

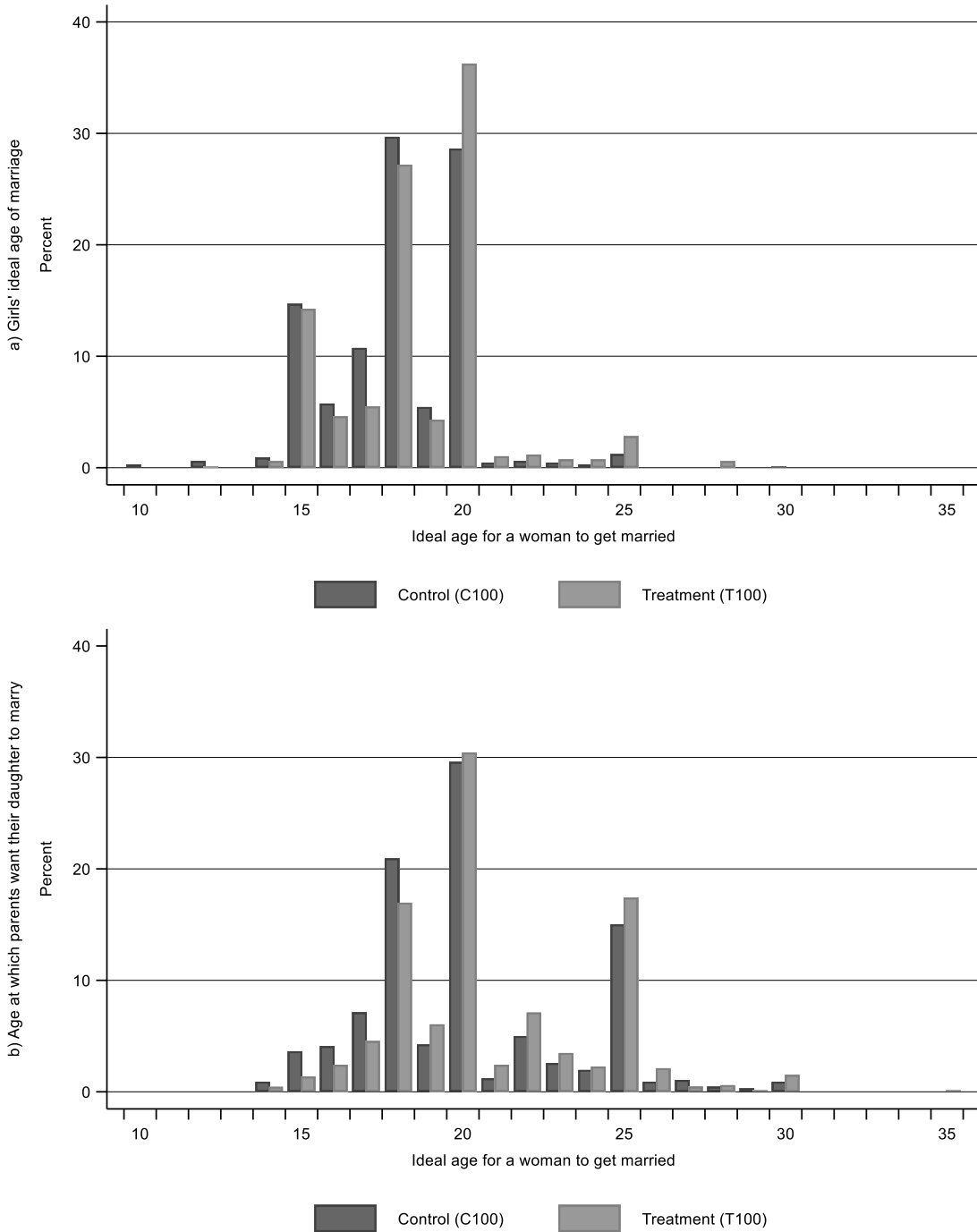
**Online Appendix**

**for**

**Schoolgirls not Brides: Secondary Education as a Shield against Child Marriage**

*By* H  l  ne Giacobino, Elise Huillery, Bastien Michel and Mathilde Sage

**Figure A.1: Impact of the intervention of girls' and parents' ideal age of marriage**



**Table A.1: Additional balance checks and baseline characteristics**

	<b>Whole sample</b>		<b>Balance checks</b>		
	# Obs	Mean (s.d.)	C <sub>100</sub> Diff. (s.e.)	C <sub>100</sub> Diff. (s.e.)	T <sub>100</sub> Diff. (s.e.)
<i>Panel A: Girls who completed the follow-up survey</i>					
Age at baseline					
<i>Aged 12 or below</i>	2,029	0.24 (0.43)	0.05 (0.04)	0.01 (0.04)	-0.06 (0.04)
<i>Aged 13</i>	2,029	0.35 (0.48)	-0.04 (0.03)	-0.02 (0.04)	0.04 (0.03)
<i>Aged 14</i>	2,029	0.25 (0.43)	-0.05 (0.03)	-0.02 (0.03)	0.03 (0.03)
<i>Aged 15 or above</i>	2,029	0.15 (0.36)	0.04 (0.03)	0.02 (0.03)	-0.01 (0.03)
Has ever been engaged in an economic activity	2,030	0.13 (0.34)	0.04 (0.03)	0.05 (0.04)	-0.02 (0.03)
Ideal age for a first child	1,981	20.66 (3.15)	0.34 (0.23)	0.25 (0.28)	-0.10 (0.24)
Attitudes towards gender equality (index)	2,030	0.24 (0.23)	0.03 (0.03)	-0.03 (0.02)	-0.05 (0.03)
Attitudes towards gender equality (index)	2,030	0.24 (0.23)	0.03 (0.03)	-0.03 (0.02)	-0.05 (0.03)
Knows at least one method of contraception	2,030	0.58 (0.49)	-0.04 (0.05)	0.01 (0.06)	0.03 (0.06)
<i>P-value for joint nullity test:</i>			0.159	0.496	0.422

---

**Panel B: Households in which an adult responded to the follow-up parents survey**

*Household head characteristics*

Highest educational attainment

<i>None</i>	2,010	0.74 (0.44)	0.03 (0.03)	-0.02 (0.03)	-0.01 (0.04)
<i>Primary</i>	2,010	0.26 (0.44)	-0.03 (0.03)	0.02 (0.03)	0.01 (0.04)
<i>Middle school or above</i>	2,010	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)

Marital status

<i>Monogamous marriage</i>	2,005	0.54 (0.50)	0.00 (0.03)	-0.01 (0.04)	0.02 (0.04)
