ONLINE APPENDIX for Beyond the Degree: Fertility Outcomes of 'First in Family' Graduates

Anna Adamecz*
Anna Lovász†
Sunčica Vujić‡

August 3, 2024

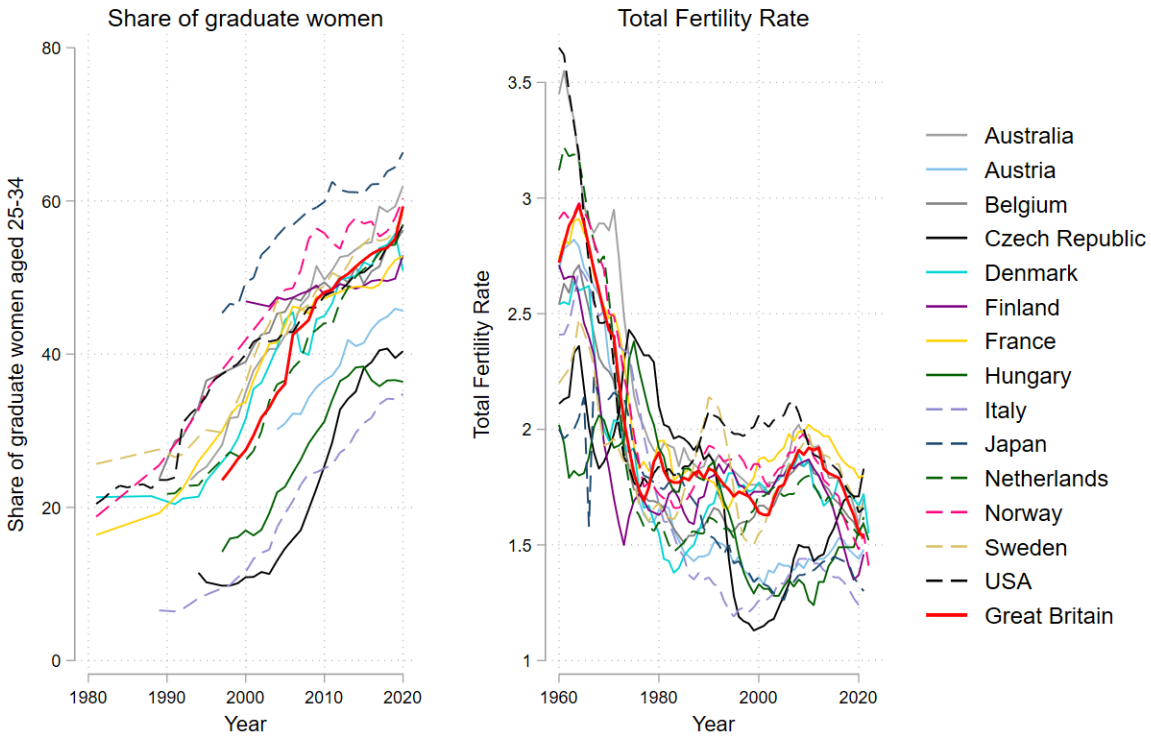
*Corresponding author. University College London, Social Research Institute, London, United Kingdom; Institute of Economics HUN-REN Centre for Economic and Regional Studies, Budapest, Hungary; and IZA, Bonn, Germany. Email: a.adamecz-volgyi@ucl.ac.uk

†Politics, Philosophy, and Public Affairs, School of Interdisciplinary Arts and Sciences, University of Washington Tacoma, Tacoma, Washington, United States; Institute of Economics HUN-REN Centre for Economic and Regional Studies, Budapest, Hungary. Email: plovi@uw.edu

‡Department of Economics, University of Antwerp, Belgium; University of Bath, Bath, UK; VU Amsterdam, Amsterdam, The Netherlands; and IZA, Bonn, Germany. Email: suncica.vujic@uantwerpen.be

A. Detailed Results and Supporting Evidence

Figure OA1: Graduation and fertility rates over time in the OECD



Source: OECD

Table OA1: Returns to graduation: the number of children among women (age 46)

VARIABLES	(1) Model 1	(2) Model 2	(3) Model 3	(4) Model 3 potential FiF	(5) Model 3 children of grad. parents
Graduate, age 46	-0.313***	-0.213***	0.0717	-0.272***	0.0222
	(0.0404)	(0.0463)	(0.0969)	(0.0515)	(0.107)
Parents with no degree		-0.0518	0.130*		
		(0.0547)	(0.0787)		
FiF graduate			-0.348***		
			(0.107)		
Constant	1.849***	-35.06***	-35.17***	-34.78***	-41.27*
	(0.0220)	(7.730)	(7.725)	(8.173)	(24.48)
Observations	4,351	4,351	4,351	3,786	565
R-squared	0.012	0.040	0.042	0.043	0.071
Controls		Yes	Yes	Yes	Yes

*Source: BCS70. Regressions based on Equation 1. Additional control variables: region of birth, parental background (SES), being a first born child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Table OA2: Returns to graduation: childlessness among women (age 46)

VARIABLES	(1) Model 1	(2) Model 2	(3) Model 3	(4) Model 3 potential FiF	(5) Model 3 children of grad. parents
Graduate, age 46	0.0735***	0.0566***	-0.0311	0.0803***	-0.0588
	(0.0144)	(0.0166)	(0.0355)	(0.0184)	(0.0395)
Parents with no degree		0.0158	-0.0402		
		(0.0200)	(0.0287)		
FiF graduate			0.107***		
			(0.0392)		
Constant	0.173***	12.12***	12.15***	12.03***	15.41*
	(0.00667)	(2.509)	(2.510)	(2.627)	(8.685)
Observations	4,351	4,351	4,351	3,786	565
R-squared	0.007	0.022	0.024	0.024	0.068
Controls		Yes	Yes	Yes	Yes

*Source: BCS70. Regressions based on Equation 1. Additional control variables: region of birth, parental background (SES), being a first born child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Table OA3: Returns to graduation: the number of children among women who had children (age 46)

VARIABLES	(1) Model 1	(2) Model 2	(3) Model 3	(4) Model 3 potential FiF	(5) Model 3 children of grad. parents
Graduate, age 46	-0.197***	-0.116***	0.0125	-0.130***	-0.129
	(0.0348)	(0.0408)	(0.0808)	(0.0460)	(0.0902)
Parents with no degree		-0.0250	0.0579		
		(0.0456)	(0.0662)		
FiF graduate			-0.159*		
			(0.0898)		
Constant	2.235***	-10.95	-10.98	-10.66	-8.413
	(0.0196)	(6.854)	(6.849)	(7.211)	(20.93)
Observations	3,516	3,516	3,516	3,072	444
R-squared	0.008	0.033	0.033	0.036	0.071
Controls		Yes	Yes	Yes	Yes

*Source: BCS70. Regressions based on Equation 1. Subsample of women who had at least one child by age 46. Additional control variables: region of birth, parental background (SES), being a first born child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Table OA4: Returns to graduation: the number of children among men (age 46)

VARIABLES	(1) Model 1	(2) Model 2	(3) Model 3	(4) Model 3 potential FiF	(5) Model 3 children of grad. parents
Graduate, age 46	-0.0903**	-0.0452	0.143	-0.0870	0.131
	(0.0428)	(0.0478)	(0.103)	(0.0530)	(0.113)
Parents with no degree		-0.00251	0.107		
		(0.0575)	(0.0790)		
FiF graduate			-0.232**		
			(0.113)		
Constant	1.562***	-47.73***	-47.76***	-52.11***	-12.12
	(0.0227)	(8.186)	(8.190)	(8.576)	(29.18)
Observations	4,077	4,077	4,077	3,545	532
R-squared	0.001	0.021	0.022	0.025	0.048
Controls		Yes	Yes	Yes	Yes

*Source: BCS70. Regressions based on Equation 1. Additional control variables: region of birth, parental background (SES), being a first born child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Table OA5: Returns to graduation: childlessness among men (age 46)

