

Online Appendix

Does Gender Ideology Matter? Pre-pandemic Gender Role Attitudes and the Division of Housework and Childcare During COVID-19 in Germany^{*}

Katrin Firl, Anna Hebel

^{*} This Online Appendix contains additional information regarding the article:
<https://www.comparativepopulationstudies.de/index.php/CPoS/article/view/722/451>

Tab. A1: Three-way interaction between change in working hours, gender, and GRA; housework sample

DV: Female share of housework (W13)	All
<i>Female share of housework W11</i>	0.51*** (0.00)
<i>GRA W11 (ref. egalitarian)</i>	
Traditional	0.23** (0.01)
<i>Change in working hours (ref. no change)</i>	
Reduced hours	-0.03 (0.58)
Increased hours	0.05 (0.32)
<i>Interaction: GRA * Hours</i>	
Traditional * Reduced hours	-0.10 (0.38)
Traditional * Increased hours	-0.21 (0.23)
<i>Gender (ref. male)</i>	
Female	0.14* (0.01)
<i>Interaction: GRA * Gender</i>	
Traditional * Female	-0.31* (0.01)
<i>Interaction: Hours * Gender</i>	
Reduced hours * Female	0.13* (0.05)
Increased hours * Female	-0.09 (0.19)
<i>Interaction: GRA * Hours * Gender</i>	
Traditional * Reduced hours * Female	0.36* (0.04)
Traditional * Increased hours * Female	-0.05+ (0.09)
<i>Education (ref. low & middle)</i>	
High	-0.05 (0.13)

Tab. A1: Continuation

DV: Female share of housework (W13)	All
<i>Number of children (ref. 0)</i>	
1	0.12** (0.01)
2	0.12** (0.00)
3+	0.18** (0.00)
<i>Lockdown (ref. lockdown light)</i>	
Hard lockdown	-0.00 (0.98)
<i>Birth cohort (ref. 1991-93)</i>	
1981-83	-0.08+ (0.07)
1971-73	0.00 (0.92)
<i>Region (ref. West Germany)</i>	
East Germany	-0.95** (0.02)
<i>Partner's working hours W13</i>	0.00 (0.72)
Constant	1.66*** (0.00)
Observations	2205

Note: DV = dependent variable; p-values in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: pairfam, own calculations.

Tab. A2: Three-way interaction between change in working hours, gender, and GRA; childcare sample

DV: Female share of childcare W13	All
<i>Female share of childcare W11</i>	0.39*** (0.00)
<i>GRA W11 (ref. egalitarian)</i>	
Traditional	-0.03 (0.68)
<i>Change in working hours (ref. no change)</i>	
Reduced hours	-0.15* (0.04)
Increased hours	0.12 (0.15)
<i>Interaction: GRA * Hours</i>	
Traditional * Reduced hours	0.24* (0.02)
Traditional * Increased hours	0.04 (0.72)
<i>Gender (ref. male)</i>	
Female	0.09 (0.22)
<i>Interaction: GRA * Gender</i>	
Traditional * Female	0.09 (0.41)
<i>Interaction: Hours * Gender</i>	
Reduced hours * Female	0.21+ (0.06)
Increased hours * Female	-0.18 (0.12)
<i>Interaction: GRA * Hours * Gender</i>	
Traditional * Reduced hours * Female	-0.19 (0.23)
Traditional * Increased hours * Female	-0.05 (0.75)
<i>Education (ref. low & middle)</i>	
High	-0.04 (0.23)

Tab. A2: Continuation

DV: Female share of childcare W13	All
<i>Number of children (ref. 1)</i>	
2	0.09* (0.01)
3+	0.06 (0.21)
<i>Age of youngest child W13</i>	-0.01** (0.00)
<i>Lockdown (ref. lockdown light)</i>	
Hard lockdown	-0.03 (0.40)
<i>Birth cohort (ref. 1991-93)</i>	
1981-83	0.00 (0.99)
1971-73	0.11 (0.32)
<i>Region (ref. West Germany)</i>	
East Germany	-0.11** (0.00)
<i>Partner's working hours W13</i>	0.00* (0.02)
Constant	2.00*** (0.00)
Observations	1336

Note: DV = dependent variable; p-values in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: pairfam, own calculations.

