

Online Appendix

for the paper “Maternal Depression, Women’s Empowerment, and Parental Investment: Evidence from a Randomized Control Trial” by Baranov, Bhalotra, Biroli, & Maselko

Appendix Section A provides details of the Thinking Healthy Program and the data used in the paper. Appendix Section B reports summary statistics and descriptive correlations of the rich measures that we use throughout the paper. Appendix Section C reports further information on the mothers who were excluded from the intervention because they were not clinically depressed at baseline. Appendix Section D details compliance, baseline balance, and attrition of our sample. Appendix Section E shows several robustness checks in terms of controls used, construction of indices, and observational associations between baseline covariates and outcomes of interest. In Appendix Section G we test for heterogeneity of treatment effects by baseline depression severity, education, wealth, family structure, mother’s age, and whether the index child is the first child. Finally, in Appendix Section H, we show in detail all of the treatment effects for the individual outcomes we measure in the dataset.

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A Description of the Thinking Healthy Program

This section provides details of the Thinking Healthy Program and the data used in the main text. Table A.1 below outlines the essential features of the Thinking Healthy Program. Figure A.2 shows a map of the treatment and control clusters. Figure A.3 provides a detailed count of sample flow from baseline to the 7-year follow-up by treatment arm.

Table A.1 – Essential features of the Thinking Healthy Program (THP)

Theoretical basis	Based on principles of Cognitive Behavior Therapy (CBT)
Delivering agent	Village-based female (lady) health workers (LHWs). Generally completed high school. 6-months training in preventive maternal and child health. Intervention is simple enough to be delivered by lay-counselors where LHWs do not exist
Structure of intervention	16 sessions organized in 5 modules: 4 weekly sessions (Module 1 – <i>Preparing for the baby</i>) in the last month of pregnancy. 3 fortnightly sessions (Module 2 – <i>The baby's arrival</i>) in the first postnatal month; 9 monthly sessions (Modules 3 – 5 – <i>Early, Middle and Late Infancy</i>) thereafter; each session approx. 45 min
Structure of session	Active listening, followed by 3 steps - step 1: identifying unhealthy (unhelpful) thinking; step 2: replacing unhealthy thinking with healthy thinking; step 3: practicing healthy thinking and behaviors. Homework given for each session
Areas covered	Each module covers 3 areas – mother's mood and personal health; mother-infant relationship; relationship of mother with significant others
Tools	Training manual with step-by-step instructions for conducting each session; activity workbooks for mothers; health calendar for families to monitor progress and activities THP manual cross-referenced with LHW Training Manual
Training	2-day training workshop followed by 1-day refresher after 4 months; includes training video with actors conducting sessions; role-plays and discussions
Supervision	Monthly half-day sessions in groups of 10; discussion of problems and "brain-storming" for solutions. Checks for fidelity.
Additional features	Use of pictures in addition to words for non-literates; emphasis on being active listeners as well as trainers; special training session on dealing with difficult situations

Source: Reproduced from Table 3 in Rahman (2007).