<i>Polygamous marriage</i>	2,005	0.40 (0.49)	0.00 (0.03)	0.02 (0.04)	0.02 (0.04)
<i>Other</i>	2,005	0.06 (0.24)	-0.01 (0.02)	-0.02 (0.02)	-0.04 (0.01)

*Household characteristics*

Ethnic group

<i>Djerma/Songhai</i>	2,079	0.23 (0.42)	0.01 (0.04)	-0.01 (0.05)	0.01 (0.04)
<i>Hausa</i>	2,079	0.57 (0.49)	0.00 (0.04)	-0.03 (0.04)	-0.02 (0.04)
<i>Peul</i>	2,079	0.06 (0.23)	0.03 (0.02)	0.00 (0.03)	0.01 (0.02)
<i>Touareg</i>	2,079	0.08 (0.26)	-0.02 (0.03)	0.03 (0.03)	-0.01 (0.03)
<i>Other</i>	2,079	0.03 (0.17)	0.00 (0.02)	0.00 (0.02)	0.00 (0.02)

Wall material of the dwelling

<i>Mud</i>	2,079	0.46 (0.50)	-0.02 (0.06)	-0.02 (0.06)	-0.06 (0.06)
<i>Stones</i>	2,079	0.26 (0.44)	0.03 (0.05)	-0.07 (0.04)	0.02 (0.05)
<i>Wood/Straw</i>	2,079	0.13 (0.33)	0.01 (0.03)	0.00 (0.03)	0.00 (0.03)
<i>Bricks</i>	2,079	0.08 (0.28)	-0.02 (0.02)	0.09 (0.04)	0.04 (0.04)
<i>Cement/Concrete</i>	2,079	0.05 (0.22)	0.00 (0.02)	0.00 (0.02)	0.00 (0.02)
<i>Other</i>	2,079	0.02 (0.12)	-0.01 (0.01)	0.00 (0.01)	0.00 (0.01)

Owns a radio

2,079	0.43 (0.50)	-0.01 (0.03)	0.05 (0.04)	0.06 (0.03)
-------	----------------	-----------------	----------------	----------------

Owns a TV

2,079	0.15 (0.36)	-0.01 (0.04)	0.05 (0.04)	0.05 (0.04)
-------	----------------	-----------------	----------------	----------------

*P-value for joint nullity test:* 0.676 0.216 0.142

---

*Notes:* In this table, we present the average characteristics of respondents who completed the follow-up survey (whole sample). Then, we examine the similarity of the groups compared in this study: 1) T100 and C100, 2) T50 and T100, and 3) C50 and C100. For each of these three comparisons, we restrict the sample to observations belonging to one of the two groups compared and regress each variable displayed in the left-hand column on a dummy variable indicating the girl's treatment status (T100, T50, and C50, respectively), and strata fixed effects.

