>Female</b>		
No	981	22
Yes	3,391	77
Missing	57	1
<b>Same sex couple<sup>1</sup></b>		
No	3,003	68
Yes	123	3
Missing	1,303	29
<b>University degree</b>		
No	837	19
Yes	3,577	81
Missing	15	0
<b>Federal state<sup>2</sup></b>		
Baden-Württemberg	410	9
Bavaria	562	13
Berlin	1,191	27
Brandenburg	153	3
Bremen	53	1
Hamburg	162	4
Hesse	280	6
Mecklenburg-Western Pomerania	43	1
Lower Saxony	337	8
North Rhine-Westphalia	657	15
Rhineland-Palatinate	119	3
Saarland	10	0
Saxony	230	5
Saxony-Anhalt	63	1
Schleswig-Holstein	104	2
Thuringia	51	1
Missing	4	0
<b>Size of place of residence</b>		
Fewer than 50,000 inhabitants	1,068	24
50,000 inhabitants or more	3,340	75
Missing	21	0
<b>Number of rooms in proportion to size of household</b>		
Overcrowded	521	12
Adequate	1,539	35
More than adequate	2,272	51
Missing	97	2
<b>Migration background</b>		
Born in Germany, parents as well	3,808	86
Born in Germany, at least one parent born abroad	353	8
I was born abroad	259	6
Missing	9	0
<b>Worktime bef. Corona<sup>1</sup></b>		
Nonemployed	426	10

Part-time, <=37h	1,985	45
Full-time, >37h	1,918	43
Missing	100	2

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1 includes missings due to filters

2 not part of the regression model

**Variable overview:** time variant independent variables (N for each wave = 4,429)

	t							
	0		1		2		3	
	N	%	N	%	N	%	N	%
<b>Family constellation</b>								
Single, no children	1,042	24	1,042	24	1,033	23	1,036	23
Living with partner, no children	1,090	25	1,090	25	1,126	25	1,117	25
Living with partner and children	2,057	46	2,057	46	2,053	46	2,056	46
Single parent	201	5	201	5	203	5	204	5
Missing	39	1	39	1	14	0	16	0
<b>Children in household</b>								
No	2,159	49	2,159	49	2,161	49	2,158	49
Yes	2,269	51	2,269	51	2,268	51	2,271	51
Missing	1	0	1	0	0	0	0	0
<b>Employment</b>								
No	426	10	432	10	429	10	461	10
Yes	3,928	89	3,922	89	3,956	89	3,929	89
Missing	75	2	75	2	44	1	39	1
<b>Contract<sup>1</sup></b>								
Permanent	2,431	55	2,431	55	2,385	54	2,343	53
Fixed-term	1,176	27	1,176	27	1,168	26	1,144	26
Self-employed	304	7	304	7	319	7	317	7
Missing	518	12	518	12	557	13	625	14
<b>Current work situation<sup>1</sup></b>								
Both office	2,238	51	198	4	246	6	413	9
Both homeoffice	24	1	1,254	28	1,257	28	1,060	24
Respondent homeoffice, partner office	169	4	588	13	656	15	629	14
Respondent office, partner homeoffice	102	2	181	4	217	5	353	8
Both not working	23	1	64	1	56	1	40	1
Respondent working, partner not	202	5	344	8	322	7	241	5
Respondent not working, partner working	303	7	436	10	386	9	392	9
Missing	1,368	31	1,364	31	1,289	29	1,301	29
<b>Job loss during the pandemic<sup>1,2</sup></b>								
No	0	0	34	1	40	1	45	1
Yes	0	0	6	0	6	0	16	0
Missing	4,429	100	4,389	99	4,383	99	4,368	99
<b>Rating household income</b>								
Living comfortably	3,242	73	2,884	65	2,860	65	2,824	64
Getting by	1,101	25	1,295	29	1,302	29	1,400	32
Difficulties getting by/barely coping	84	2	236	5	264	6	202	5
Missing	2	0	14	0	3	0	3	0
<b>Key/essential worker<sup>1</sup></b>								
No	2,951	67	2,951	67	2,911	66	2,858	65
Yes	892	20	892	20	892	20	880	20
Missing	586	13	586	13	626	14	691	16
<b>Sector<sup>1</sup></b>								
Manufacturing, mining, and related industries	173	4	173	4	169	4	163	4
Retail, hospitality, transport, storage	180	4	180	4	179	4	175	4
Information and communication	356	8	356	8	354	8	342	8
Scientific, technical, and support service activities	1,232	28	1,232	28	1,218	28	1,210	27
Public administration and defense	491	11	491	11	488	11	483	11
Education, human health, and social work	862	19	862	19	847	19	834	19
Other service	556	13	556	13	551	12	537	12
Missing	579	13	579	13	623	14	685	15