Figure A.1 – Map of the Rawalpindi District

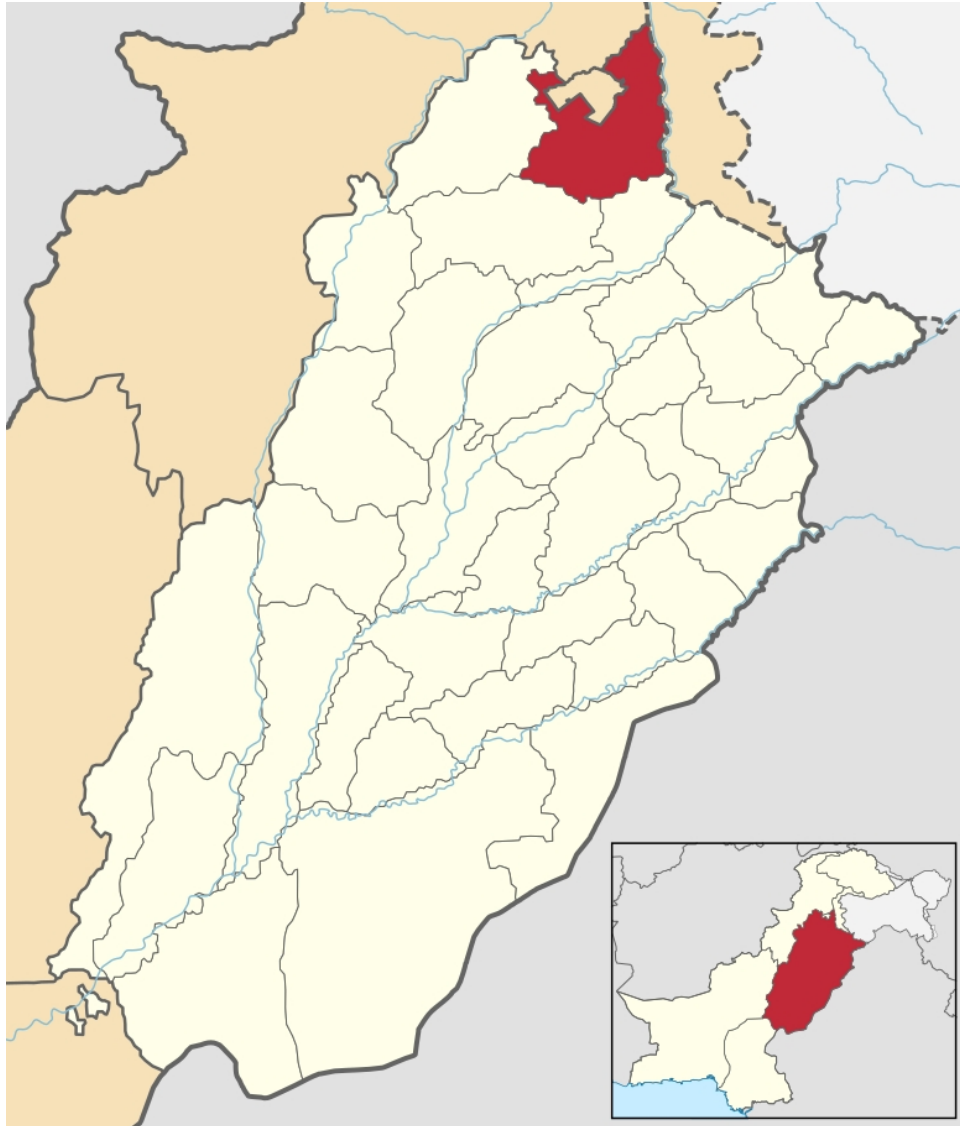
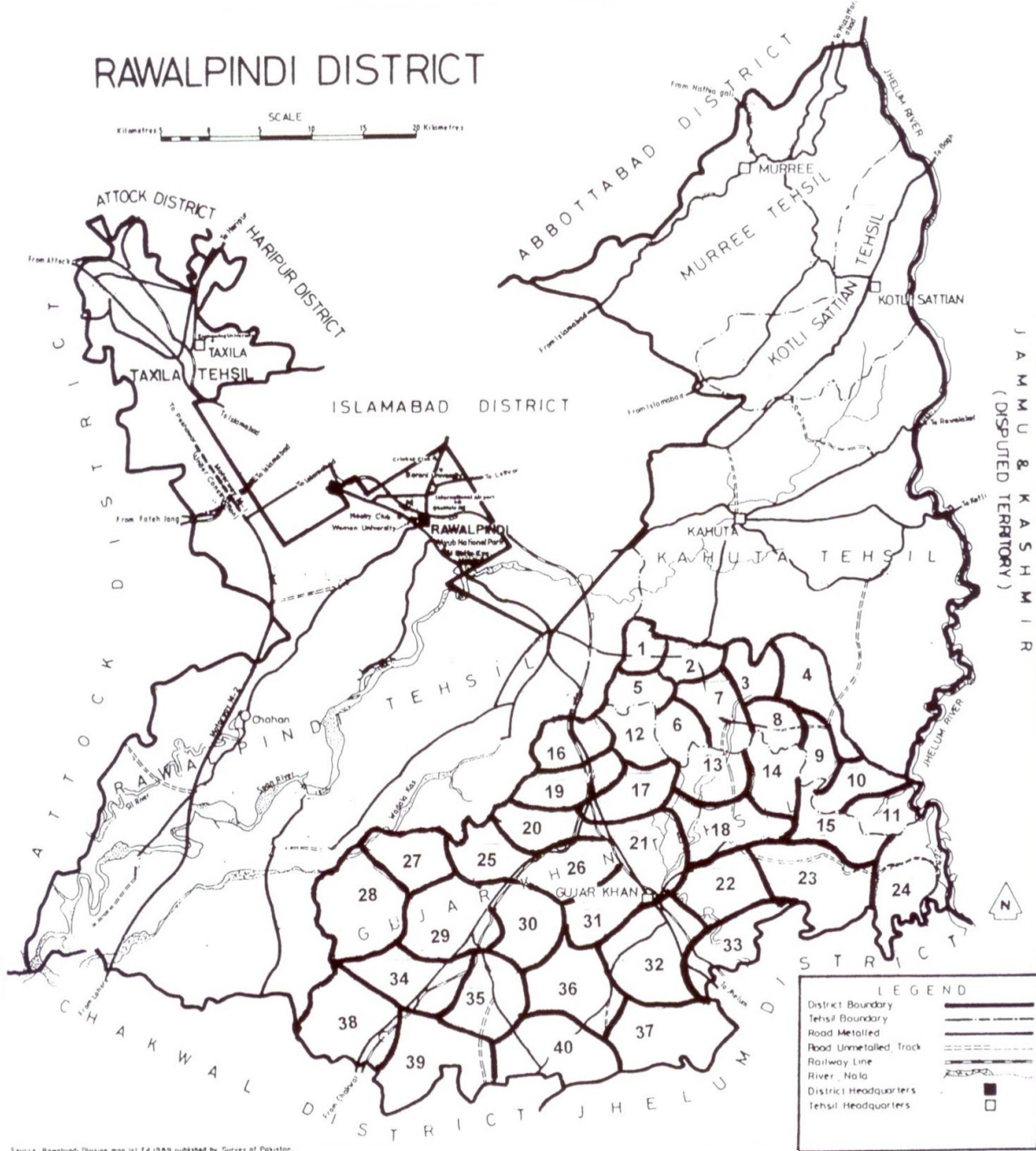