For each comparison, we test the joint nullity of the coefficient associated with the set of covariates displayed under panel B and D. The associated p-values are shown in the rows entitled "P-value for joint nullity test."

**Table A.2: Lee bounds for impact on life outcomes**

	# Obs	<b>Lower Lee bounds</b>		<b>Upper Lee bounds</b>	
		<b>T<sub>100</sub>-C<sub>100</sub></b>		<b>T<sub>100</sub>-C<sub>100</sub></b>	
		(1) Diff. (s.e.)	(2) Unadj. p-values	(3) Diff. (s.e.)	(4) Unadj. p-values
<b>Panel A: Education</b>					
Dropped out	1,305	-0.26 (0.04)	0.000	-0.20 (0.05)	0.000
Enrolled in:					
<i>Grade 6</i>	1,276	-0.05 (0.02)	0.017	-0.01 (0.02)	0.502
<i>Grade 7</i>	1,276	0.16 (0.04)	0.000	0.23 (0.04)	0.000
<i>Grade 8</i>	1,276	0.02 (0.04)	0.683	0.08 (0.04)	0.090
Months of education since Oct. 17	1,276	2.80 (0.79)	0.000	4.08 (0.72)	0.000
<b>Panel B: Marriage &amp; fertility</b>					
Married	1,305	-0.09 (0.02)	0.000	-0.06 (0.03)	0.027
<i>Married before 16 (if 16 or above)</i>	882	-0.04 (0.01)	0.000	-0.01 (0.01)	0.425
<i>Married before 17 (if 17 or above)</i>	460	-0.10 (0.02)	0.000	-0.04 (0.02)	0.060
<i>Married before 18 (if 18 or above)</i>	118	-0.23 (0.07)	0.001	-0.05 (0.06)	0.412
Promised	1,305	-0.06 (0.02)	0.000	-0.02 (0.02)	0.263
Ever been pregnant	1,305	-0.03 (0.01)	0.003	0.00 (0.01)	0.974
<b>Panel C: Well-being</b>					
Life satisfaction (standardized 10-point Likert scale)	1,305	0.17 (0.11)	0.121	0.35 (0.11)	0.001
Happiness (standardized 4-point Likert scale)	1,305	-0.01 (0.08)	0.865	0.07 (0.09)	0.420
<i>P-value for joint nullity test:</i>		0.000		0.000	
Strata fixed effects		YES		YES	
Double lasso procedure to select baseline covariates		YES		YES	

*Notes:* In this table, we bound the average treatment effect of the intervention on our primary outcomes (education, marriage and fertility, and well-being). In columns (1)-(2) and (3)-(4), we report Lee bounds to account for differential attrition. For both bounds, we report the estimate we obtain by estimating equation (1) with covariates selected using a Double Lasso procedure and associated unadjusted p-value. Because we randomized within strata, trimming is performed within strata. Standard errors are clustered at the village level.

