

Online Appendix Table 1
Adjusted and Unadjusted OLS Regression Coefficients for Fertility Outcomes

Variable	Number of Pregnancies		Number of Births		Number of Living Children		Contraceptive Use		Pregnancy Termination	
	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.	Coef.	Std. Err.
$\hat{\tau}^{OLS}$ (Unadjusted)	0.202	0.033	0.181	0.026	0.196	0.022	-0.014	0.006	0.003	0.005
$\hat{\tau}^{OLS}$ (Adjusted)	0.204	0.023	0.189	0.017	0.184	0.015	-0.016	0.005	-0.001	0.005
Number of Observations	25366		25366		25366		25366		25366	
R^2	0.519		0.573		0.538		0.134		0.116	

Note: This table compares the OLS estimates of a first-born girl on fertility outcomes with and without adjusting for the family level covariates. The first row reports the OLS regression of the fertility outcome on the first-born female dummy without additional covariates. The second row reports the OLS regression of the fertility outcome on the first-born female dummy after controlling for the first born's survival, year of survey, region, year of survey and region interactions, mother's age, age at first birth, years of education, ethnicity, rural residence, husband's age and years of education, patrilocal residence, whether the marriage was arranged and husband's family paid a bride price plus indicator variables for missing husbands age, husbands years of education, arranged marriage and bride price payment. Standard errors are heteroskedasticity-consistent.

Online Appendix Table 2
Coefficients for the Logit Regression

Variable	Coefficient	Standard Error	95 % Confidence Interval	
Mother's age	0.0014	0.0029	-0.0042	0.0070
Mother's age at 1 st birth	-0.0067	0.0037	-0.0139	0.0005
Mother's years of education	0.0065	0.0047	-0.0027	0.0157
Mother Non-Turkish	-0.0629	0.0404	-0.1421	0.0162
West	-0.0539	0.0418	-0.1359	0.0280
South	-0.0127	0.0448	-0.1005	0.0750
Central	-0.0597	0.0439	-0.1458	0.0263
North	-0.0876	0.0492	-0.1840	0.0088
Rural	-0.0128	0.0294	-0.0704	0.0447
Patrilocal Family	0.0808	0.0434	-0.0043	0.1659
Father's age	0.0015	0.0026	-0.0036	0.0066
Father's age missing	-0.0167	0.0477	-0.1103	0.0769
Father's years of education	0.0013	0.0042	-0.0068	0.0095
Father's education missing	0.0749	0.2041	-0.3251	0.4750
Arranged marriage	-0.0248	0.0280	-0.0798	0.0301
Arranged marriage missing	-0.4056	0.6322	-1.6447	0.8334
Bride price paid	0.0432	0.0341	-0.0237	0.1101
Bride price payment missing	-0.0906	0.1053	-0.2970	0.1157
Survey year=1998	0.0151	0.0393	-0.0620	0.0922
Survey year=2003	0.0158	0.0378	-0.0583	0.0899
Survey year=2008	-0.0106	0.0389	-0.0868	0.0657
Constant	-0.0433	0.1090	-0.2569	0.1702

Pseudo- $R^2 = 0.0006$

Number of Observations = 25,366

χ^2 -test statistic = 19.84

Prob [$\chi^2 > 19.84$] = 0.5317

Note: This table reports the full set of coefficients from the logit regression of the first child's gender (equals 0 if a boy and 1 if a girl) on all the variables in the table. The first column reports the coefficients, the second column reports the standard errors of the coefficients, and the last two columns report the 95 percent confidence intervals for the estimated coefficients. The joint χ^2 -test results at the bottom are based on the null hypothesis that all the slope coefficients are jointly equal to zero.

Online Appendix
Table 3. Interaction Effects on Family Size
Women Aged 15-49

Category	Survey Year (1)			Category	Mother's Education (2)			Category	Father's Education (3)		
	OLS	$\bar{y} Z_i = 0$	% Δ		OLS	$\bar{y} Z_i = 0$	% Δ		OLS	$\bar{y} Z_i = 0$	% Δ
1993	0.162*** (0.031)	2.86	0.057*** (0.011)	No Education	0.255*** (0.046)	4.19	0.057*** (0.010)	No Education	0.236** (0.099)	4.73	0.049** (0.019)
1998	0.151*** (0.032)	2.79	0.054*** (0.011)	Primary	0.206*** (0.018)	2.51	0.082*** (0.007)	Primary	0.212*** (0.023)	2.97	0.069*** (0.007)
2003	0.211*** (0.028)	2.68	0.075*** (0.010)	Secondary \geq	0.060*** (0.020)	1.79	0.036*** (0.010)	Secondary \geq	0.143*** (0.017)	2.17	0.067*** (0.007)
2008	0.203*** (0.028)	2.62	0.076*** (0.010)								
p (joint χ^2)	0.40		0.27	p (joint χ^2)	< 0.001		< 0.001	p (joint χ^2)	0.05		0.62
N	25366		25366		25366		25366		25283		25283
R^2	0.55				0.55				0.55		