Figure A.2 – Map of treatment and control clusters



Notes: Treatment and control clusters are numbered from 1 to 40.

Figure A.3 – Sample sizes

	Treatment		Control		Total		T-C p-value
Pregnant women identified	1967		1931		3898		
refusals	140	7%	159	8%	299	8%	0.19
not found	40	2%	40	2%	80	2%	
Screened at baseline	1787	91%	1731	90%	3518	90%	0.20
excluded	138	8%	138	8%	276		
Depressed (completed survey)	463	26%	440	25%	903	26%	0.74
boys at birth	223	48%	226	51%	449	50%	0.95
Attrited btw baseline & 1yr	103	22%	95	22%	198	22%	
total child mortality/illness	52	11%	41	9%			0.34
stillbirths/abortions	15	3%	21	5%			0.24
infant mortality (of live births)	31	7%	18	4%			0.10
mother mortality	2	0%	3	1%			0.99
refused	11	2%	11	3%			0.90
moved	38	8%	40	9%			0.64
Complete dyads at 1yr	360		345		705		
Attrited btw 1yr & 7yr	72	20%	51	15%	123	17%	0.07
LTFU	62	13%	44	10%	106	12%	0.10
child mortality	4		3				
mother mortality	3		1				
child disabled/not eligible	2		2				
Attrited btw baseline & 7yr	174	38%	145	33%	319	35%	
child death/illness	55	32%	44	30%	99	31%	0.37
child death (of live births)	35	8%	21	5%	56	6%	0.09
mother death	5	3%	4	3%	9	3%	0.80
refused/moved/LTFU/not eligible	112	64%	96	66%	208	65%	0.39
Complete dyads at 7yr	289	62%	295	67%	584	65%	0.15
dyads at 7yr who completed 1yr	289	80%	295	86%		83%	0.07
in our data	289		296				0.13