**Table A.3: Heterogeneity results**

	# Obs	<b>Dropout</b>		<b>Married</b>		<b>Life satisfaction</b>	
		(1) C <sub>100</sub> Mean (s.d.)	(2) Diff. (s.e.)	(3) C <sub>100</sub> Mean (s.d.)	(4) Diff. (s.e.)	(5) C <sub>100</sub> Mean (s.d.)	(6) Diff. (s.e.)
<b>Panel A: Region</b>							
Dosso	181	0.35 (0.48)	-0.07 (0.16)	0.11 (0.31)	-0.01 (0.07)	0.05 (0.90)	0.48 (0.24)
Maradi	323	0.45 (0.50)	-0.27 (0.09)	0.12 (0.33)	-0.04 (0.05)	-0.30 (0.93)	0.23 (0.15)
Tahoua	285	0.44 (0.50)	-0.24 (0.08)	0.15 (0.36)	-0.03 (0.06)	-0.13 (1.35)	0.53 (0.36)
Tillabéri	235	0.36 (0.48)	-0.17 (0.09)	0.24 (0.43)	-0.20 (0.07)	0.37 (0.67)	-0.09 (0.12)
Zinder	320	0.37 (0.48)	-0.22 (0.08)	0.09 (0.29)	-0.08 (0.03)	0.16 (0.81)	0.08 (0.23)
<i>P-value for coefficients equality test:</i>			0.830		0.259		0.131
<b>Panel B: Girls' baseline GPA</b>							
Bottom 50%	566	0.45 (0.50)	-0.20 (0.06)	0.16 (0.37)	-0.06 (0.04)	0.02 (0.93)	0.18 (0.12)
Top 50%	554	0.35 (0.48)	-0.18 (0.06)	0.13 (0.34)	-0.06 (0.03)	0.03 (1.04)	0.28 (0.16)
Missing	224	0.42 (0.49)	-0.31 (0.07)	0.13 (0.34)	-0.12 (0.03)	-0.10 (1.04)	0.26 (0.18)
<i>P-value for coefficients equality test:</i>			0.356		0.310		0.791
<b>Panel C: Household wealth</b>							
Top 50%	656	0.38 (0.49)	-0.22 (0.05)	0.13 (0.34)	-0.07 (0.04)	0.09 (0.94)	0.14 (0.12)
Bottom 50%	688	0.42 (0.49)	-0.21 (0.06)	0.15 (0.36)	-0.07 (0.03)	-0.09 (1.05)	0.35 (0.13)
<i>P-value for coefficients equality test:</i>			0.810		0.942		0.093
<b>Panel D: Household head religiosity</b>							
Very religious (10 on a 1 to 10 scale)	1,170	0.41 (0.49)	-0.24 (0.05)	0.13 (0.34)	-0.06 (0.03)	-0.02 (1.03)	0.29 (0.12)
Less religious (less than 10 out of 10)	173	0.36 (0.48)	-0.17 (0.10)	0.22 (0.41)	-0.12 (0.05)	0.17 (0.71)	-0.04 (0.14)
<i>P-value for coefficients equality test:</i>			0.457		0.345		0.059
<b>Panel E: Household head conservativeness</b>							
Top 50%	672	0.42 (0.49)	-0.20 (0.06)	0.15 (0.36)	-0.07 (0.04)	-0.13 (1.02)	0.38 (0.12)
Bottom 50%	672	0.39 (0.49)	-0.20 (0.05)	0.13 (0.34)	-0.06 (0.03)	0.13 (0.97)	0.03 (0.12)
<i>P-value for coefficients equality test:</i>			0.907		0.878		0.004
Strata fixed effects			YES				YES
Covariates			DL				DL

*Notes:* In this table, we describe the average treatment effect of the intervention on our main primary outcomes (dropout, marriage, and life satisfaction) for different subgroups of the sample. For each subgroup, we report the estimate obtained when estimating equation (1) adding covariates selected using a double lasso procedure. For each panel, the p-value associated with the equality test tests that the intervention has the same effect for all subgroups.

In the last row of the table, "NO" indicates that no additional covariates were added to the estimated equation and "DL" indicates that the covariates were selected by a Double Lasso procedure.

Standard errors are clustered at the village level.

**Table A.4: Impact on human capital and preferences (individual items)**

	# Obs	$C_{100}$	$T_{100} - C_{100}$			
		(1) Mean (s.d.)	(2) Diff. (s.e.)	(3) Diff. (s.e.)	(4) Unadj. p-values	(5) WY p-values
<i>Panel A: Human capital</i>						
<i>Psychosocial skills index</i>						
Problem solving skills (13 items)	1,344	0.00 (1.00)	0.06 (0.10)	0.06 (0.10)	0.555	0.973
Perseverance (6 items)	1,344	-0.00 (1.00)	0.05 (0.12)	0.05 (0.12)	0.697	0.990
Self-awareness (11 items)	1,344	-0.00 (1.00)	0.09 (0.11)	0.09 (0.11)	0.380	0.936
Interpersonal skills (7 items)	1,344	-0.00 (1.00)	-0.03 (0.13)	-0.03 (0.13)	0.804	0.992
Self-efficacy (9 items)	1,344	-0.00 (1.00)	0.11 (0.08)	0.11 (0.08)	0.200	0.796
Creativity (4 items)	1,344	0.00 (1.00)	0.08 (0.10)	0.08 (0.10)	0.422	0.936
<i>SRH-related knowledge index (age&gt;14)</i>						
Knowledge about pregnancy and delivery (6 items)	1,272	0.00 (1.00)	0.03 (0.11)	0.03 (0.11)	0.776	0.992
Knowledge about contraceptive methods (13 items)	1,272	-0.00 (1.00)	-0.02 (0.12)	-0.02 (0.12)	0.880	0.992
Knowledge about HIV (8 items)	1,272	0.00 (1.00)	0.09 (0.11)	0.09 (0.11)	0.414	0.936
<i>P-value for joint nullity test:</i>				0.511		