VARIABLES	(1) Model 1	(2) Model 2	(3) Model 3	(4) Model 3 potential FiF	(5) Model 3 children of grad. parents
Graduate, age 46	0.0146	0.00501	-0.0793**	0.0236	-0.0757*
	(0.0163)	(0.0185)	(0.0397)	(0.0205)	(0.0447)
Parents with no degree		-0.00327	-0.0523*		
		(0.0223)	(0.0310)		
FiF graduate			0.104**		
			(0.0436)		
Constant	0.262***	16.96***	16.97***	17.93***	10.86
	(0.00792)	(2.904)	(2.905)	(3.055)	(10.40)
Observations	4,077	4,077	4,077	3,545	532
R-squared	0.000	0.014	0.016	0.018	0.058
Controls		Yes	Yes	Yes	Yes

*Source: BCS70. Regressions based on Equation 1. Additional control variables: region of birth, parental background (SES), being a first born child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Table OA6: Returns to graduation: the number of children among men who had children (age 46)

VARIABLES	(1) Model 1	(2) Model 2	(3) Model 3	(4) Model 3 potential FiF	(5) Model 3 children of grad. parents
Graduate, age 46	-0.0822**	-0.0484	-0.0337	-0.0503	-0.0346
	(0.0367)	(0.0407)	(0.0872)	(0.0448)	(0.0992)
Parents with no degree		-0.0152	-0.00625		
		(0.0485)	(0.0663)		
FiF graduate			-0.0182		
			(0.0947)		
Constant	2.117***	-17.81**	-17.80**	-21.27***	12.48
	(0.0207)	(7.635)	(7.637)	(8.007)	(26.13)
Observations	2,994	2,994	2,994	2,609	385
R-squared	0.001	0.026	0.026	0.030	0.060
Controls		Yes	Yes	Yes	Yes

*Source: BCS70. Regressions based on Equation 1. Subsample of men who had at least one child by age 46. Additional control variables: region of birth, parental background (SES), being a first born child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Table OA7: Selection to graduation: the role of being potential FiF

VARIABLES	(1) Model 1	(2) Model 2	(3) Model 3
Female	0.0189**	0.0248***	0.0245***
	(0.00933)	(0.00865)	(0.00866)
Parents with no degree	-0.354***	-0.215***	-0.214***
	(0.0137)	(0.0133)	(0.0133)
First-born child = 1			0.00421
			(0.0102)
First-born child = 99			-0.0285
			(0.0555)
Number of siblings = 1, 1			0.00750
			(0.0164)
Number of siblings = 2, 2			0.000525
			(0.0186)
Number of siblings = 3, 3 or more			-0.00481
			(0.0209)
Number of siblings = 99, data missing			0.0384*
			(0.0202)
Constant	0.552***	0.353***	0.346***
	(0.0136)	(0.0250)	(0.0297)
Observations	8,081	8,081	8,081
R-squared	0.077	0.223	0.224

*Source: BCS70. Model 2-4 contains additional categorical control variables (region, SES, ethnicity, cognitive CFA and math CSE). Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Table OA8: Selection to graduation: the role of childbearing preferences at age 16

VARIABLES	(1) Women with graduate parents	(2) Men with graduate parents	(3) Women potential FiF	(4) Men potential FiF
Having children is very important, age 16 = 1	0.0368	-0.131*	-0.00289	0.0149
	(0.0598)	(0.0739)	(0.0225)	(0.0264)
Having children is very important, age 16 = 99	0.130	0.0879	-0.0687	0.0239
	(0.245)	(0.261)	(0.0489)	(0.0930)
Getting married is very important, age 16 = 1	0.0332	0.0786	0.00586	0.0402
	(0.0610)	(0.0748)	(0.0247)	(0.0288)
Getting married is very important, age 16 = 99	-0.213	-0.191	0.0333	-0.0436
	(0.242)	(0.262)	(0.0488)	(0.0929)
Constant	19.73**	14.62	8.055***	7.116***
	(9.330)	(9.768)	(2.557)	(2.471)
Observations	565	532	3,786	3,545
R-squared	0.232	0.240	0.164	0.167

*Source: BCS70. Further control variables: region of birth, parental background (SES), being a first born child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

B. Robustness Checks

First, we re-estimate our main models using fewer control variables. In particular, controlling for parental SES could be problematic as it might be highly correlated with parental education. Furthermore, age 16 math grades are missing for a substantial share of the sample. In the main models we use missing flags to account for missing grades, but in this robustness check we leave them out. Table OA9 shows that these results are very similar to our previous results and allow to draw the same conclusions.

Table OA9: Robustness test 1: The FiF fertility gap among graduates, fewer control variables

	(1)	(2)	(3)	(4)	(5)	(6)
	No. of children	No. of children	Childless-ness	Childless-ness	No. of children	No. of children
VARIABLES	Women	Men	Women	Men	Mothers	Fathers
FiF graduate	-0.180**	-0.0717	0.0791***	0.0484	-0.0226	0.0355
	(0.0756)	(0.0843)	(0.0281)	(0.0317)	(0.0629)	(0.0717)
Constant	-6.797	-25.25	6.518	11.33*	9.226	-3.849
	(14.39)	(15.59)	(5.408)	(6.415)	(12.08)	(13.48)
Observations	1,133	994	1,133	994	854	719
R-squared	0.031	0.024	0.029	0.019	0.039	0.028

*Source: BCS70. Additional control variables: region of birth, mother's year of birth, being a first-born child, No. of siblings, ethnicity, cognitive skills. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Second, as the number of children is a count variable while childlessness is binary, we re-estimate our main results using Poisson-regressions for the number of children and probit for childlessness. Table OA10 shows that the results are similar to our main results.

Table OA10: Robustness test 2: The FiF fertility gap among graduates, Poisson and probit models

VARIABLES	(1) No. of children Women Poisson	(2) No. of children Men Poisson	(3) Childless-ness Women probit	(4) Childless-ness Men probit	(5) No. of children Mothers Poisson	(6) No. of children Fathers Poisson
FiF graduate	-0.107**	-0.0547	0.269***	0.148	-0.0100	0.00766
	(0.0475)	(0.0556)	(0.0968)	(0.0994)	(0.0302)	(0.0348)
Constant	-5.553	-16.75	21.97	30.70	4.266	-1.261
	(9.515)	(10.94)	(17.07)	(18.76)	(5.907)	(6.644)
Observations	1,133	994	1,132	994	854	719

*Source: BCS70. Additional control variables: region of birth, mother's year of birth, being a first-born child, No. of siblings, ethnicity, cognitive skills. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Third, we re-estimate our main results, Table OA11, re-weighted by attrition weights constructed with three methods: via probit and random forest selection models and entropy balancing. These results are very similar to our main specifications. They confirm that for women, the previously shown significant statistical relationships are robust to taken selection to our analytical sample into account. The association between the number of children and being a FiF graduate is between -0.214 and -0.294 while the association between childlessness and being a FiF graduate is between 0.079 and 0.094 among women, all significant on a 5% level. Among men, however, none of these associations stay significant.

Table OA11: Robustness test 3: The FiF fertility gap among graduates, weighted estimates

	(1) No. of children Women	(2) No. of children Men	(3) Childless-ness Women	(4) Childless-ness Men	(5) No. of children Mothers	(6) No. of children Fathers
Probit weights						
FiF graduate	-0.186**	0.00806	0.0807***	0.0135	-0.0275	0.0427
	(0.0839)	(0.0935)	(0.0312)	(0.0364)	(0.0688)	(0.0796)
Constant	-1.143	-20.28	5.630	11.26	13.17	1.085
	(15.50)	(18.90)	(6.085)	(7.558)	(12.81)	(16.87)
Observations	1,078	929	1,078	929	811	669
R-squared	0.041	0.048	0.039	0.042	0.048	0.059
Random forest weights						
FiF graduate	-0.178**	-0.0947	0.0789***	0.0580*	-0.0272	0.0301
	(0.0769)	(0.0876)	(0.0292)	(0.0327)	(0.0656)	(0.0745)
Constant	-11.79	-23.03	9.647*	11.02*	10.39	-1.875
	(14.52)	(16.66)	(5.639)	(6.583)	(11.88)	(14.87)
Observations	1,133	994	1,133	994	854	719
R-squared	0.033	0.039	0.039	0.030	0.038	0.063
Entropy balancing						
FiF graduate	-0.266***	-0.0345	0.105***	0.0340	-0.0604	0.0528
	(0.0950)	(0.114)	(0.0341)	(0.0497)	(0.0760)	(0.0798)
Constant	3.628	-17.99	4.865	9.837	14.71	-2.518
	(18.71)	(28.04)	(7.721)	(10.72)	(15.66)	(23.32)
Observations	1,078	929	1,078	929	811	669
R-squared	0.082	0.090	0.074	0.111	0.152	0.101

*Source: BCS70. Additional control variables: region of birth, parental background (SES), mother's year of birth, being a firstborn child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Fourth, we re-estimate our main results using IPW weighting in Table OA12. As mentioned above, while this method cannot take care of unobserved selection, it uses observed information in a more systemic way, thus it makes FiF and non-FiF graduates more comparable (conditional on their observed characteristics). Our main result are similar: FiF graduate women have 0.19 fewer children and are 9.1 percentage points more likely to stay childless at age 46 than graduate women whose parents are graduates. Interestingly, the estimated coefficient for male childlessness is also significant on a 10% significance level.