Notes: Table shows the sample flow from the start of the intervention when pregnant women were identified to the 7-year follow-up. Percentages are not defined in the same way from row to row. P-values of simple χ^2 tests of differences in rates across treatment and control groups are in the last column.

B Summary Statistics of indices and measures

We report summary statistics for maternal decision-making outcomes (Table B.3), children's outcomes (Table B.4), and potential mediators (Table B.5). We then provide a description of the mental health scales available in the data (Appendix Table A.I), of the six outcome indices used (Appendix Table A.II), and of the parental investments and child development inventories (Appendix Table A.III). Finally, we show the conditional correlations of observable characteristics at baseline, 6, and 12 months with parental investment at age 8 (Table B.6), and with child developmental outcomes at age 8 (Table B.7).

Table B.2 – Summary Statistics for Maternal Mental Health

	Mean	SD	Median	Min.	Max.	Total Obs
Depression severity index (7y)^a	-0.25	0.9	-0.7	-0.8	3.4	885
Depressed (7y)	0.22	0.4	0.0	0.0	1.0	885
# Depression symptoms present (7y)	3.99	2.8	3.0	1.0	10.0	885
Symptoms cause impairment (7y)	0.29	0.4	0.0	0.0	1.0	885
Depressed in previous 2 years (7y)	0.04	0.2	0.0	0.0	1.0	885
Depression severity index (1y)^a	-0.36	1.0	-0.9	-1.3	1.5	584
Depressed (1y) ^b	0.42	0.5	0.0	0.0	1.0	584
Depression severity (1y) ^b	7.84	7.8	5.0	0.0	24.0	584
BDQ disability score (1y) ^b	3.65	4.2	2.0	0.0	15.0	584
GAF general functioning (1y) ^b	16.14	11.9	12.0	0.0	39.0	584
Depression severity index (6m)^a	-0.31	0.9	-0.8	-1.3	1.9	584
Depressed (6m) ^b	0.36	0.5	0.0	0.0	1.0	584
Depression severity (6m) ^b	6.31	6.9	4.0	0.0	24.0	584
BDQ disability score (6m) ^b	3.13	3.6	2.0	0.0	14.0	584
GAF general functioning (6m) ^b	14.11	11.4	10.0	0.0	39.0	584

Notes: Index variables, created such that the control group has mean 0, standard deviation 1, are in bold. The individual variables that make up each index are listed below. The sample includes the intervention (baseline depressed mothers in treatment and control groups) and non-intervention (baseline non-depressed mothers) groups.

^a Index variables were created following Anderson (2008), with higher scores indicating more severe depression.

^b These outcomes were analyzed in Rahman et al. (2008).