(continued)

**Panel B: Preferences**

*Gender equality opinions index*

Men should have the highest level of education in the family	1,344	0.44 (0.50)	-0.04 (0.04)	-0.04 (0.04)	0.401	0.975
Men should earn money for the family	1,344	0.80 (0.40)	-0.09 (0.04)	-0.09 (0.04)	0.021	0.277
Women should be responsible for washing, cleaning and cooking	1,344	0.95 (0.21)	-0.01 (0.01)	-0.01 (0.01)	0.451	0.975
Women should be responsible for fetching water	1,344	0.55 (0.50)	0.04 (0.04)	0.04 (0.04)	0.215	0.881
Women should be responsible for feeding and bathing children	1,344	0.85 (0.35)	-0.02 (0.03)	-0.02 (0.03)	0.515	0.975
Women should be responsible for caring for the sick	1,344	0.35 (0.48)	0.03 (0.04)	0.03 (0.04)	0.474	0.975
Women should be responsible for helping children with their studies at home	1,344	0.21 (0.41)	0.01 (0.03)	0.01 (0.03)	0.676	0.975

*Tolerance vis-à-vis domestic violence index*

Beating wife is justified if she burns the food	1,344	0.15 (0.36)	-0.03 (0.03)	-0.03 (0.03)	0.324	0.959
Beating wife is justified if she argues with her husband	1,344	0.31 (0.46)	-0.04 (0.05)	-0.04 (0.05)	0.435	0.975
Beating wife is justified if she goes out without telling her husband	1,344	0.36 (0.48)	-0.03 (0.06)	-0.03 (0.06)	0.542	0.975
Beating wife is justified if she neglects the children	1,344	0.35 (0.48)	-0.05 (0.05)	-0.05 (0.05)	0.306	0.944
Beating wife is justified if she refuses to have sex with her husband	1,344	0.36 (0.48)	-0.08 (0.05)	-0.08 (0.05)	0.146	0.782
Beating wife is justified if she talks to her husband about protecting from AIDS	1,344	0.20 (0.40)	-0.03 (0.04)	-0.03 (0.04)	0.466	0.975

*P-value for joint nullity test:*

0.435

Strata fixed effects

YES YES YES YES

Covariates

NO DL DL DL

**Notes:** In this table, we describe the average treatment effect of the intervention on respondents' skills (academic skills, psychosocial skills) and sexual and reproductive health knowledge. In column (1), we report the mean (and standard deviation) in the control group for each outcome. In column (2), we report the estimate we obtain when estimating equation (1). In column (3), we re-estimate equation (1) adding covariates selected using a double lasso procedure. In column (4), we report the p-value associated with the coefficients displayed in column (2). In column (5), we report Westfall-Young stepdown adjusted p-values to control for Family-Wise Error Rates (1,000 bootstrap replications). A family of outcomes consists of all the outcomes displayed under the same panel.

The p-value associated with the joint nullity test tests that the intervention has no effect on any of the outcomes displayed in the table.

In the last row of the table, "NO" indicates that no additional covariates were added to the estimated equation and "DL" indicates that the covariates were selected by a Double Lasso procedure.

Standard errors are clustered at the village level.



**Table A.5: Detailed impacts on academic skills**

	Total nber of obs.	<b>C<sub>100</sub></b>		<b>T<sub>100</sub>-C<sub>100</sub></b>		
		(1) Mean (s.d.)	(2) Diff. (s.e.)	(3) Diff. (s.e.)	(4) Unadj. p-values	(5) WY p-values
<b>Panel A: Literacy</b>						
Reads letters	1,344	0.75 (0.43)	0.06 (0.04)	0.07 (0.04)	0.107	.
Reads words	1,344	0.41 (0.49)	0.01 (0.05)	0.02 (0.04)	0.679	.
Reads paragraphs	1,344	0.35 (0.48)	0.03 (0.05)	0.04 (0.04)	0.389	.
Understands short stories	1,344	0.30 (0.46)	0.03 (0.04)	0.03 (0.04)	0.409	.
<i>P-value for joint nullity test:</i>				0.146		
<b>Panel B: Mathematics</b>						
Can count	1,344	0.93 (0.25)	0.02 (0.02)	0.02 (0.02)	0.387	.
Can identify figures	1,344	0.93 (0.25)	0.02 (0.02)	0.02 (0.02)	0.387	.
Can compare figures	1,344	0.90 (0.30)	0.03 (0.02)	0.03 (0.02)	0.216	.
Can do additions	1,344	0.72 (0.45)	0.09 (0.04)	0.09 (0.04)	0.028	.
Can do substractions	1,344	0.60 (0.49)	0.08 (0.04)	0.08 (0.04)	0.091	.
Can do multiplications	1,344	0.54 (0.50)	0.09 (0.05)	0.08 (0.04)	0.065	.
Can do divisions	1,344	0.47 (0.50)	0.07 (0.05)	0.07 (0.05)	0.125	.
<i>P-value for joint nullity test:</i>				0.174		
Strata fixed effects			YES	YES	YES	
Covariates			NO	DL	DL	