Table OA12: Robustness test 4: The FiF fertility gap among graduates, IPW estimates

	(1) No. of children women	(2) No. of children men	(3) Childlessness women	(4) Childlessness men	(5) No. of children mothers	(6) No. of children fathers
FiF graduate	-0.192***	-0.0528	0.0907***	0.0611*	0.000613	0.0815
	(0.0733)	(0.0905)	(0.0275)	(0.0333)	(0.0610)	(0.0806)
Observations	1,082	958	1,082	958	812	694

*Source: BCS70. Additional control variables: region of birth, parental background (SES), being a firstborn child, No. of siblings, ethnicity, cognitive skills, math grades from age 16, mother's year of birth. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Lastly, we investigate how these results would look like in the presence of such unobserved characteristic that is correlated with both fertility outcomes and being a FiF graduate, i.e. omitted variable bias. As mentioned in the main text, we follow the procedure of Masten et al. (2024) using the `tesensitivity` package of Stata. As Table OA13 shows, five out of our six main results are fairly sensitive to the potential existence of omitted variable bias, except for the FiF gap in childlessness among graduate women. In this case, the estimated coefficient on FiF graduate seems to be fairly robust to omitted variable bias.

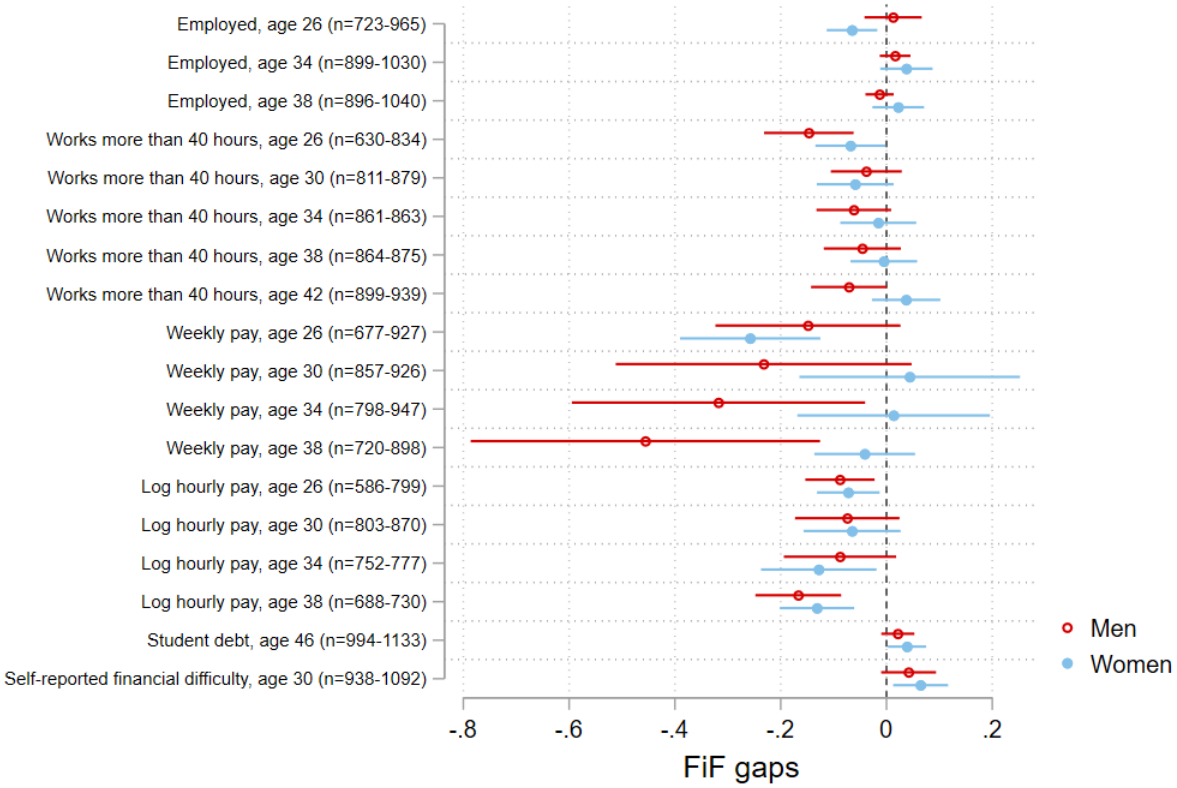
Table OA13: Robustness test 5: The sensitivity of the estimated FiF fertility gaps to omitted variable bias (breakdown c-values according to Masten et al. (2024)

	(1) Women	(2) Men
Number of chidren	0.018	0.001
Childlessness	0.042	0.011
Number of chidren among parents	0.002	0.002

Source: BCS70. Estimated using tesensitivity in Stata.

C. Heterogeneity Analysis

Figure OA2: The FiF gap in labour market outcomes



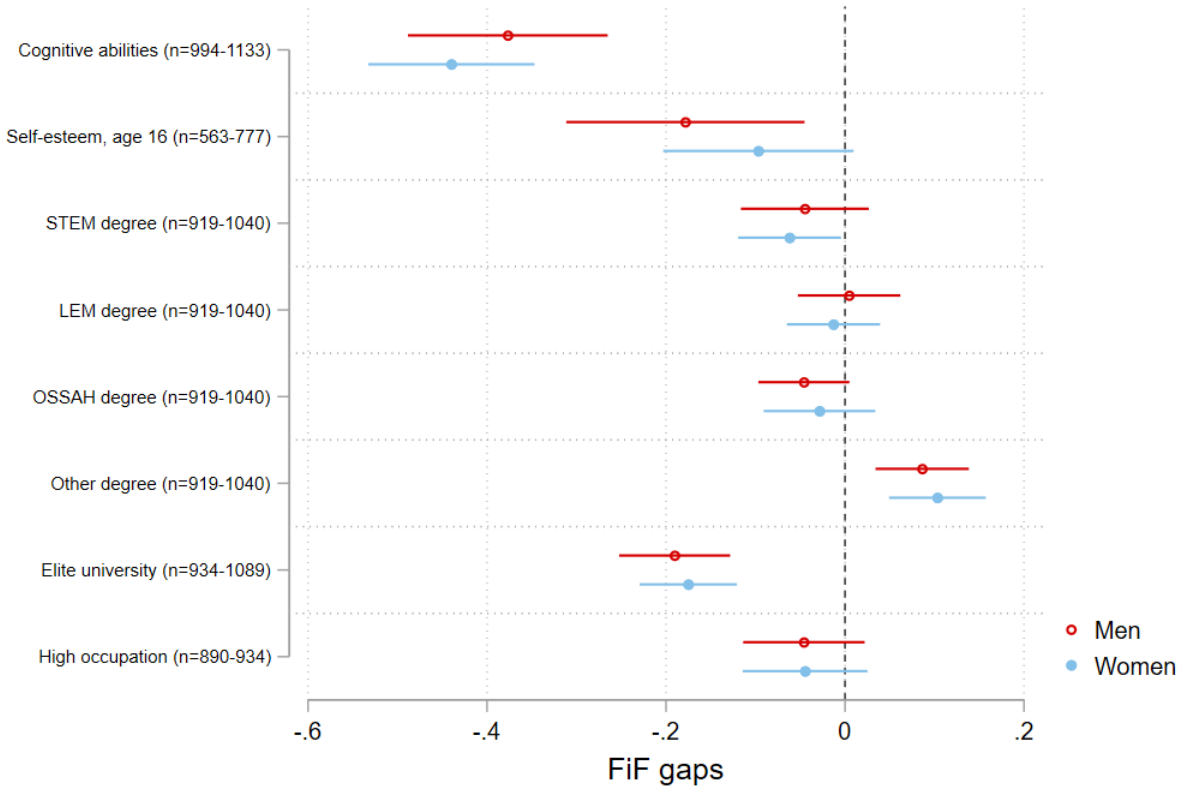
Source: BCS70. Sample of university graduates. Each data point captures the raw difference in these variables between FiF and non-FiF graduates, separately for men and women. All differences are plotted with their 95% confidence intervals. As all variables come from different waves of BCS70, the number of observations differ for each and indicated on the y-axis for men and women, respectively.