1 includes missings due to filters

2 not part of the regression model

**Variable overview:** dependent variables (N for each wave = 4,429)

	t							
	0		1		2		3	
	N	%	N	%	N	%	N	%
<b>Work less<sup>1</sup></b>								
No	0	0	2,097	47	2,704	61	3,034	69
Yes	0	0	1,803	41	1,242	28	884	20
Missing	4,429	100	529	12	483	11	511	12
<b>Homeoffice<sup>1</sup></b>								
No	3,633	82	693	16	793	18	1,252	28
Yes	264	6	2,952	67	2,988	67	2,563	58
Missing	532	12	784	18	648	15	614	14
<b>Current distribution of household work: Housework<sup>1</sup></b>								
(Almost) exclusively my partner	42	1	49	1	52	1	48	1
Mostly my partner	257	6	237	5	260	6	283	6
About fifty-fifty	1,478	33	1,507	34	1,419	32	1,391	31
Mostly me	939	21	805	18	882	20	893	20
(Almost) exclusively me	407	9	530	12	550	12	543	12
Missing	1,306	29	1,301	29	1,266	29	1,271	29
<b>Current distribution of household work: Childcare<sup>1</sup></b>								
(Almost) exclusively my partner	23	1	27	1	31	1	23	1
Mostly my partner	204	5	185	4	207	5	216	5
About fifty-fifty	733	17	831	19	767	17	746	17
Mostly me	747	17	589	13	648	15	689	16
(Almost) exclusively me	281	6	372	8	356	8	336	8
Missing	2,441	55	2,425	55	2,420	55	2,419	55
<b>Current satisfaction: Work<sup>1</sup></b>								
very dissatisfied	63	1	217	5	170	4	140	3
	156	4	415	9	428	10	322	7
	202	5	458	10	465	10	357	8
	326	7	559	13	549	12	436	10
	864	20	888	20	960	22	1,029	23
	1,577	36	997	23	1,077	24	1,265	29
very satisfied	712	16	364	8	296	7	369	8
Missing	529	12	531	12	484	11	511	12
<b>Current satisfaction: Family life</b>								
very dissatisfied	26	1	123	3	80	2	55	1
	65	1	260	6	266	6	167	4
	131	3	342	8	361	8	277	6
	345	8	552	12	618	14	469	11
	1,022	23	974	22	1,105	25	1,085	24
	1,773	40	1,255	28	1,359	31	1,625	37
very satisfied	914	21	769	17	613	14	727	16
Missing	153	3	154	3	27	1	24	1
<b>Current satisfaction: Life in general</b>								
very dissatisfied	11	0	88	2	59	1	29	1
	54	1	247	6	236	5	148	3
	87	2	357	8	370	8	270	6
	257	6	606	14	580	13	442	10
	896	20	1,176	27	1,301	29	1,173	26
	2,255	51	1,496	34	1,505	34	1,870	42
very satisfied	843	19	449	10	372	8	495	11
Missing	26	1	10	0	6	0	2	0

1 includes missings due to filters

**Appendix B:** Predicted probabilities of working fewer hours or not at all during the COVID-19 pandemic (parents only)

	t1		t2		t3	
Men	ref.		ref.		ref.	
Women	0.04	[-0.02,0.09]	0.05	[-0.01,0.11]	0.07**	[0.02,0.13]
Not essential worker	ref.		ref.		ref.	
Essential worker	-0.09**	[-0.15,-0.03]	-0.06*	[-0.12,-0.00]	-0.06*	[-0.11,-0.01]
N	1791		1769		1726	

95% confidence intervals in brackets

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Predicted probabilities of working fewer hours or not at all during the COVID-19 pandemic (nonparents only)

	t1		t2		t3	
Men	ref.		ref.		ref.	
Women	0.02	[-0.03,0.07]	0.03	[-0.01,0.07]	0.02	[-0.02,0.05]
Not essential worker	ref.		ref.		ref.	
Essential worker	-0.05	[-0.11,0.01]	-0.00	[-0.05,0.05]	-0.05*	[-0.09,-0.01]
N	1801		1793		1765	

95% confidence intervals in brackets

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Note: The above tables present marginal effects. The dependent variable is the reduction in time spent in paid work, which includes both reductions in working hours and the stoppage of work due to plant closures and furlough payments, etc, and could have been induced by either the employer or the employee. The underlying logistic regression models are adjusted for age, migration background, education, household income, apartment size, community size, pre-pandemic working hours, contract type and industry. The models were fully interacted with the time point of the survey.