*Notes:* In this table, we describe the average treatment effect of the intervention on respondents' academic skills. In column (1), we report the mean (and standard deviation) in the control group for each outcome. In column (2), we report the estimates we obtain when estimating equation (1). In column (3), we re-estimate equation (1) adding covariates selected using a double lasso procedure. In column (4), we report the p-value associated with the coefficients displayed in column (3). In column (5), we report the associated Westfall-Young stepdown adjusted p-values to control for Family-Wise Error Rates (1,000 bootstrap replications). A family of outcomes consists of all the outcomes displayed under the same panel. In each of the two panels, all the variables come from one single variable. For this reason, no correction is performed.

We test the joint nullity of the coefficients displayed in column (3). The associated p-values are shown in the row entitled "P-value for joint nullity test."

In the last row of the table, "NO" indicates that no additional covariates were added to the estimated equation and "DL" indicates that the covariates were selected by a Double Lasso procedure.

Standard errors are clustered at the village level.

**Table A.6: FWER adjusted p-values considering all outcomes as a single family**

**A.6.a:** To address concerns about the large number of families of outcomes in the article, we present adjusted p-values in this table when all girl-level outcome variables are grouped into a single family of outcomes.

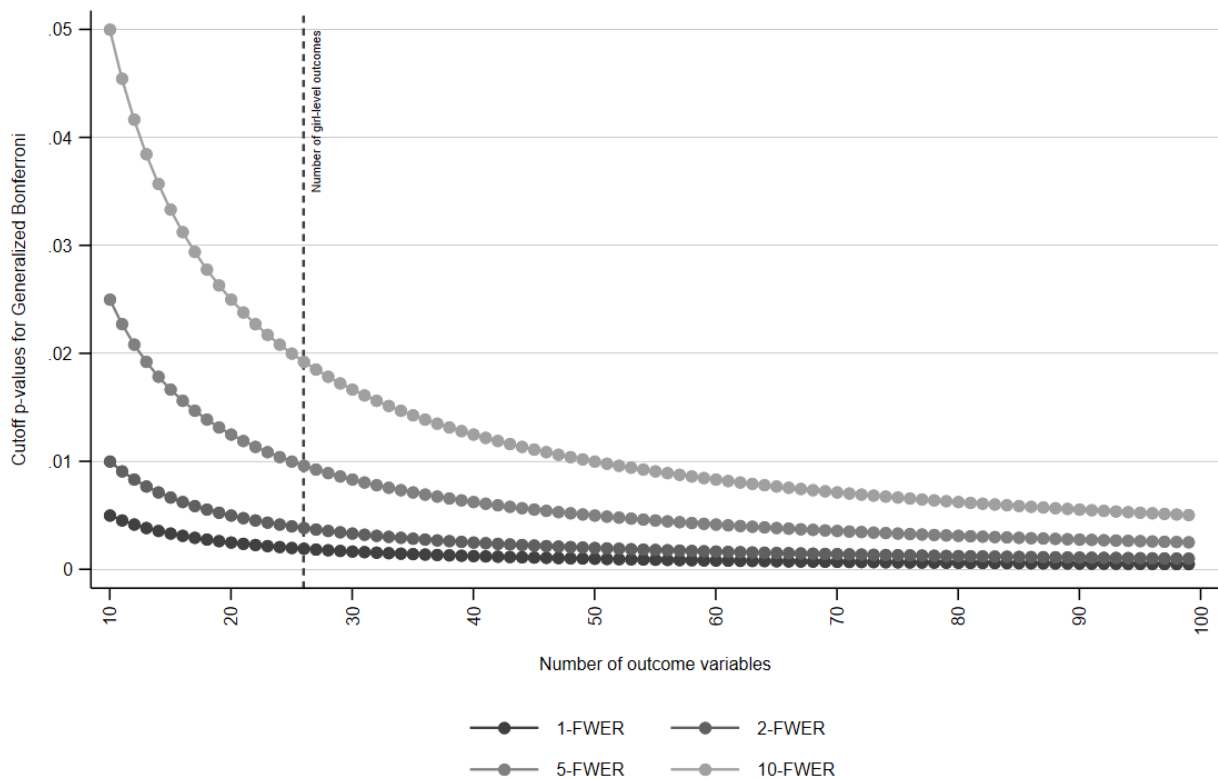
	# Obs	<u>C<sub>100</sub></u>	<u>T<sub>100</sub>-C<sub>100</sub></u>		<u>P-values</u>	
		(1) Mean (s.d.)	(2) Diff. (s.e.)	(3) Diff. (s.e.)	(4) Uncorr. p-values	(5) WY p-values
<b>Table 2 Impact on life outcomes</b>						