Table OA14: The role of labour market outcomes and financial constraints in the FiF fertility gap

	(1) No. of children Women	(2) No. of children Men	(3) Childless-ness Women	(4) Childless-ness Men	(5) No. of children Mothers	(6) No. of children Fathers
I. Low hourly pay, age 30	-0.165	0.253	0.0588	-0.00843	-0.0542	0.415***
	(0.119)	(0.155)	(0.0502)	(0.0683)	(0.106)	(0.135)
Observations	438	301	438	301	307	202
II. High hourly pay, age 30	-0.185	-0.0413	0.0784*	0.0120	-0.0102	-0.00497
	(0.123)	(0.112)	(0.0465)	(0.0413)	(0.0959)	(0.0963)
Observations	432	502	432	502	332	388
III. Financial difficulties, age 30	-0.270	0.152	0.0247	-0.0688	-0.338	-0.0171
	(0.249)	(0.304)	(0.0776)	(0.124)	(0.243)	(0.250)
Observations	217	150	217	150	157	94
IV. No financial difficulties, age 30	-0.157**	-0.0721	0.0694**	0.0441	-0.0191	0.0208
	(0.0783)	(0.0872)	(0.0295)	(0.0326)	(0.0641)	(0.0737)
Observations	1,034	940	1,034	940	778	684
V. Student debt, age 46	-0.527	-0.138	0.0695	0.116	-0.378	-0.0775
	(0.438)	(0.608)	(0.122)	(0.203)	(0.408)	(0.427)
Observations	99	54	99	54	76	35
VI. No student debt, age 46	-0.157**	-0.0721	0.0694**	0.0441	-0.0191	0.0208
	(0.0783)	(0.0872)	(0.0295)	(0.0326)	(0.0641)	(0.0737)
Observations	1,034	940	1,034	940	778	684

*Source: BCS70. Equation 2 estimated on specific subsamples of graduates as indicated in each block. The estimated coefficients on "FiF graduate" are reported in the table. All coefficients are estimated in separate models. Additional control variables: region of birth, parental background (SES), being a firstborn child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Figure OA3: The FiF gap in skills and human capital



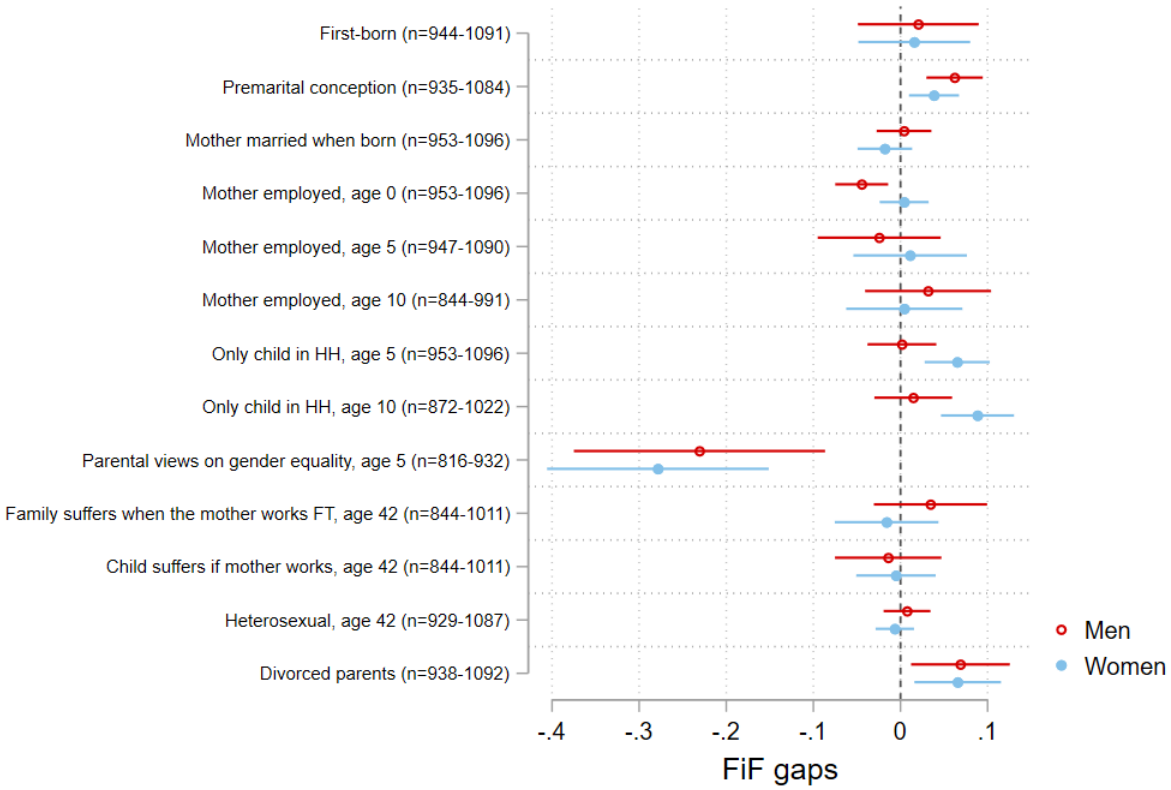
Source: BCS70. Sample of university graduates. Each data point captures the raw difference in these variables between FiF and non-FiF graduates, separately for men and women. All differences are plotted with their 95% confidence intervals. As all variables come from different waves of BCS70, the number of observations differ for each and indicated on the y-axis for men and women, respectively.

Table OA15: The role of skills and human capital in the FiF fertility gap

	(1) No. of children Women	(2) No. of children Men	(3) Childless-ness Women	(4) Childless-ness Men	(5) No. of children Mothers	(6) No. of children Fathers
I. Low cognitive skills	–0.215*	–0.214	0.090**	0.121**	–0.043	0.026
	(0.120)	(0.142)	(0.044)	(0.050)	(0.100)	(0.130)
Observations	535	442	535	442	407	322
II. High cognitive skills	–0.146	0.035	0.063*	–0.016	–0.011	–0.004
	(0.100)	(0.111)	(0.038)	(0.042)	(0.082)	(0.091)
Observations	598	552	598	552	447	397
III. Low self-esteem	–0.200	–0.066	0.093*	0.054	0.003	0.026
	(0.145)	(0.181)	(0.055)	(0.072)	(0.123)	(0.146)
Observations	360	248	360	248	257	172
IV. High self-esteem	–0.046	0.033	0.021	–0.008	–0.005	0.018
	(0.127)	(0.160)	(0.045)	(0.061)	(0.100)	(0.138)
Observations	417	315	417	315	323	220
V. STEM degree	–0.044	0.091	0.072	–0.015	0.123	0.079
	(0.158)	(0.121)	(0.057)	(0.048)	(0.144)	(0.099)
Observations	266	451	266	451	205	336
VI. LEM degree	–0.284	–0.358	0.052	0.076	–0.246	–0.274
	(0.204)	(0.237)	(0.083)	(0.081)	(0.164)	(0.213)
Observations	200	184	200	184	140	136
VII. OSSAH degree	–0.346**	–0.348*	0.103*	0.104	–0.178	–0.203
	(0.151)	(0.204)	(0.054)	(0.087)	(0.132)	(0.168)
Observations	349	137	349	137	265	98.
VIII. Other degree	–0.065	0.159	0.139**	0.053	0.243	0.376*
	(0.179)	(0.245)	(0.070)	(0.098)	(0.151)	(0.225)
Observations	225	147	225	147	167	107
IX. Elite uni	0.002	–0.136	0.034	0.031	0.059	–0.073
	(0.167)	(0.173)	(0.059)	(0.061)	(0.146)	(0.136)
Observations	257	251	257	251	201	185
X. Not elite uni	–0.192**	–0.025	0.082**	0.033	–0.027	0.051
	(0.088)	(0.106)	(0.034)	(0.041)	(0.070)	(0.089)
Observations	832	683	832	683	619	502