Note: This table shows the effect of a first-born female on sibship size for different subgroups estimated by interacting the first-born female dummy with each category of interest. The sample includes 25,366 women aged 15-49. The outcome is the number of living children in the family. Panel (1) reports the effect of a first-born female on total number of living children by survey year. Panel (2) reports the effect of a first-born female on total number of living children by mother's education level. Panel (3) reports the effect of a first-born female on total number of living children by father's education level. The first column in each panel is estimated with OLS. The second column in each panel reports the mean number of children for families with first-born males, indicated with $\bar{y}|Z_i = 0$. The third column in each panel is estimated with maximum likelihood assuming a Poisson process and shows the relative change in family size, % Δ , induced by a first-born female. The reported p -values are from χ^2 -tests based on the null hypothesis that the estimated coefficients are the same across the subgroups. All regressions control for the first born's survival, year of survey, mother's age, age at first birth, education level, ethnicity, region, rural residence, husband's age, husband's education level, patrilocal residence, whether the marriage was arranged and husband's family paid a bride price plus indicator variables for missing husband's age, husband's education, arranged marriage and bride price payment. Heteroskedasticity-consistent standard errors are in parentheses. Significance levels are indicated by * < .10, ** < .05, *** < .01.

Online Appendix
Table 4. Interaction Effects on Family Size
Women Aged 35-49

Category	<i>Survey Year</i> (1)			Category	<i>Mother's Education</i> (2)			Category	<i>Father's Education</i> (3)		
	OLS	$\bar{y} Z_i = 0$	% Δ		OLS	$\bar{y} Z_i = 0$	% Δ		OLS	$\bar{y} Z_i = 0$	% Δ
1993	0.193*** (0.058)	3.74	0.052*** (0.015)	No Education	0.239*** (0.060)	4.83	0.049*** (0.012)	No Education	0.104 (0.124)	5.42	0.026 (0.022)
1998	0.195*** (0.055)	3.58	0.056*** (0.015)	Primary	0.288*** (0.031)	3.03	0.090*** (0.009)	Primary	0.272*** (0.036)	3.60	0.071*** (0.009)
2003	0.270*** (0.045)	3.28	0.076*** (0.013)	Secondary \geq	0.085** (0.036)	2.13	0.041*** (0.015)	Secondary \geq	0.215*** (0.030)	2.66	0.078*** (0.010)
2008	0.264*** (0.044)	3.15	0.081*** (0.013)								
p (joint χ^2)	0.56		0.36	p (joint χ^2)	< 0.001		0.004	p (joint χ^2)	0.27		0.11
N	12093		12093		12093		12093		12048		12048
R^2	0.52				0.52				0.52		

Note: This table shows the effect of a first-born female on sibship size for different subgroups estimated by interacting the first-born female dummy with each category of interest. The sample includes 12,093 women aged 35-49. The outcome is the number of living children in the family. Panel (1) reports the effect of a first-born female on total number of living children by survey year. Panel (2) reports the effect of a first-born female on total number of living children by mother's education level. Panel (3) reports the effect of a first-born female on total number of living children by father's education level. The first column in each panel is estimated with OLS. The second column in each panel reports the mean number of children for families with first-born males, indicated with $\bar{y}|Z_i = 0$. The third column in each panel is estimated with maximum likelihood assuming a Poisson process and shows the relative change in family size, % Δ , induced by a first-born female. The reported p -values are from χ^2 -tests based on the null hypothesis that the estimated coefficients are the same across the subgroups. All regressions control for the first born's survival, year of survey, mother's age, age at first birth, education level, ethnicity, region, rural residence, husband's age, husband's education level, patrilocal residence, whether the marriage was arranged and husband's family paid a bride price plus indicator variables for missing husband's age, husband's education, arranged marriage and bride price payment. Heteroskedasticity-consistent standard errors are in parentheses. Significance levels are indicated by * < .10, ** < .05, *** < .01.