Tab. A3: AMEs of traditional pre-pandemic GRAs (baseline = egalitarian GRA) by changes in working hours and separated by sex for both samples

	Change in female share of			
	housework:		childcare:	
	for men	for women	for men	for women
<i>Baseline: egalitarian GRA</i>				
No change in hours	0.23** (0.01)	-0.08 (0.38)	-0.03 (0.68)	0.06 (0.46)
Reduced hours	0.12 (0.15)	0.18+ (0.07)	0.21** (0.00)	0.11 (0.22)
Increased hours	0.02 (0.92)	0.05 (0.65)	0.01 (0.89)	0.05 (0.70)
Observations	2205	2205	1336	1336

p-values in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

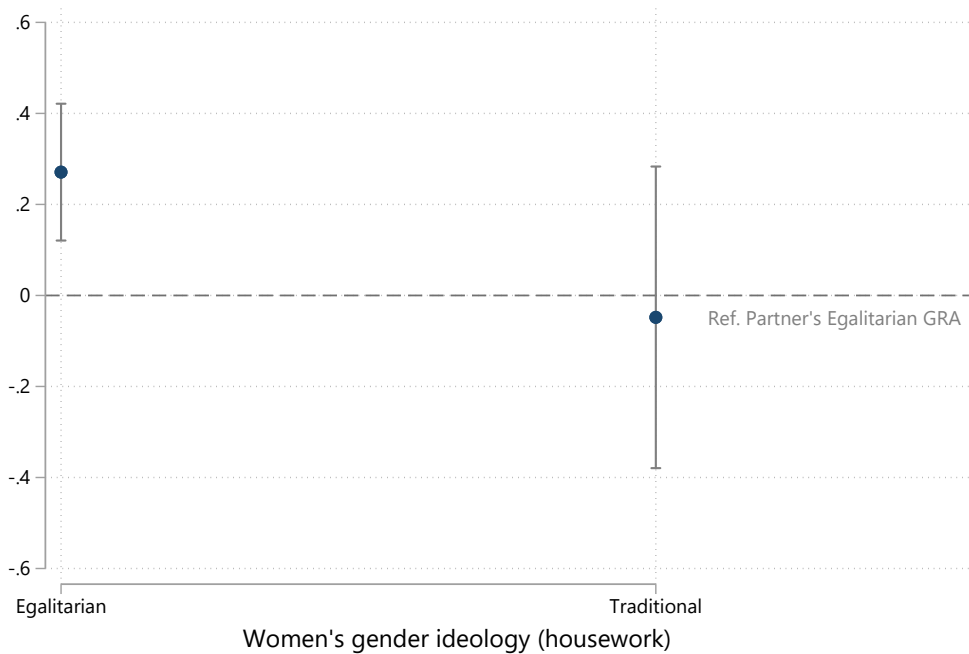
Source: pairfam, own calculations.

Robustness checks: interaction of anchor and partner GRAs

Division of housework

Fig. A1: Average marginal effect of male partner's traditional GRAs (baseline = partner's egalitarian GRA) with 95% confidence intervals by the female anchor's GRAs. Merged anchor and partner housework sample, women (n = 586)