<b>Panel A: Education</b>						
Dropped out	1,344	0.40 (0.49)	-0.21 (0.05)	-0.21 (0.04)	0.000	0.004
<i>Grade 6</i>	1,315	0.06 (0.24)	-0.02 (0.02)	-0.02 (0.02)	0.297	0.980
<i>Grade 7</i>	1,315	0.21 (0.41)	0.20 (0.04)	0.20 (0.04)	0.000	0.001
<i>Grade 8</i>	1,315	0.31 (0.46)	0.04 (0.05)	0.05 (0.04)	0.237	0.953
Months of education since Oct. 17	1,315	21.22 (8.43)	3.00 (0.80)	3.09 (0.77)	0.000	0.013
<b>Panel B: Marriage &amp; fertility</b>						
Married	1,344	0.14 (0.35)	-0.07 (0.03)	-0.07 (0.03)	0.009	0.285
<i>Married before 16 (if 16 or above)</i>	921	0.04 (0.19)	-0.02 (0.01)	-0.02 (0.01)	0.105	0.810
<i>Married before 17 (if 17 or above)</i>	499	0.11 (0.31)	-0.07 (0.02)	-0.07 (0.02)	0.004	0.182
<i>Married before 18 (if 18 or above)</i>	151	0.21 (0.41)	-0.15 (0.06)	-0.17 (0.07)	0.008	0.320
Promised	1,344	0.10 (0.30)	-0.03 (0.02)	-0.03 (0.02)	0.097	0.804
Ever been pregnant	1,344	0.03 (0.18)	-0.01 (0.01)	-0.01 (0.01)	0.486	0.991
<b>Panel C: Well-being</b>						
Life satisfaction (standardized 10-point Likert scale)	1,344	0.00 (1.00)	0.25 (0.11)	0.25 (0.11)	0.028	0.510
Happiness (standardized 4-point Likert scale)	1,344	0.00 (1.00)	0.06 (0.09)	0.06 (0.09)	0.513	0.991
<b>Table 3 Impact on girls' aspirations</b>						
<b>Panel D: Educational aspirations</b>						
Wishes to attend high school	1,344	0.35 (0.48)	-0.09 (0.03)	-0.09 (0.03)	0.004	0.182
Wishes to pursue higher education	1,344	0.30 (0.46)	0.16 (0.05)	0.16 (0.05)	0.001	0.069
<b>Panel E: Professional aspirations</b>						
Wishes to work outside the home in non-family activities	1,199	0.86 (0.35)	0.04 (0.03)	0.04 (0.03)	0.138	0.775
Wishes to have a modern occupation	1,344	0.78 (0.41)	0.07 (0.04)	0.07 (0.04)	0.074	0.867
Expected monthly income (in 1,000 XOF)	1,090	139.88 (127.58)	20.46 (11.55)	20.46 (11.49)	0.075	0.775