Table B.3 – Summary Statistics for Women’s Decision Making

	Mean	SD	Median	Min.	Max.	Total Obs
Mother’s financial empowerment^a	0.21	1.2	0.4	-1.8	6.0	885
Mother controls spending (6m) ^b	0.57	0.5	1.0	0.0	1.0	584
Mother gets pocket money (1y)	0.74	0.4	1.0	0.0	1.0	582
Mother controls spending (7y) ^c	0.60	0.5	1.0	0.0	1.0	885
Mother gets pocket money (7y) ^c	0.65	0.5	1.0	0.0	1.0	859
Mother employed (7y)	0.12	0.3	0.0	0.0	1.0	885
Mother’s income (100s PKR) (7y)	4.33	15.5	0.0	0.0	100.0	876
Parental investment (monetary)^a	0.23	1.0	0.3	-5.6	2.5	885
HOME: Learning materials	2.86	1.5	3.0	0.0	6.0	885
HOME: Physical environment	4.86	2.4	5.0	0.0	8.0	885
Monthly expend. on educ (ln) (7y)	7.37	1.3	7.6	2.3	10.6	748
Expected grade attainment	14.45	2.5	16.0	0.0	21.0	881
Private school	0.47	0.5	0.0	0.0	1.0	878
School quality	0.00	2.3	-0.1	-5.3	4.4	850
Parental investment (time-intensive)^a	0.23	1.0	0.2	-2.3	3.6	885
HOME: Enrichment	2.94	1.4	3.0	0.0	5.0	885
HOME: Family companionship	3.36	1.7	3.0	0.0	6.0	885
HOME: Family integration	2.82	1.0	3.0	0.0	12.0	885
Frequency of mother play	0.19	0.3	0.0	0.0	1.0	885
Someone helps with studies	0.58	0.5	1.0	0.0	1.0	885
Parenting style^a	0.05	1.0	0.2	-4.3	2.2	885
PPI: Not harsh	13.97	8.1	14.0	0.0	33.0	885
PPI: Not harsh for age	8.61	1.4	9.0	0.0	9.0	885
PPI: Consistent	9.88	3.5	10.0	0.0	18.0	885
HOME: Responsivity	8.96	1.6	10.0	1.0	10.0	885
HOME: Encouragement of maturity	5.23	1.6	5.0	0.0	7.0	885
HOME: Emotional climate	4.74	1.9	5.0	0.0	8.0	885
Fertility trajectory^a	-0.08	1.1	-0.0	-4.3	2.7	885
Ideal # kids (7y)	3.29	1.2	3.0	0.0	9.0	874
# kids born past 7yrs	1.12	1.0	1.0	0.0	5.0	885
Pregnant at 1y	0.07	0.3	0.0	0.0	1.0	583
Index not last child	0.67	0.5	1.0	0.0	1.0	885

Notes: Index variables, created such that the control group has mean 0, standard deviation 1, are in bold. The individual variables that make up each index are listed below. The sample includes the intervention (baseline depressed mothers in treatment and control groups) and non-intervention (baseline non-depressed mothers) groups.

^a Index variables were created following Anderson (2008), with positive values always associated with more favorable outcomes for all indices.

^b This outcome was analyzed in Rahman et al. (2012).

^c We use both measures of control over spending, even though they are highly correlated, because one phrasing was asked at the 6-month survey, while the other at the 12-month. At 6 months, the question was phrased as “Does your husband/head of family give you spending money and if so do you decide how to use it”, while at 12 months the question was phrased as “Do you get pocket money for spending on personal needs”. Since the summary index places more weight on uncorrelated information, adding additional highly correlated variables does not affect the index. For example, in the limit, adding additional perfectly correlated variables does not affect the index at all.