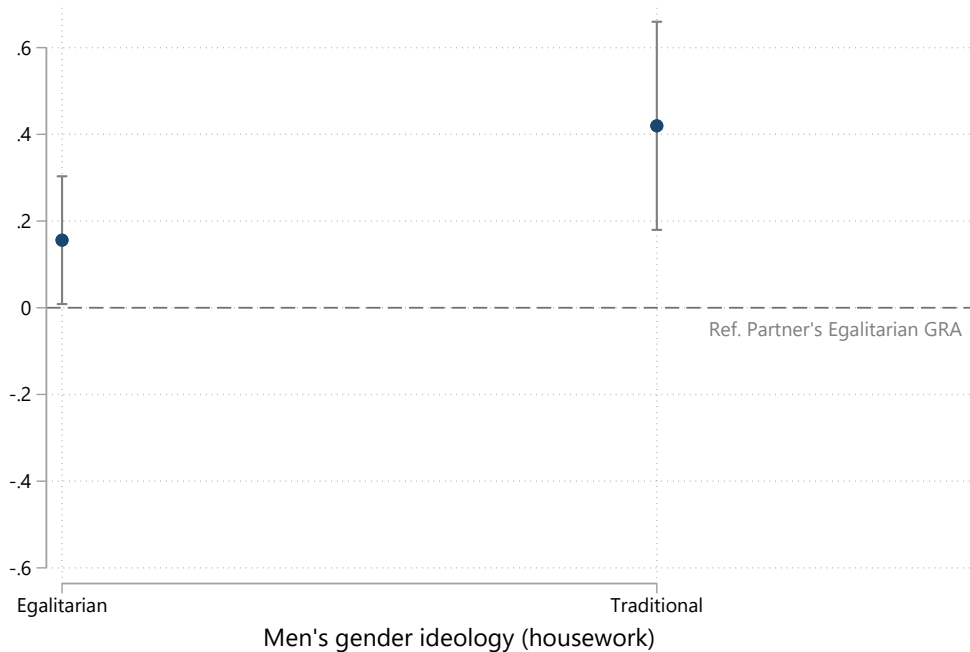
Change in the female share of housework



Source: pairfam, own calculations.

Fig. A2: Average marginal effect of female partner's traditional GRAs (baseline = partner's egalitarian GRA) with 95% confidence intervals by the male anchor's GRAs. Merged anchor and partner housework sample, men (n = 692)

Change in the female share of housework



Source: pairfam, own calculations.

Looking at the average marginal effects of partners' traditional GRAs (Fig. A1 and A2) in the housework sample, for women, a partner holding traditional attitudes is only significantly influential when the woman is egalitarian. In that case, women perform significantly more housework than if both partners are egalitarian. When a woman is traditional, the man's attitudes have no significant influence on her share of housework.

For men, women's traditional attitudes have a significant influence for both egalitarian and traditional men. Here, the female share of housework is highest when both partners are traditional.

Tab. A4: Two-way interaction between anchor and partner GRA; merged anchor and partner housework sample, men

DV: Female share of housework (W13)	All
<i>Female share of housework W11</i>	0.50*** (0.00)
<i>Anchor GRA W11 (ref. egalitarian)</i>	
Traditional	0.02 (0.81)
<i>Partner GRA W11 (ref. egalitarian)</i>	
Traditional	0.16* (0.04)
<i>Interaction: Anker GRA * Partner GRA</i>	
Traditional * Traditional	0.26+ (0.06)
<i>Education (ref. low & middle)</i>	
High	-0.02 (0.72)
<i>Number of children (ref. 0)</i>	
1	0.12 (0.12)
2	0.05 (0.53)
3+	0.08 (0.41)
<i>Lockdown (ref. lockdown light)</i>	
Hard lockdown	-0.02 (0.68)
<i>Birth cohort (ref. 1991-93)</i>	
1981-83	-0.15+ (0.06)
1971-73	-0.10 (0.23)
<i>Region (ref. West Germany)</i>	
East Germany	-0.16** (0.00)
Constant	1.85*** (0.00)
Observations	692

Note: DV = dependent variable;

p-values in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: pairfam, own calculations.

Tab. A5: Two-way interaction between anchor and partner GRA; merged anchor and partner housework sample, women

DV: Female share of housework (W13)	All
<i>Female share of housework W11</i>	0.49*** (0.00)
<i>Anchor GRA W11 (ref. egalitarian)</i>	
Traditional	0.22** (0.01)
<i>Partner GRA W11 (ref. egalitarian)</i>	
Traditional	0.27*** (0.00)
<i>Interaction: Anker GRA * Partner GRA</i>	
Traditional * Traditional	0.32+ (0.09)
<i>Education (ref. low & middle)</i>	
High	-0.06 (0.25)
<i>Number of children (ref. 0)</i>	
1	0.05 (0.58)
2	0.18* (0.02)
3+	0.23* (0.05)
<i>Lockdown (ref. lockdown light)</i>	
Hard lockdown	-0.06 (0.29)
<i>Birth cohort (ref. 1991-93)</i>	
1981-83	-0.08 (0.34)
1971-73	-0.01 (0.89)
<i>Region (ref. West Germany)</i>	
East Germany	-0.11+ (0.05)
Constant	1.77*** (0.00)
Observations	586