**Appendix C:** Predicted probabilities of working from home during the COVID-19 pandemic (parents only)

	t1		t2		t3	
Men	ref.		ref.		ref.	
Women	0.04	[-0.01,0.09]	0.05	[-0.00,0.10]	0.03	[-0.03,0.08]
Not essential worker	ref.		ref.		ref.	
Essential worker	-0.19***	[-0.25,-0.13]	-0.23***	[-0.29,-0.17]	-0.30***	[-0.36,-0.24]
N	1673		1694		1681	

95% confidence intervals in brackets

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

**Nonparents: Probability of working from home during the Pandemic**

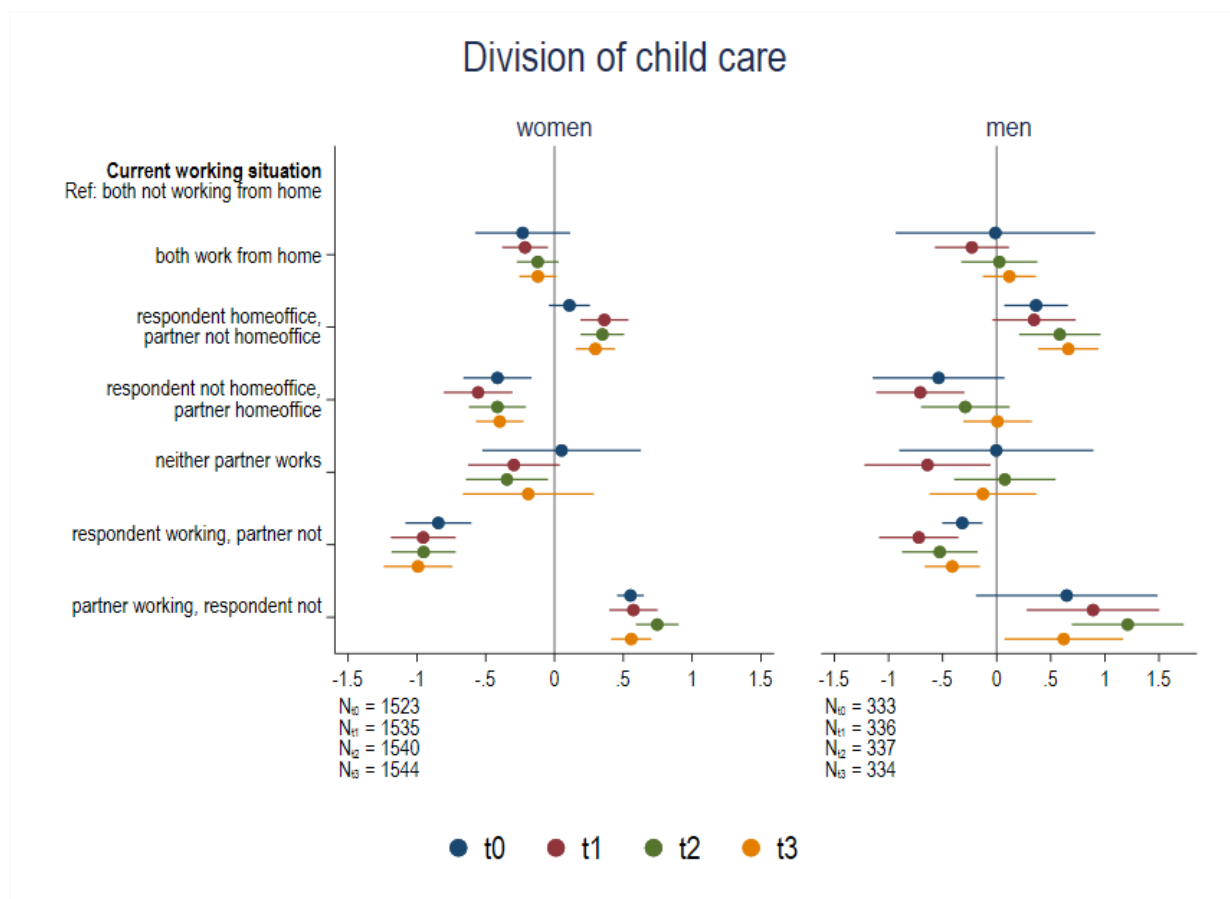
	t1		t2		t3	
Men	ref.		ref.		ref.	
Women	0.02	[-0.02,0.06]	0.02	[-0.02,0.06]	0.01	[-0.04,0.06]
Not essential worker	ref.		ref.		ref.	
Essential worker	-0.23***	[-0.29,-0.18]	-0.21***	[-0.26,-0.16]	-0.24***	[-0.30,-0.18]
N	1688		1733		1728	