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Table 5. Interaction Effects on Family Size
Women Aged 15-49

<i>Patrilocal Residence</i> (1)				<i>Arranged Marriage</i> (2)				<i>Bride Price Paid</i> (3)			
Category	OLS	$\bar{y} Z_i = 0$	% Δ	Category	OLS	$\bar{y} Z_i = 0$	% Δ	Category	OLS	$\bar{y} Z_i = 0$	% Δ
No	0.185*** (0.016)	2.81	0.065*** (0.005)	No	0.147*** (0.021)	2.28	0.065*** (0.008)	No	0.163*** (0.015)	2.39	0.066*** (0.006)
Yes	0.179*** (0.038)	2.15	0.080*** (0.016)	Yes	0.208*** (0.020)	3.02	0.067*** (0.006)	Yes	0.250*** (0.042)	3.83	0.067*** (0.010)
Difference	-0.006 (0.042)		0.015 (0.017)	Difference	0.061** (0.029)		0.003 (0.011)	Difference	0.087* (0.044)		0.001 (0.012)
<i>N</i>	25366		25366		25355		25355		24956		24956
<i>R</i> ²	0.55				0.55				0.55		

Note: This table shows the effect of a first-born female on sibship size for different subgroups estimated by interacting the first-born female dummy with each category of interest. The sample includes 25,366 women aged 15-49. The outcome is the number of living children in the family. Panel (1) reports the effect of a first-born female on total number of living children by patrilocal residency. Panel (2) reports the effect of a first-born female on total number of living children by type of marriage. Panel (3) reports the effect of a first-born female on total number of living children by bride price payment to bride's family. The first column in each panel is estimated with OLS. The second column in each panel reports the mean number of children for families with first-born males, indicated with $\bar{y}|Z_i = 0$. The third column in each panel is estimated with maximum likelihood assuming a Poisson process and shows the relative change in family size, % Δ , induced by a first-born female. The reported differences show if the estimated coefficients are the same across the two subgroups. All regressions control for the first born's survival, year of survey, mother's age, age at first birth, education level, ethnicity, region, rural residence, husband's age, husband's education level, patrilocal residence, whether the marriage was arranged and husband's family paid a bride price plus indicator variables for missing husband's age, husband's education, arranged marriage and bride price payment. Heteroskedasticity-consistent standard errors are in parentheses. Significance levels are indicated by * < .10, ** < .05, *** < .01.

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Table 6. Interaction Effects on Family Size
Women Aged 35-49

Category	<i>Patrilocal Residence</i> (1)			Category	<i>Arranged Marriage</i> (2)			Category	<i>Bride Price Paid</i> (3)		
	OLS	$\bar{y} Z_i = 0$	% Δ		OLS	$\bar{y} Z_i = 0$	% Δ		OLS	$\bar{y} Z_i = 0$	% Δ
No	0.233*** (0.025)	3.40	0.066*** (0.007)	No	0.230*** (0.039)	2.87	0.077*** (0.012)	No	0.216*** (0.025)	2.93	0.069*** (0.008)
Yes	0.321** (0.130)	3.49	0.090** (0.036)	Yes	0.238*** (0.032)	3.67	0.063*** (0.008)	Yes	0.281*** (0.062)	4.64	0.064*** (0.013)
Difference	0.088 (0.133)		0.023 (0.036)	Difference	0.008 (0.050)		-0.014 (0.015)	Difference	0.065 (0.067)		-0.004 (0.015)
<i>N</i>	12093		12093		12087		12087		11916		11916
<i>R</i> ²	0.52				0.52				0.52		

Note: This table shows the effect of a first-born female on sibship size for different subgroups estimated by interacting the first-born female dummy with each category of interest. The sample includes 12,093 women aged 35-49. The outcome is the number of living children in the family. Panel (1) reports the effect of a first-born female on total number of living children by patrilocal residency. Panel (2) reports the effect of a first-born female on total number of living children by type of marriage. Panel (3) reports the effect of a first-born female on total number of living children by bride price payment to bride's family. The first column in each panel is estimated with OLS. The second column in each panel reports the mean number of children for families with first-born males, indicated with $\bar{y}|Z_i = 0$. The third column in each panel is estimated with maximum likelihood assuming a Poisson process and shows the relative change in family size, % Δ , induced by a first-born female. The reported differences show if the estimated coefficients are the same across the two subgroups. All regressions control for the first born's survival, year of survey, mother's age, age at first birth, education level, ethnicity, region, rural residence, husband's age, husband's education level, patrilocal residence, whether the marriage was arranged and husband's family paid a bride price plus indicator variables for missing husband's age, husband's education, arranged marriage and bride price payment. Heteroskedasticity-consistent standard errors are in parentheses. Significance levels are indicated by * < .10, ** < .05, *** < .01.