Note: DV = dependent variable;

p-values in parentheses

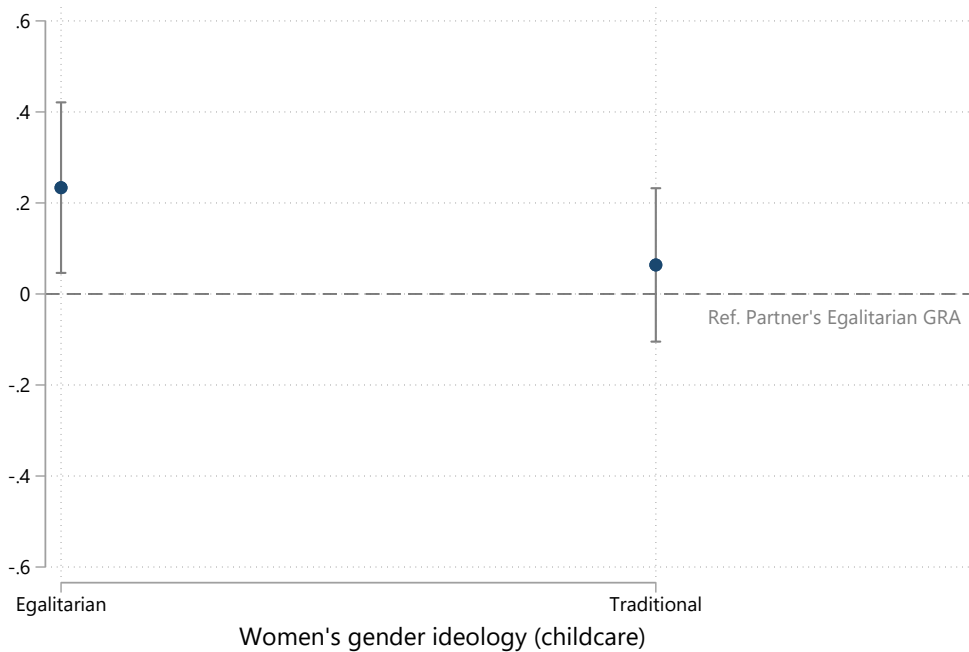
+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: pairfam, own calculations.

Division of Childcare

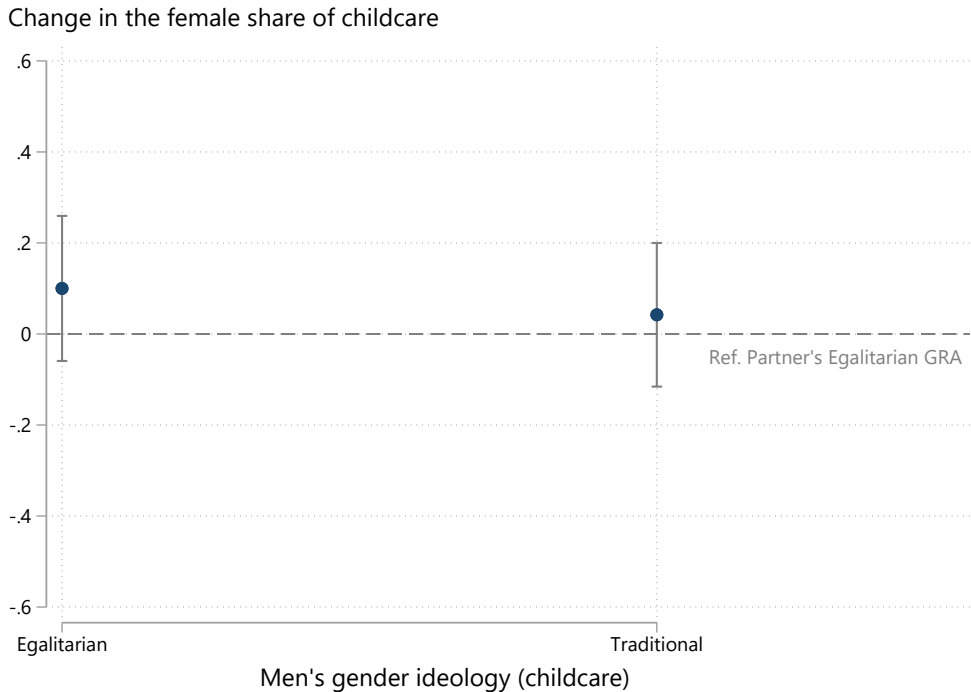
Fig. A3: Average marginal effect of male partner's traditional GRA (baseline = partner's egalitarian GRA) with 95% confidence intervals by the female anchors GRA. Merged anchor and partner childcare sample, women (n = 363)

Change in the female share of childcare



Source: pairfam, own calculations.