95% confidence intervals in brackets

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$

Note: The above tables present marginal effects. The dependent variable is working from home among those who had worked at the pandemic's outset and had not stopped working. The underlying logistic regression models are adjusted for age, migration background, education, household income, apartment size, community size, pre-pandemic working hours, contract type and industry. The models were fully interacted with the time point of the survey.

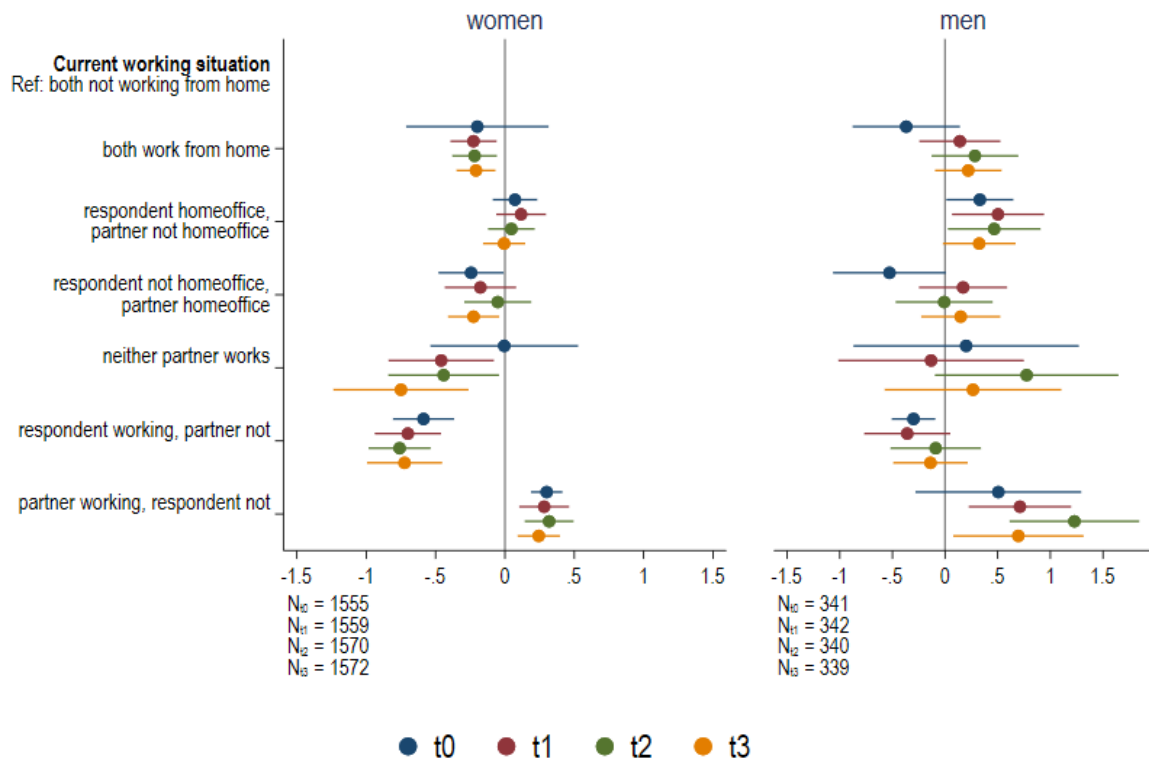
## Appendix D: Parents' division of unpaid labor by gender



Note: The figure presents coefficients of OLS regressions with clustered, robust standard errors. The dependent variables are division of child care and division of housework measured in all three waves (t1 to t3). In the first wave, respondents also retrospectively assessed their division of unpaid labour before the pandemic (t0). The variable is measured on a 5-point scale ranging from “(Almost) exclusively my partner” to “(Almost) exclusively me”. The following covariates were included in the analyses: age, migration background, respondent’s and partners’ education, household income, apartment size, community size and same-sex relationship. All models were fully interacted with the time point of the survey. Stata’s `coefplot` command (Jann 2014) was used to generate the figure.