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Table 7. Infant Mortality Differences among Third-born Children by Sex Composition of the Older Siblings

	Sex composition of the first two siblings					
	(1) Two Boys		(2) One Boy & One Girl		(3) Two Girls	
	Third-born		Third-Born		Third-born	
	Boy	Girl	Boy	Girl	Boy	Girl
Mean	0.081	0.068	0.068	0.068	0.060	0.071
Standard Deviation	[0.27]	[0.25]	[0.25]	[0.25]	[0.24]	[0.26]
<i>Girl-Boy difference</i>	-0.012 (0.009)		0.001 (0.007)		0.011 (0.009)	
<i>Difference-in-differences</i>	Reference		0.013 (0.011)		0.024* (0.013)	
<i>Covariate Adjusted Difference-in-differences</i>	Reference		0.015 (0.011)		0.024* (0.013)	
<i>N</i>	12,207					

Note: This table compares the infant mortality rates of the third-born children by sex composition of the older two siblings. Infant mortality is defined as the death of a child under the age of one. The sample is restricted to children who were born at least 12 months before the time of the interview. Girl-boy difference estimator shows the gender difference in infant mortality for third-born children by sex composition of the older two siblings. In panel (2), difference-in-difference estimator shows the difference in girl-boy infant mortality gap between third-born children who have no older male siblings and who have one female older sibling. In panel (3), difference-in-difference estimator shows the difference in girl-boy infant mortality gap between third-born children who have no older male siblings and who have no older female siblings. The covariate adjusted results are from the regressions that control for the first- and second-born older sibling's sex, year of survey, region, year of survey and region interactions, mother's age, age at first birth, years of education, ethnicity, rural residence, husband's age and years of education, patrilocal residence, whether the marriage was arranged and bride's family received a bride price plus indicator variables for missing husband's age, husband's years of education, arranged marriage and bride price payment. Heteroskedasticity-consistent standard errors are in parentheses. Significance levels are indicated by * < .10, ** < .05, *** < .01.

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Table 8. The Effect of Previous Sibling's Sex on Child Vaccination

	(1) BCG				(2) DPT				(3) Polio				(4) MMR			
	Boy		Girl		Boy		Girl		Boy		Girl		Boy		Girl	
	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl	Boy	Girl
Previous sibling's sex																
Subsequent sibling's sex																
Outcome																
Mean	0.814	0.816	0.817	0.810	0.819	0.820	0.833	0.817	0.873	0.872	0.884	0.866	0.690	0.680	0.699	0.685
Standard Deviation	[0.39]	[0.39]	[0.39]	[0.39]	[0.38]	[0.38]	[0.37]	[0.39]	[0.33]	[0.33]	[0.32]	[0.34]	[0.46]	[0.47]	[0.46]	[0.46]
<i>Girl-Boy difference</i>	0.002		-0.007		0.001		-0.016		-0.000		-0.018		-0.010		-0.013	
	(0.013)		(0.013)		(0.013)		(0.013)		(0.011)		(0.011)		(0.016)		(0.015)	
<i>Difference-in-differences</i>		-0.009				-0.017				-0.018				-0.004		
		(0.018)				(0.018)				(0.016)				(0.022)		
<i>Covariate adjusted</i>																
<i>Difference-in-differences</i>		-0.007				-0.017				-0.017				0.001		
		(0.017)				(0.017)				(0.015)				(0.020)		
<i>N</i>		7,456				7,327				7,557				7,252		

Note: This table compares the vaccination rates between boys and girls by previous sibling's sex. Regression samples are restricted to children who were born in the second birth parity or later and who were under the age of five at the time of the interview. Immunization outcomes are compared for BCG (Bacillus Calmette-Guerin), DPT (diphtheria, pertussis, tetanus), Polio, and MMR (measles-mumps-rubella) vaccinations in Panel (1) through Panel (4), respectively. Girl-boy difference estimator shows the gender difference in vaccination rates by previous sibling's sex. Difference-in-difference estimator shows the difference in girl-boy differences between children who has a previous female sibling and children who has a previous male sibling. The lower panel shows the same results from the regressions that control for the child's birth order, year of survey, region, year of survey and region interactions, mother's age, age at first birth, years of education, ethnicity, rural residence, husband's age and years of education, patrilocal residence, whether the marriage was arranged and husband paid a bride price plus indicator variables for missing husband's age, husband's years of education, arranged marriage and bride price payment. Standard errors are in parentheses and clustered by mother. Significance levels are indicated by * < .10, ** < .05, *** < .01.