Fig. A4: Average marginal effect of female partner’s traditional GRA (baseline = partner’s egalitarian GRA) with 95% confidence intervals by the male anchors GRA. Merged anchor and partner childcare sample, women (n = 444)



Source: pairfam, own calculations.

Considering the interaction between anchor and partner GRA (Fig. A3 and A4), for women, we find that a male partners’ traditional GRAs are only influential if she is egalitarian, showing that in these cases of misalignment, male attitudes are indeed influential for women’s behavior. If she is traditional, whether her partner is egalitarian or traditional makes no significant difference for her share of childcare. For male anchors, female partners’ GRAs make no significant difference, neither for egalitarian, nor for traditional men.

Tab. A6: Two-way interaction between anchor and partner GRA; merged anchor and partner childcare sample, men

DV: Female share of childcare (W13)	All
<i>Female share of childcare W11</i>	0.34*** (0.00)
<i>Anchor GRA W11 (ref. egalitarian)</i>	
Traditional	0.15+ (0.06)
<i>Partner GRA W11 (ref. egalitarian)</i>	
Traditional	0.10 (0.22)
<i>Interaction: Anker GRA * Partner GRA</i>	
Traditional * Traditional	-0.06 (0.61)
<i>Education (ref. low & middle)</i>	
High	0.07 (0.20)
<i>Number of children (ref. 0)</i>	
2	0.08 (0.27)
3+	0.08 (0.37)
<i>Age of youngest child W11</i>	-0.02* (0.01)
<i>Lockdown (ref. lockdown light)</i>	
Hard lockdown	-0.07 (0.27)
<i>Birth cohort (ref. 1991-93)</i>	
1981-83	0.19 (0.33)
1971-73	0.34 (0.10)
<i>Region (ref. West Germany)</i>	
East Germany	-0.08 (0.26)
Constant	2.02*** (0.00)
Observations	444

Note: DV = dependent variable;

p-values in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: pairfam, own calculations.

Tab. A7: Two-way interaction between anchor and partner GRA; merged anchor and partner childcare sample, women

DV: Female share of childcare (W13)	All
<i>Female share of childcare W11</i>	0.44*** (0.00)
<i>Anchor GRA W11 (ref. egalitarian)</i>	
Traditional	0.17* (0.04)
<i>Partner GRA W11 (ref. egalitarian)</i>	
Traditional	0.23* (0.02)
<i>Interaction: Anker GRA * Partner GRA</i>	
Traditional * Traditional	-0.17 (0.19)
<i>Education (ref. low & middle)</i>	
High	-0.06 (0.36)
<i>Number of children (ref. 0)</i>	
2	0.02 (0.78)
3+	0.07 (0.48)
<i>Age of youngest child W11</i>	-0.02 (0.10)
<i>Lockdown (ref. lockdown light)</i>	
Hard lockdown	-0.08 (0.20)
<i>Birth cohort (ref. 1991-93)</i>	
1981-83	-0.03 (0.89)
1971-73	0.07 (0.74)
<i>Region (ref. West Germany)</i>	
East Germany	-0.18* (0.01)
Constant	1.98*** (0.00)
Observations	363

Note: DV = dependent variable;

p-values in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: pairfam, own calculations.

Robustness checks: GRA items

Division of housework (alternate GRA specification)

Tab. A8: Share of traditional respondents in the housework sample with an alternate GRA specification

Variable	Housework sample n=2,488
GRAs W11: Traditional	0.47

Source: pairfam, own calculations.

Tab. A9: OLS regression with the female share of housework (W13) as the dependent variable, alternate GRA specification; housework sample

DV: Female share of housework W13	All	Men	Women
<i>Female share of housework W11</i>	0.52*** (0.00)	0.53*** (0.00)	0.51*** (0.00)
<i>GRA W11 (ref. egalitarian)</i>			
Traditional	0.09** (0.00)	0.11** (0.00)	0.07+ (0.10)
<i>Education (ref. low & middle)</i>			
High	-0.04 (0.11)	-0.02 (0.51)	-0.06 (0.11)
<i>Number of children (ref. 0)</i>			
1	0.12** (0.01)	0.13* (0.03)	0.10+ (0.08)
2	0.10** (0.01)	0.08 (0.14)	0.13* (0.02)
3+	0.18*** (0.00)	0.14+ (0.06)	0.22** (0.00)
<i>Lockdown (ref. lockdown light)</i>			
Hard lockdown	0.01 (0.85)	0.03 (0.46)	-0.02 (0.68)
<i>Birth cohort (ref. 1991-93)</i>			
1981-83	-0.09* (0.03)	-0.12* (0.05)	-0.07 (0.23)
1971-73	-0.02 (0.64)	-0.04 (0.53)	-0.00 (0.96)
<i>Gender (ref. male)</i>			
Female	0.08** (0.00)		
<i>Region (ref. West Germany)</i>			
East Germany	-0.09** (0.00)	-0.15*** (0.00)	-0.04 (0.37)
Constant	1.68*** (0.00)	1.65*** (0.00)	1.78*** (0.00)
Observations	2488	1203	1285