<i>(continued)</i>						
<b>Panel F: Family aspirations</b>						
Wishes to get married (if not already married)	1,199	0.95 (0.21)	0.00 (0.02)	0.00 (0.02)	0.804	0.991
Wants to get married before 18 (if not already married)	1,137	0.13 (0.33)	-0.07 (0.02)	-0.07 (0.02)	0.002	0.119
Wants children (if she does not have any)	1,271	0.97 (0.18)	-0.01 (0.01)	-0.01 (0.01)	0.512	0.991
Age at which the girl wants her first child (if she wants some)	1,189	21.34 (2.81)	0.93 (0.23)	0.93 (0.23)	0.000	0.012
<b>Table 5 Impact on girls' human capital and preferences</b>						
<b>Panel G: Human capital</b>						
Reading skills index	1,344	0.00 (1.00)	0.09 (0.11)	0.09 (0.09)	0.327	0.973
Numeracy skills index	1,344	-0.00 (1.00)	0.18 (0.10)	0.18 (0.10)	0.082	0.775
Psychosocial skills index	1,344	0.00 (1.00)	0.12 (0.11)	0.12 (0.11)	0.286	0.973
SRH-related knowledge index (age>14)	1,272	-0.00 (1.00)	0.04 (0.12)	0.04 (0.12)	0.727	0.991
<b>Panel H: Preferences</b>						
<i>*Opinions on marriage and fertility</i>						
Ideal age for a woman to get married	1,333	18.05 (2.14)	0.49 (0.18)	0.50 (0.18)	0.005	0.188
Ideal age for a man to get married	1,329	23.22 (3.73)	0.77 (0.33)	0.77 (0.33)	0.019	0.416
There are disadvantages to getting married before 18	1,344	0.42 (0.49)	0.06 (0.04)	0.06 (0.04)	0.164	0.880
There are disadvantages to having a child before 18	1,344	0.47 (0.50)	0.04 (0.04)	0.04 (0.04)	0.310	0.973
<i>*Opinions on gender equality</i>						
Gender equality opinions index	1,344	-0.00 (1.00)	-0.04 (0.08)	-0.04 (0.08)	0.609	0.991
Sons' ideal education length (in years)	1,344	12.89 (3.87)	0.64 (0.43)	0.64 (0.43)	0.136	0.867
Daughters' ideal education length (in years)	1,344	12.06 (3.44)	0.77 (0.38)	0.77 (0.38)	0.041	0.607
Would be ideal for sons to work	1,344	0.88 (0.32)	0.03 (0.03)	0.03 (0.03)	0.355	0.973
Would be ideal for daughters to work	1,344	0.86 (0.35)	0.02 (0.03)	0.02 (0.03)	0.486	0.991
<i>*Opinions on domestic violence</i>						
Tolerance vis-à-vis domestic violence index	1,344	-0.00 (1.00)	-0.13 (0.12)	-0.13 (0.12)	0.260	0.964
<i>P-value for joint nullity test:</i>				0.002		
Strata fixed effects			YES	YES	YES	YES
Covariates			NO	DL	DL	DL

**Notes:** In this table, we describe the average treatment effect of the intervention on our primary outcomes (education, marriage and fertility, and well-being). In column (1), we report the mean (and standard deviation) in the control group for each outcome. In column (2), we report the estimates we obtain when estimating equation (1). In column (3), we re-estimate equation (1) adding covariates selected using a double lasso procedure. In column (4), we report the p-value associated with the coefficients displayed in column (3). In column (5), we report the associated Westfall-Young stepdown adjusted p-values to control for Family-Wise Error Rates (1,000 bootstrap replications). In this table, all outcomes were grouped into one single family of outcomes. In the last row of the table, "NO" indicates that no additional covariates were added to the estimated equation and "DL" indicates that the covariates were selected by a Double Lasso procedure. Standard errors are clustered at the village level.

**A.6.b:** Until now, p-values have been adjusted to control for the probability of one or more false rejections within families of outcomes (i.e., the "familywise error rate" or FWER). However, when the number of outcomes is large (as in the previous table), control of the FWER at conventional levels can become so stringent that true negatives have little chance of being detected. In such a context, it is worth considering an alternative that offers greater statistical power which consists in controlling the probability of k or more false rejections (the "k-FWER") (Lehmann and Romano, 2005).

Although extreme, the simplest procedure to control the k-FWER is to use the Generalized Bonferroni (GH) method. If s is the number of outcomes within a family of outcomes, then this method consists in reducing the threshold above which an effect is no longer considered to be statistically significant to  $k\alpha/s$ . The following figure shows the threshold for different values of k and s, which can be compared with the unadjusted p-values reported in the different tables.



For reference:

- Table 2 contains 10 distinct outcomes
- Table 3 contains 8 distinct outcomes
- Table 4 contains 8 distinct outcomes
- Table 5 contains 14 distinct outcomes
- Table 5 contains 14 distinct outcomes
- Table 6 contains 10 distinct outcomes
- Table 7 contains 6 distinct outcomes

Interestingly, although the GH procedure offers low statistical power to detect true negatives, the unadjusted p-value associated with a number of our key outcomes related to girls' education and their parents' aspirations at the time of the follow-up survey is so low (often less than 0.002) that it would remain statistically significant even under severe correction procedures (large  $s$  and small  $k$ ). This is also the case, although to a lesser extent, for some variables related to girls' marital status at the time of the follow-up survey.

## **Reference**

Lehmann, Erich Leo, and Joseph P. Romano. 2005. "Generalizations of the familywise error rate." *Annals of Statistics*, 33: 1138–1154.