*Source: BCS70. Equation 2 estimated on specific subsamples of graduates as indicated in each block. The estimated coefficients on "FiF graduate" are reported in the table. All coefficients are estimated in separate models. Additional control variables: region of birth, parental background (SES), being a firstborn child, No. of siblings, ethnicity. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Figure OA4: The FiF gap in family background and gender roles



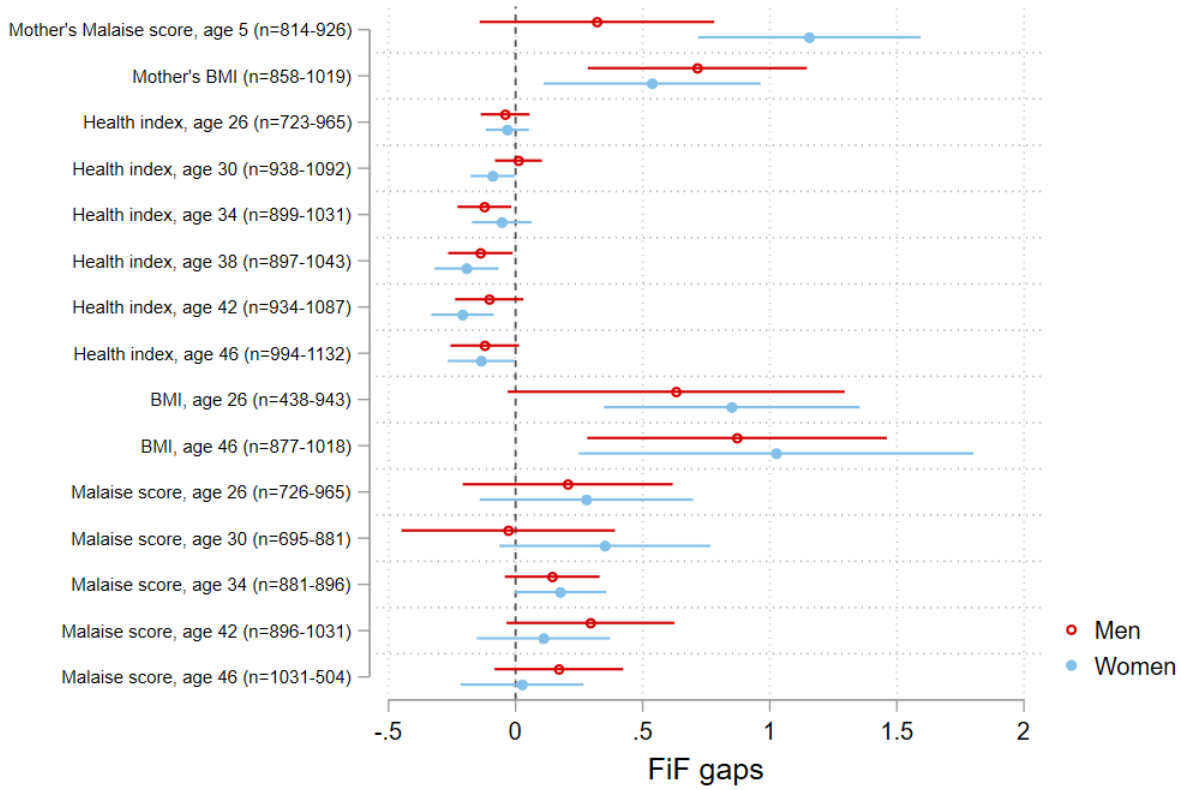
Source: BCS70. Sample of university graduates. Each data point captures the raw difference in these variables between FiF and non-FiF graduates, separately for men and women. All differences are plotted with their 95% confidence intervals. As all variables come from different waves of BCS70, the number of observations differ for each and indicated on the y-axis for men and women, respectively.

Table OA16: The role of family background in the FiF fertility gap

	(1) No. of children Women	(2) No. of children Men	(3) Childless-ness Women	(4) Childless-ness Men	(5) No. of children Mothers	(6) No. of children Fathers
I. Marital conception	–0.185**	0.006	0.080**	0.007	–0.027	0.026
	(0.085)	(0.092)	(0.032)	(0.035)	(0.070)	(0.078)
Observations	102	883	102	883	771	637
II. Premarital conception	0.124	–0.370	–0.178	0.058	–0.502*	–0.198
	(0.441)	(1.591)	(0.159)	(0.477)	(0.278)	(0.931)
Observations	56	52	56	52	45	37
III. Only child in HH	0.208	–0.218	–0.065	0.030	0.036	–0.170
	(0.401)	(0.358)	(0.161)	(0.143)	(0.330)	(0.311)
Observations	101	82	101	82	68	59
IV. Not only child in HH	–0.207**	0.033	0.088***	0.005	–0.038	0.052
	(0.085)	(0.095)	(0.031)	(0.036)	(0.070)	(0.082)
Observations	995	871	995	871	757	630
V. High gender equality	–0.145	0.079	0.066	0.012	–0.005	0.139
	(0.118)	(0.131)	(0.044)	(0.050)	(0.100)	(0.109)
Observations	541	441	541	441	401	315
VI.Low gender equality	–0.329**	–0.147	0.119**	0.044	–0.135	–0.081
	(0.135)	(0.152)	(0.050)	(0.058)	(0.106)	(0.123)
Observations	391	375	391	375	301	266
VII. Heterosexual	–0.174**	–0.106	0.075***	0.049	–0.031	–0.007
	(0.078)	(0.088)	(0.028)	(0.032)	(0.065)	(0.074)
Observations	105	895	105	895	809	681
VIII. Divorced parents	–0.310	–0.063	0.112	0.014	–0.099	0.009
	(0.253)	(0.204)	(0.086)	(0.078)	(0.250)	(0.187)
Observations	194	189	194	189	149	137
IX. Not divorced parent	–0.177**	–0.016	0.072**	0.025	–0.037	0.044
	(0.084)	(0.095)	(0.031)	(0.036)	(0.069)	(0.079)
Observations	898	749	898	749	672	544
X. Mother employed at age 5	0.047	0.144	–0.013	–0.038	0.017	0.091
	(0.117)	(0.124)	(0.046)	(0.049)	(0.097)	(0.105)
Observations	562	485	562	485	423	357
XI. Mother not employed at age 5	–0.370***	–0.137	0.157***	0.055	–0.039	–0.045
	(0.115)	(0.138)	(0.041)	(0.050)	(0.095)	(0.117)
Observations	528	462	528	462	397	327

*Source: BCS70. Equation 2 estimated on specific subsamples of graduates as indicated in each block. The estimated coefficients on "FiF graduate" are reported in the table. All coefficients are estimated in separate models. Additional control variables: region of birth, parental background (SES), ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Figure OA5: The FiF gap in general health