Note: DV = dependent variable;

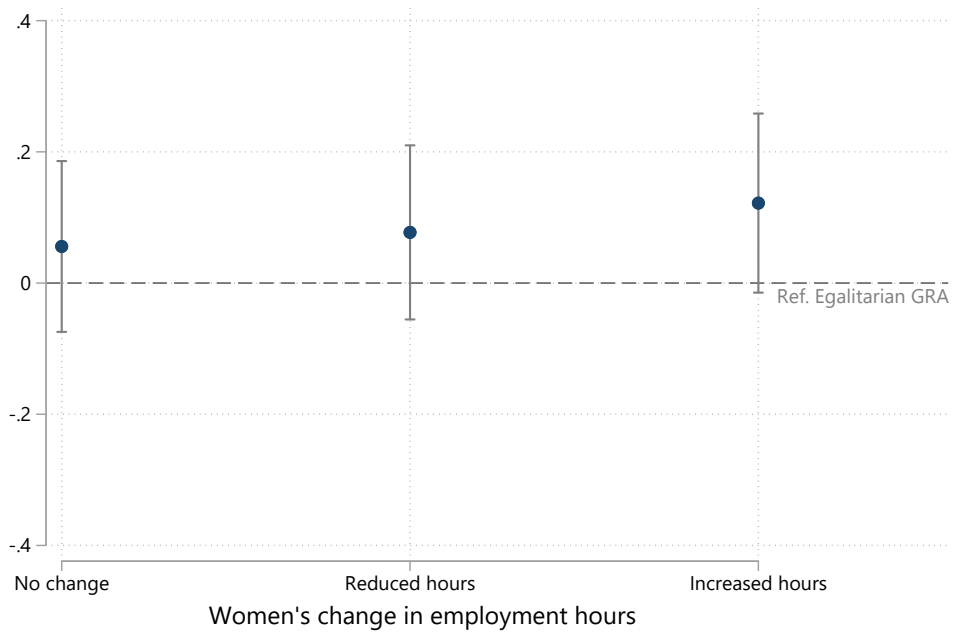
p-values in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: pairfam, own calculations.

Fig. A5: Conditional AMEs with 95% confidence intervals of women's traditional pre-pandemic GRAs (baseline = egalitarian GRA) on the female share of housework with the alternate GRA specification