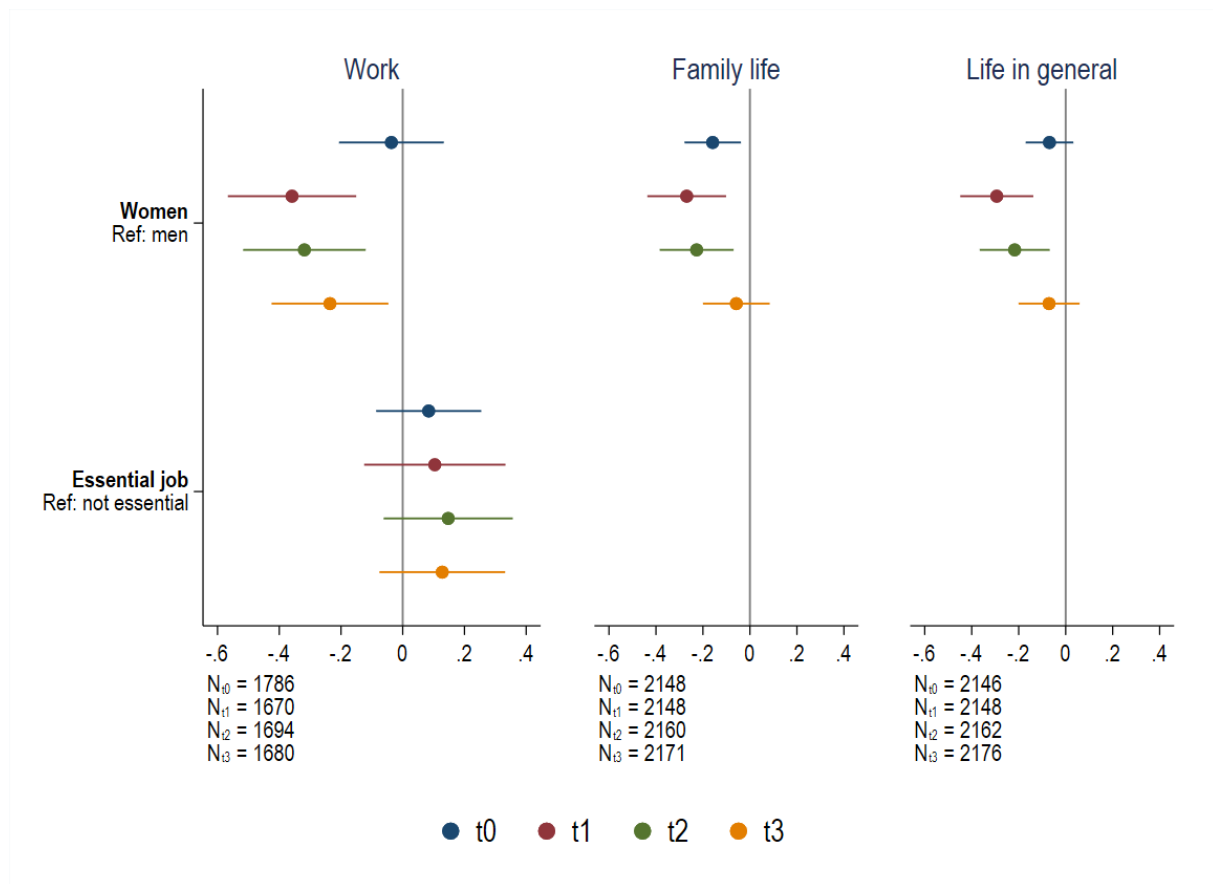


## Division of housework



Note: The figure presents coefficients of OLS regressions with clustered, robust standard errors. The dependent variables are division of child care and division of housework measured in all three waves (t1 to t3). In the first wave, respondents also retrospectively assessed their division of unpaid labour before the pandemic (t0). The variable is measured on a 5-point scale ranging from “(Almost) exclusively my partner” to “(Almost) exclusively me”. The following covariates were included in the analyses: age, migration background, respondent’s and partners’ education, household income, apartment size, community size and same-sex relationship. All models were fully interacted with the time point of the survey. Stata’s `coefplot` command (Jann 2014) was used to generate the figure.