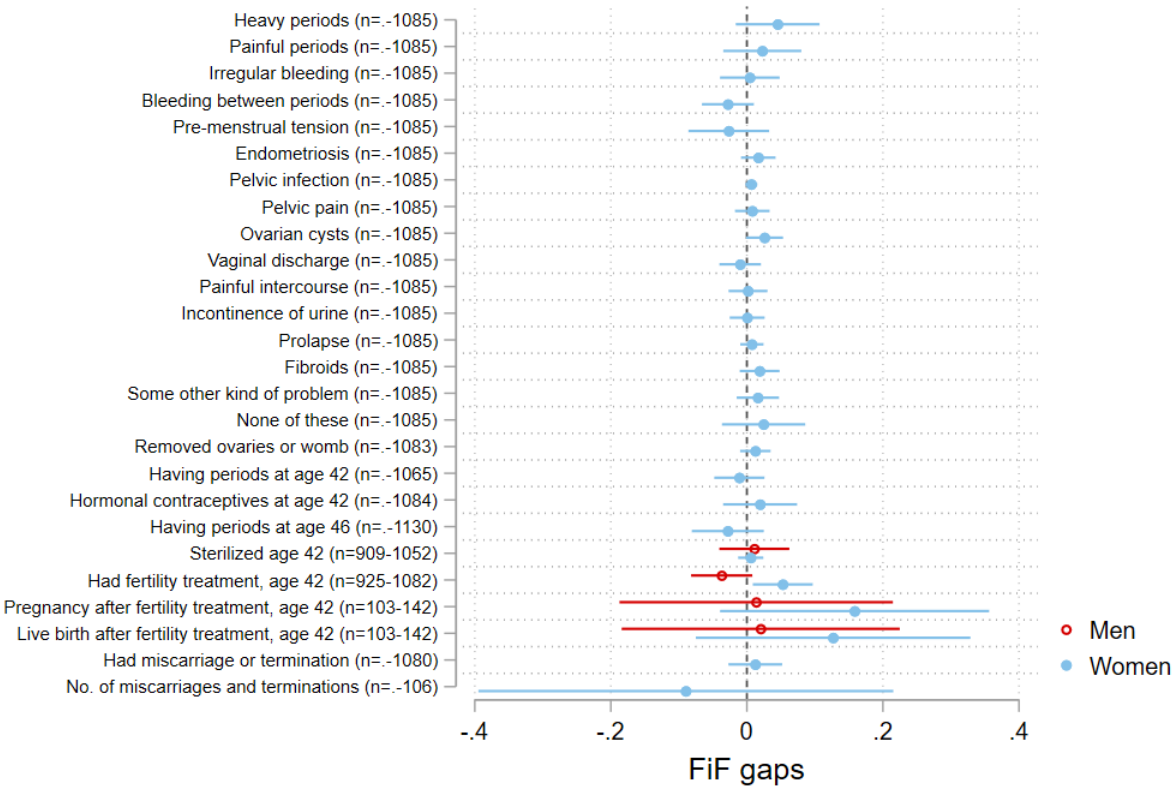
Source: BCS70. Sample of university graduates. Each data point captures the raw difference in these variables between FiF and non-FiF graduates, separately for men and women. All differences are plotted with their 95% confidence intervals. As all variables come from different waves of BCS70, the number of observations differ for each and indicated on the y-axis for men and women, respectively.

Table OA17: The role of health in the FiF fertility gap

	(1) No. of children Women	(2) No. of children Men	(3) Childless-ness Women	(4) Childless-ness Men	(5) No. of children Mothers	(6) No. of children Fathers
I. High maternal BMI	–0.151	0.069	0.045	–0.023	–0.095	0.017
	(0.144)	(0.157)	(0.050)	(0.057)	(0.121)	(0.134)
Observations	410	357	410	357	304	263
II. Low maternal BMI	–0.234**	–0.128	0.102***	0.051	–0.032	–0.045
	(0.097)	(0.111)	(0.037)	(0.042)	(0.086)	(0.095)
Observations	609	501	609	501	458	364
III. High maternal Malaise	–0.100	–0.147	0.038	0.083	–0.027	0.052
	(0.160)	(0.152)	(0.064)	(0.056)	(0.143)	(0.140)
Observations	372	326	372	326	275	236
IV. Low maternal Malaise	–0.164	0.116	0.067*	–0.027	–0.032	0.063
	(0.109)	(0.132)	(0.040)	(0.051)	(0.086)	(0.109)
Observations	554	488	554	488	422	344
V. High own BMI	–0.236	–0.208	0.092	0.091	–0.086	–0.046
	(0.158)	(0.190)	(0.059)	(0.066)	(0.135)	(0.163)
Observations	330	247	330	247	238	184
VI.Low own BMI	–0.109	–0.130	0.060	–0.046	0.023	–0.372*
	(0.098)	(0.223)	(0.037)	(0.088)	(0.083)	(0.203)
Observations	613	191	613	191	477	119
VII. High health index	–0.143	–0.117	0.073**	0.062	0.021	0.007
	(0.089)	(0.101)	(0.032)	(0.039)	(0.072)	(0.083)
Observations	759	651	759	651	601	479
VIII. Low health index	–0.111	0.054	0.055	–0.050	–0.038	0.038
	(0.172)	(0.199)	(0.070)	(0.071)	(0.155)	(0.179)
Observations	284	246	284	246	195	175
IX. High own Malaise	–0.103	–0.187	0.093*	0.045	0.076	–0.088
	(0.133)	(0.206)	(0.052)	(0.074)	(0.112)	(0.174)
Observations	387	246	387	246	282	178
X. Low own Malaise	–0.072	0.039	0.021	0.023	–0.027	0.132
	(0.117)	(0.117)	(0.045)	(0.049)	(0.095)	(0.095)
Observations	494	449	494	449	379	317

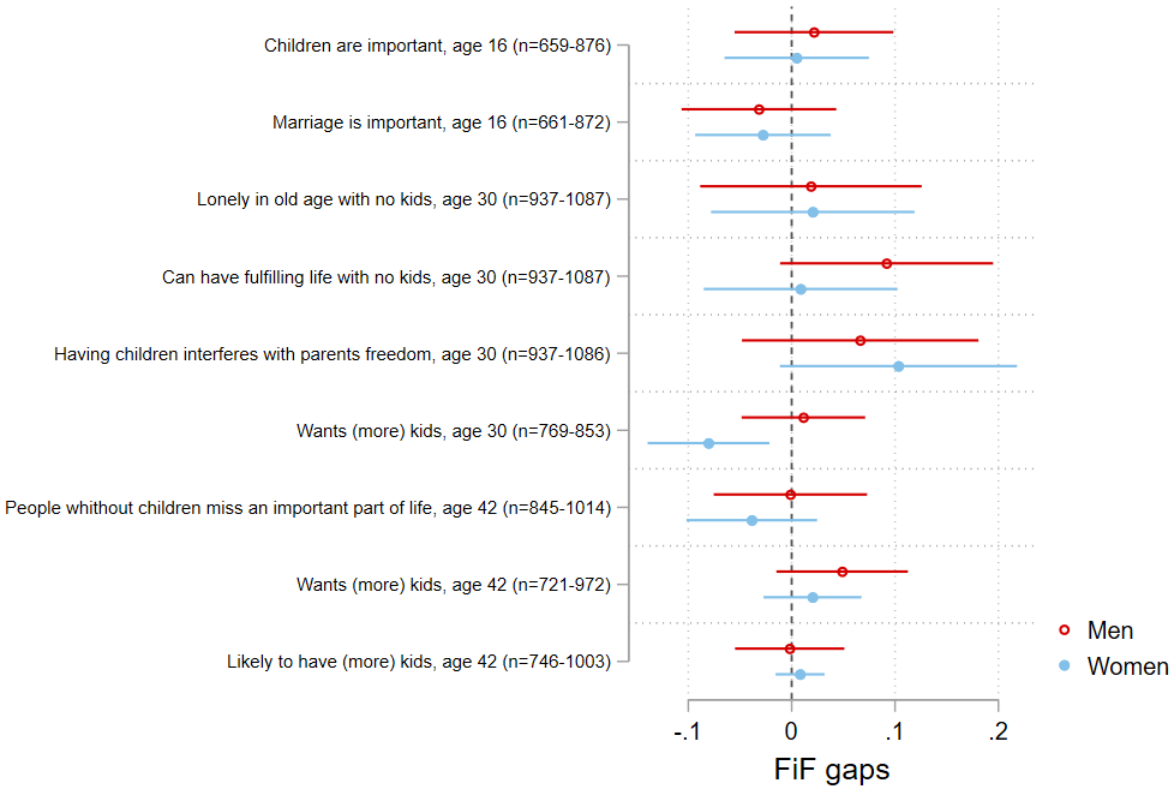
*Source: BCS70. Equation 2 estimated on specific subsamples of graduates as indicated in each block. The estimated coefficients on "FiF graduate" are reported in the table. All coefficients are estimated in separate models. Additional control variables: region of birth, parental background (SES), being a firstborn child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Figure OA6: The FiF gap in reproductive health



Source: BCS70. Sample of university graduates. Each data point captures the raw difference in these variables between FiF and non-FiF graduates, separately for men and women. All differences are plotted with their 95% confidence intervals. As all variables come from different waves of BCS70, the number of observations differ for each and indicated on the y-axis for men and women, respectively.