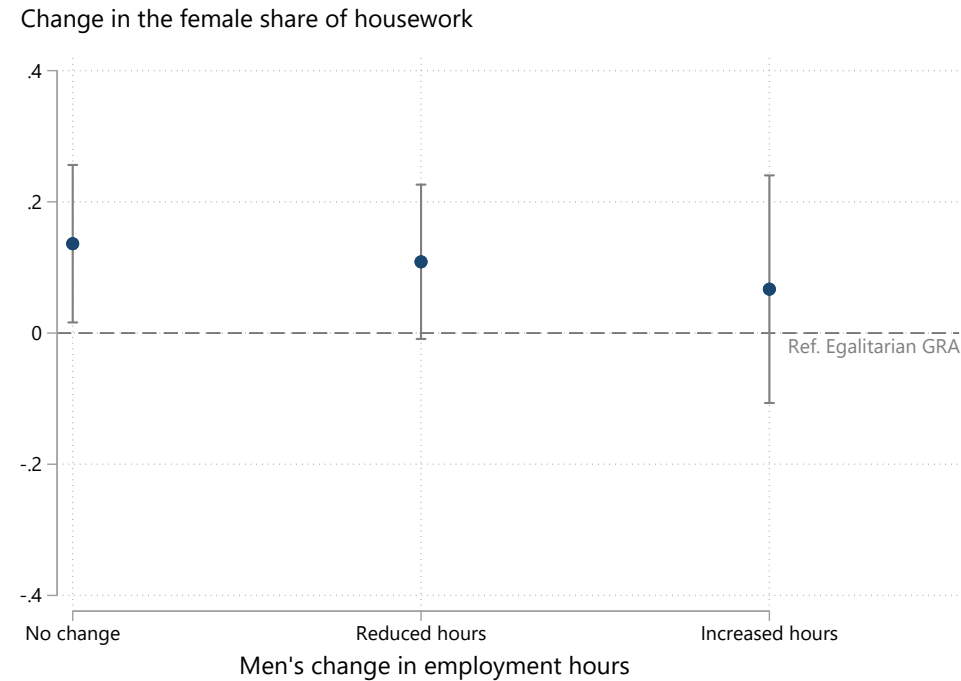
Change in the female share of housework



Note: Adjusted for all control variables.

Source: pairfam, own calculations.

Fig. A6: Conditional AMEs with 95% confidence intervals of men’s traditional pre-pandemic GRAs (baseline = egalitarian GRA) on the female share of housework with the alternate GRA specification



Note: Adjusted for all control variables.

Source: pairfam, own calculations.

Division of childcare (other GRA item)**Tab. A10:** OLS regression with the female share of childcare (W13) as the dependent variable, alternate GRA item; childcare sample

DV: Female share of childcare W13	All	Men	Women
<i>Female share of childcare W11</i>	0.39*** (0.00)	0.37*** (0.00)	0.42*** (0.00)
<i>GRA W11 (ref. egalitarian)</i>			
Traditional	0.03 (0.37)	0.02 (0.68)	0.05 (0.32)
<i>Education (ref. low & middle)</i>			
High	-0.04 (0.24)	-0.01 (0.74)	-0.06 (0.22)
<i>Number of children (ref. 1)</i>			
2	0.07+ (0.07)	0.08 (0.13)	0.05 (0.35)
3 or more	0.10+ (0.05)	0.08 (0.23)	0.10 (0.15)
<i>Age of youngest child W13</i>	-0.02*** (0.00)	-0.02** (0.00)	-0.01+ (0.07)
<i>Lockdown (ref. lockdown light)</i>			
Hard lockdown	-0.00 (0.93)	-0.01 (0.86)	0.01 (0.83)
<i>Birth cohort (ref. 1991-93)</i>			
1981-83	0.01 (0.92)	0.05 (0.65)	-0.07 (0.61)
1971-73	0.11 (0.25)	0.17 (0.19)	0.01 (0.92)
<i>Gender (ref. male)</i>			
Female	0.11*** (0.00)		
<i>Region (ref. West Germany)</i>			
East Germany	-0.11** (0.00)	-0.10+ (0.08)	-0.12* (0.02)
Constant	2.14*** (0.00)	2.20*** (0.00)	2.22*** (0.00)
Observations	1509	757	752

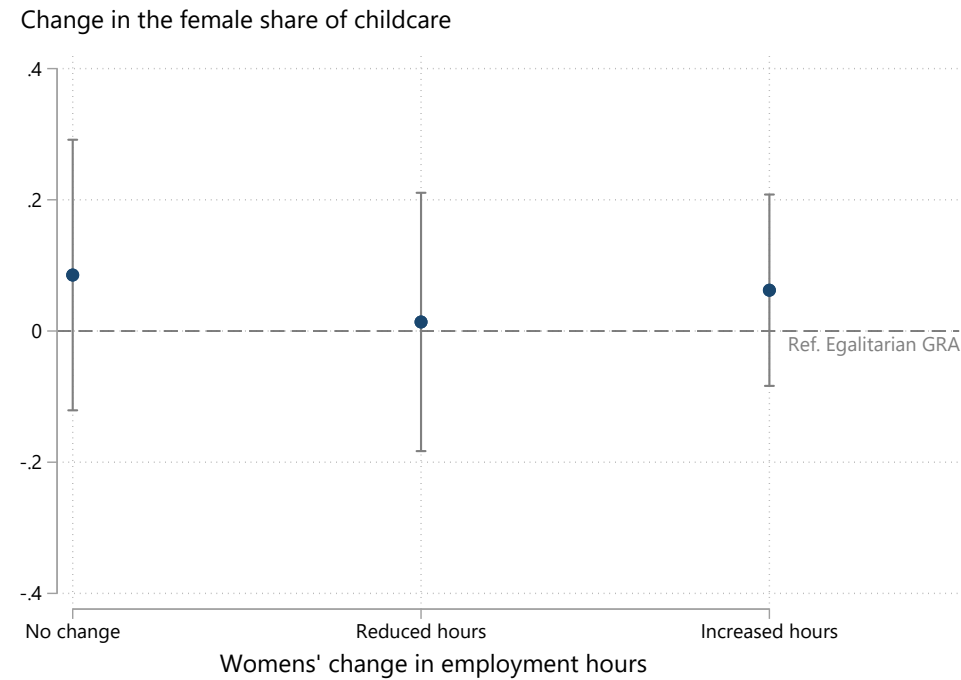
Note: DV = dependent variable;