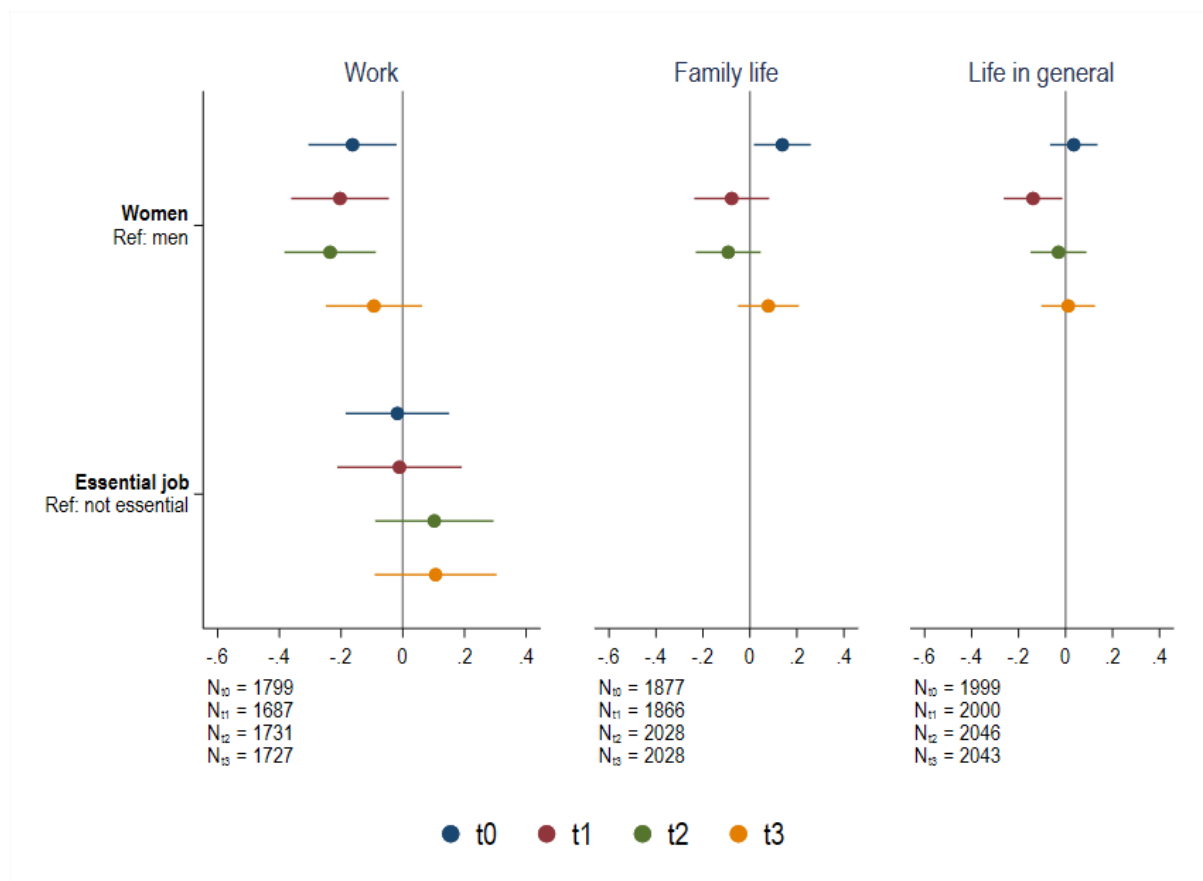
## Appendix E: Changes in satisfaction with work, family life and life in general (parents only)



Note: The dependent variable is satisfaction with work, family life and life in general on a 7-point scale measured in all three waves (t1 to t3). In the first wave, respondents also retrospectively assessed their satisfaction in all three domains before the pandemic (t0).

The following covariates were included in the analyses: age, migration background, respondent's education, household income, apartment size and community size; the analyses for satisfaction with work further included contract type, pre-pandemic working hours, home office and industry; the analyses of family life and life in general also included employment status as an additional covariate. All models were fully interacted with the time point of the survey. Stata's coefplot command (Jann 2014) was used to generate the figure.

## Changes in satisfaction with work, family life and life in general (nonparents only)



Note:

The dependent variable is satisfaction with work, family life and life in general on a 7-point scale measured in all three waves (t1 to t3). In the first wave, respondents also retrospectively assessed their satisfaction in all three domains before the pandemic (t0).

The following covariates were included in the analyses: age, migration background, respondent's education, household income, apartment size and community size; the analyses for satisfaction with work further included contract type, pre-pandemic working hours, home office and industry; the analyses of family life and life in general also included employment status as an additional covariate. All models were fully interacted with the time point of the survey. Stata's coefplot command (Jann 2014) was used to generate the figure.