Figure OA7: The FiF gap in child-related preferences



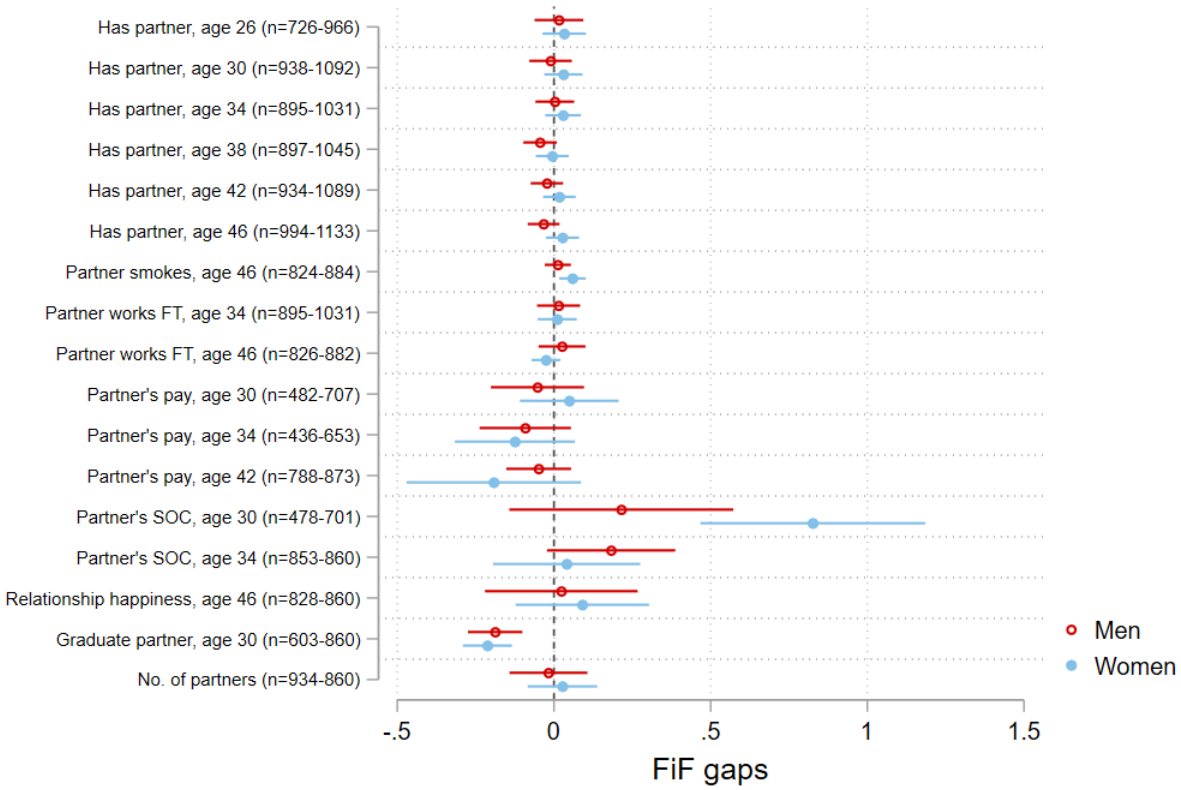
Source: BCS70. Sample of university graduates. Each data point captures the raw difference in these variables between FiF and non-FiF graduates, separately for men and women. All differences are plotted with their 95% confidence intervals. As all variables come from different waves of BCS70, the number of observations differ for each and indicated on the y-axis for men and women, respectively.

Table OA18: The role of child-related preferences in the FiF fertility gap

	(1) No. of children Women	(2) No. of children Men	(3) Childless-ness Women	(4) Childless-ness Men	(5) No. of children Mothers	(6) No. of children Fathers
I. Children are	0.162	–0.267	–0.043	0.065	0.063	–0.165
important age 16	(0.156)	(0.220)	(0.057)	(0.079)	(0.115)	(0.196)
Observations	329	202	329	202	266	153
II. Children are not	–0.228**	–0.021	0.111**	0.029	–0.018	0.045
important, age 16	(0.106)	(0.130)	(0.044)	(0.049)	(0.087)	(0.116)
Observations	547	457	547	457	386	315
III. Wants (more)	–0.033	–0.058	0.019	0.041	0.019	0.020
children, age 30	(0.094)	(0.105)	(0.033)	(0.035)	(0.080)	(0.088)
Observations	680	631	680	631	547	502
IV. Doesn't want	–0.440*	0.574**	0.127	–0.244**	–0.300	–0.012
children, age 30	(0.240)	(0.261)	(0.087)	(0.116)	(0.191)	(0.305)
Observations	173	138	173	138	111	81.
V. Childless,	–0.253***	–0.114	0.115***	0.062	–0.071	–0.012
age 30	(0.087)	(0.095)	(0.039)	(0.041)	(0.070)	(0.082)
Observations	747	724	747	724	468	449
VI. Children limit	–0.137	–0.132	0.071	0.045	0.011	–0.065
freedom, age 30	(0.110)	(0.122)	(0.045)	(0.046)	(0.089)	(0.103)
Observations	466	513	466	513	341	367
VII. Children don't	–0.257**	0.029	0.081**	–0.001	–0.112	0.026
limit freedom, age 30	(0.109)	(0.130)	(0.039)	(0.050)	(0.093)	(0.110)
Observations	620	424	620	424	476	314

*Source: BCS70. Equation 2 estimated on specific subsamples of graduates as indicated in each block. The estimated coefficients on "FiF graduate" are reported in the table. All coefficients are estimated in separate models. Additional control variables: region of birth, parental background (SES), being a firstborn child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Figure OA8: The FiF gap in partnerships



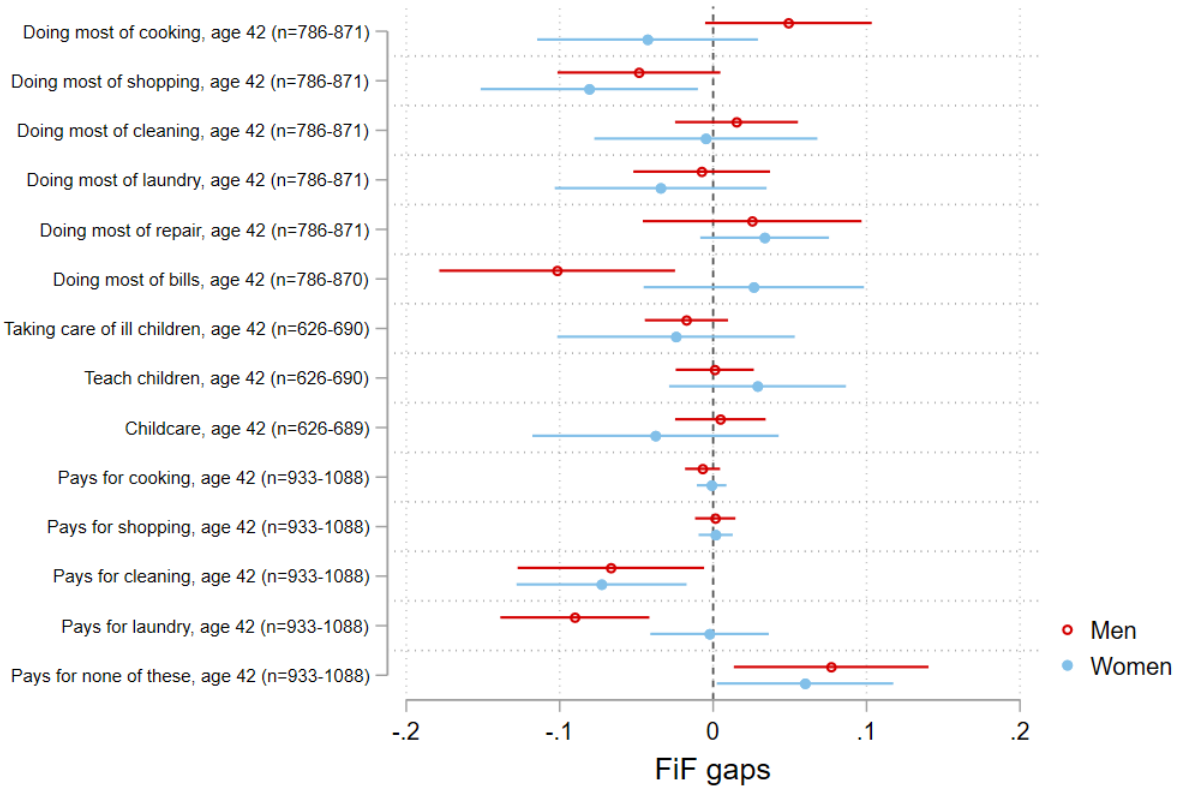
Source: BCS70. Sample of university graduates. Each data point captures the raw difference in these variables between FiF and non-FiF graduates, separately for men and women. All differences are plotted with their 95% confidence intervals. As all variables come from different waves of BCS70, the number of observations differ for each and indicated on the y-axis for men and women, respectively.