p-values in parentheses

+ $p < 0.10$, * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Source: pairfam, own calculations.

Fig. A7: Conditional AMEs with 95% confidence intervals of women’s traditional pre-pandemic GRAs (baseline = egalitarian GRA) on the female share of childcare with the alternate GRA item

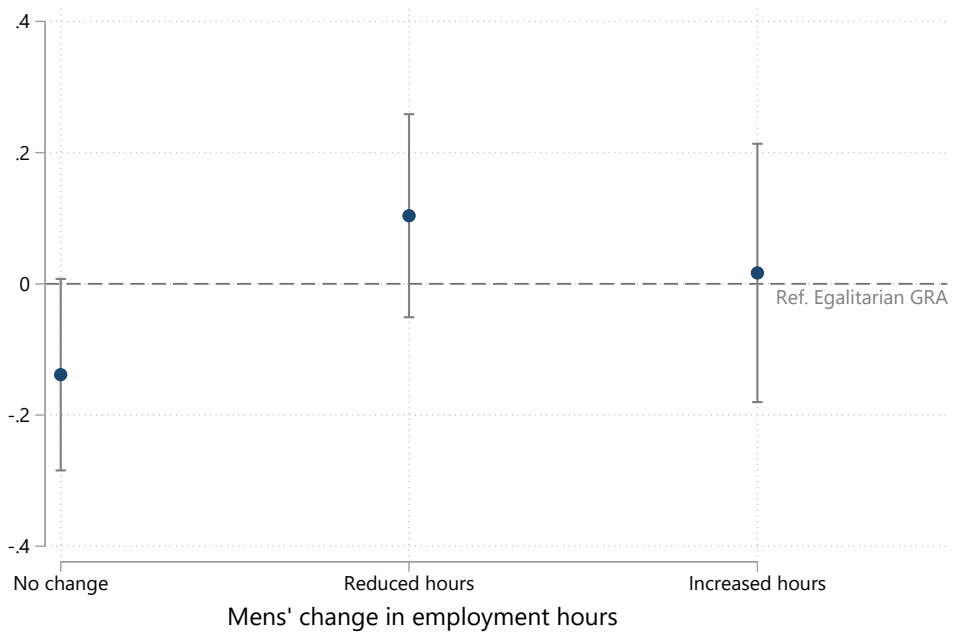


Note: Adjusted for all control variables.

Source: pairfam, own calculations.

Fig. A8: Conditional AMEs with 95% confidence intervals of men's traditional pre-pandemic GRAs (baseline = egalitarian GRA) on the female share of childcare with the alternate GRA item

Change in the female share of childcare



Note: Adjusted for all control variables.

Source: pairfam, own calculations.

Comparative Population Studies

www.comparativepopulationstudies.de

ISSN: 1869-8980 (Print) – 1869-8999 (Internet)

Published by

Federal Institute for Population Research
(BiB)
65180 Wiesbaden / Germany



2026

Editor

Prof. Dr. Roland Rau
Prof. Dr. Heike Trappe

Managing Editor

Dr. Katrin Schiefer

Editorial Assistant

Beatriz Feiler-Fuchs
Wiebke Hamann

Layout

Beatriz Feiler-Fuchs

E-mail: cpos@bib.bund.de

Scientific Advisory Board

Kieron Barclay (Stockholm)
Ridhi Kashyap (Oxford)
Anne-Kristin Kuhnt (Rostock)
Mathias Lerch (Lausanne)
Eleonora Mussino (Umeå)
Natalie Nitsche (Canberra)
Alyson van Raalte (Rostock)
Pia S. Schober (Tübingen)
Sergi Vidal (Barcelona)