Table OA19: The role of partnerships in the FiF fertility gap

	(1) No. of children Women	(2) No. of children Men	(3) Childless-ness Women	(4) Childless-ness Men	(5) No. of children Mothers	(6) No. of children Fathers
I. Has partner,	–0.151*	0.052	0.076***	–0.007	0.014	0.040
age 30	(0.091)	(0.104)	(0.029)	(0.034)	(0.076)	(0.089)
Observations	740	603	740	603	628	518
II. No partner,	–0.271**	–0.228	0.094	0.101	–0.252*	–0.059
age 30	(0.133)	(0.143)	(0.061)	(0.065)	(0.131)	(0.149)
Observations	352	335	352	335	193	163
III. Low-SOC partner,	–0.159	0.092	0.092**	–0.058	0.048	–0.044
age 30	(0.114)	(0.145)	(0.038)	(0.050)	(0.096)	(0.115)
Observations	457	303	457	303	384	257
IV. High-SOC partner,	–0.172	0.023	0.079	0.030	–0.001	0.075
age 30	(0.154)	(0.205)	(0.049)	(0.074)	(0.126)	(0.151)
Observations	244	175	244	175	208	144
V. Graduate partner,	–0.157	0.113	0.074*	–0.049	0.020	0.002
age 30	(0.129)	(0.137)	(0.039)	(0.041)	(0.113)	(0.120)
Observations	335	309	335	309	285	273
VI. Non-graduate partner,	–0.112	0.067	0.070	0.031	0.068	0.159
age 30	(0.135)	(0.166)	(0.043)	(0.059)	(0.115)	(0.146)
Observations	405	294	405	294	343	245
VI. Does not pay for HH help,	–0.215**	–0.121	0.102***	0.023	–0.016	–0.104
age 42	(0.092)	(0.107)	(0.035)	(0.041)	(0.078)	(0.092)
Observations	797	677	797	677	583	475
VI. Pays for HH help	–0.133	0.046	0.034	0.039	–0.070	0.148
age 42	(0.146)	(0.158)	(0.053)	(0.054)	(0.116)	(0.134)
Observations	291	256	291	256	236	211

*Source: BCS70. Equation 2 estimated on specific subsamples of graduates as indicated in each block. The estimated coefficients on "FiF graduate" are reported in the table. All coefficients are estimated in separate models. Additional control variables: region of birth, parental background (SES), being a firstborn child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Figure OA9: The FiF gap in household chores, age 42



Source: BCS70. Sample of university graduates. Each data point captures the raw difference in these variables between FiF and non-FiF graduates, separately for men and women. All differences are plotted with their 95% confidence intervals. As all variables come from different waves of BCS70, the number of observations differ for each and indicated on the y-axis for men and women, respectively.

Table OA20: The FiF gap among graduates in the number of children in the household (age 46)

VARIABLES	(1) No. of children in the HH women	(2) No. of children in the HH men	(3) Childless HH women	(4) Childless HH men	(5) No. of children in the HH mothers	(6) No. of children in the HH fathers
FiF graduate	-0.192**	-0.0267	0.0735**	0.0162	-0.0689	0.00184
	(0.0744)	(0.0848)	(0.0288)	(0.0323)	(0.0611)	(0.0752)
Constant	14.57	-16.38	-2.901	5.971	11.50	-6.528
	(13.37)	(15.96)	(5.644)	(6.561)	(10.55)	(14.31)
Observations	1,133	994	1,133	994	844	718
R-squared	0.032	0.036	0.021	0.031	0.057	0.044

*Source: BCS70. Additional control variables: region of birth, parental background (SES), being a first-born child, No. of siblings, ethnicity, cognitive skills, math grades from age 16. Robust standard errors in parentheses (*** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$).*

Table OA21: Reasons of childlessness (age 42, women)

	FiF N	FiF Mean	NonFiF N	NonFiF Mean	Diff	p-value
Infertility problem (personal)	208	0.11	70	0.13	-0.02	0.60
Infertility problem (partner)	208	0.03	70	0.09	-0.05	0.07
Partner sterilised/had vasectomy/hysteret	208	0.04	70	0.01	0.02	0.32
Other health reason	208	0.08	70	0.09	-0.00	0.92
I have not wanted to have children	208	0.41	70	0.31	0.09	0.16
Wanted children but not got round to it	208	0.11	70	0.19	-0.08	0.11
My partner not wanted	208	0.11	70	0.14	-0.04	0.40
Partner already has	208	0.03	70	0.04	-0.01	0.57
Haven't met right person to have children	208	0.22	70	0.41	-0.20	0.00**
Financial situation wd make it difficult	208	0.06	70	0.06	0.01	0.87
Housing situation difficult	208	0.01	70	0.01	0.00	0.99
Don't want to compromise relationship	208	0.01	70	0.01	-0.00	0.74
I have been focused on my career	208	0.13	70	0.16	-0.03	0.50
In a homosexual relationship	208	0.00	70	0.01	-0.01	0.42
No particular reason	208	0.07	70	0.06	0.01	0.67
Other reason	208	0.04	70	0.01	0.02	0.32
Don't know	208	0.00	70	0.01	-0.01	0.08
Don't want to answer	208	0.01	70	0.06	-0.04	0.05*

*Source: BCS70. 'Diff' refers to the difference of means between FiF and non-FiF graduates. Two-sided t-test p-values are reported. (*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$).*

Table OA22: Reasons of childlessness (age 42, men)

	FiF N	FiF Mean	NonFiF N	NonFiF Mean	Diff	p-value
Infertility problem (personal)	177	0.03	71	0.03	0.00	1.00
Infertility problem (partner)	177	0.07	71	0.06	0.01	0.74
Partner sterilised/had vasectomy/hysteret	177	0.00	71	0.01	-0.01	0.11
Other health reason	177	0.02	71	0.04	-0.03	0.24
I have not wanted to have children	177	0.31	71	0.42	-0.11	0.09
Wanted children but not got round to it	177	0.06	71	0.07	-0.01	0.68
My partner not wanted	177	0.11	71	0.10	0.01	0.84
Partner already has	177	0.03	71	0.04	-0.01	0.75
Haven't met right person to have children	177	0.31	71	0.32	-0.02	0.77
Financial situation wd make it difficult	177	0.05	71	0.04	0.01	0.78
Housing situation difficult	177	0.01	71	0.01	-0.01	0.50
Don't want to compromise relationship	177	0.01	71	0.00	0.01	0.37
I have been focused on my career	177	0.07	71	0.10	-0.03	0.51
In a homosexual relationship	177	0.02	71	0.01	0.00	0.87
No particular reason	177	0.13	71	0.06	0.07	0.09
Other reason	177	0.03	71	0.03	0.00	1.00
Don't know	177	0.01	71	0.00	0.01	0.53
Don't want to answer	177	0.01	71	0.00	0.01	0.37

*Source: BCS70. 'Diff' refers to the difference of means between FiF and non-FiF graduates. Two-sided t-test p-values are reported. (*** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$).*