Table B.4 – Summary Statistics for Children’s Outcomes

	Mean	SD	Median	Min.	Max.	Total Obs
Physical development^a	0.12	0.9	0.3	-4.3	2.3	885
Height-for-age (z) ^b	-0.82	1.1	-0.8	-4.9	3.2	879
BMI-for-age (z) ^b	-0.96	1.2	-1.0	-4.7	4.6	879
Not stunted (height > - 2SD)	0.86	0.3	1.0	0.0	1.0	885
Motor function	-0.00	0.7	0.2	-3.4	0.8	885
No hospitalization	0.85	0.4	1.0	0.0	1.0	885
No severe illness	0.73	0.4	1.0	0.0	1.0	885
No eyesight problems	0.96	0.2	1.0	0.0	1.0	885
No hearing problems	0.98	0.1	1.0	0.0	1.0	885
Cognitive development^a	0.06	1.0	0.1	-3.7	2.7	885
WPPSI: Verbal comprehension ^b	86.41	14.5	85.0	45.0	146.0	882
WPPSI: Visual spatial ^b	86.94	14.6	86.0	45.0	148.0	883
WPPSI: Fluid reasoning	78.55	12.5	77.0	45.0	133.0	884
WPPSI: Working memory	99.62	15.9	100.0	58.0	146.0	884
WPPSI: Processing speed	77.74	10.1	77.0	45.0	112.0	877
Urdu score	6.73	3.7	6.0	0.0	12.0	877
Math score	9.35	3.5	11.0	0.0	16.0	876
Executive function (Stroop)	14.15	3.1	16.0	0.0	16.0	885
Grade-for-age	0.75	0.3	0.8	0.0	1.5	872
Socio-emotional development^a	0.02	1.0	0.1	-4.3	2.2	885
SDQ: Emotional ^b	2.20	2.0	2.0	0.0	10.0	885
SDQ: Conduct problems ^b	3.28	2.1	3.0	0.0	10.0	885
SDQ: Hyperactivity ^b	3.55	2.6	3.0	0.0	10.0	885
SDQ: Peer problems ^b	1.98	1.6	2.0	0.0	8.0	885
SDQ: Prosocial ^b	2.40	2.5	2.0	0.0	10.0	885
SCAS: Panic and agoraphobia ^b	1.51	2.8	0.0	0.0	25.0	885
SCAS: Separation ^b	5.75	4.1	6.0	0.0	17.0	885
SCAS: Injury fear ^b	5.89	3.7	6.0	0.0	15.0	885
SCAS: Social phobia ^b	2.15	2.7	1.0	0.0	17.0	885
SCAS: Obsessive-compulsive ^b	1.33	2.2	0.0	0.0	15.0	885
SCAS: General anxiety ^b	3.42	3.1	3.0	0.0	18.0	885
Sibling survival index^a	0.12	0.9	0.2	-7.4	1.5	885
Share of boys	0.51	0.2	0.5	0.0	1.0	885
# died <1 year of age	0.25	0.6	0.0	0.0	6.0	881
# died btw 1 & 5 years old	0.04	0.2	0.0	0.0	3.0	881
# died > 5 years old	0.02	0.1	0.0	0.0	1.0	882

Notes: Index variables, created such that the control group has mean 0, standard deviation 1, are in bold. The individual variables that make up each index are listed below. The sample includes the intervention (baseline depressed mothers in treatment and control groups) and non-intervention (baseline non-depressed mothers) groups.

^a Index variables were created following Anderson (2008), with positive values always associated with more favorable outcomes for all indices.

^b These outcomes were analyzed in Maselko et al. (2015).

Table B.5 – Summary Statistics for Mediators

	Mean	SD	Median	Min.	Max.	Total Obs
Mother's physical health^a	0.17	1.1	0.3	-3.6	3.6	885
Mother never been unwell (7y)	0.67	0.5	1.0	0.0	1.0	885
Overall health (0-4) (7y)	1.95	0.9	2.0	0.0	4.0	885
Healthy days in past 30 (7y)	26.52	7.1	30.0	0.0	30.0	621
Weight (kg) (6m)	54.18	11.5	52.0	30.0	116.0	584
Weight (kg) (1y)	52.99	11.6	50.0	30.0	115.0	585
Husband's income trajectory^a	0.04	1.1	0.3	-5.7	4.1	824
Monthly income (ln) (7y)	9.01	1.4	9.2	2.3	13.8	719
Monthly income (ln) (1y)	7.28	2.3	8.0	2.3	10.6	554
Monthly income (ln) (6m)	7.30	2.2	8.0	2.3	10.5	554
Relationship quality^a	0.17	1.0	0.4	-3.7	2.7	880
Marital quality scale (7y)	5.31	1.4	6.0	0.0	6.0	859
Relationship husband (7y)	4.06	0.9	4.0	1.0	5.0	859
Husband nonviolent (7y)	0.76	0.4	1.0	0.0	1.0	859
Relationship m-in-law (7y)	3.46	1.0	4.0	1.0	5.0	566
Marital quality scale (1y)	3.56	1.0	4.0	0.0	4.0	582
Relationship husband (1y)	4.04	0.9	4.0	1.0	5.0	582
Husband nonviolent (1y)	0.72	0.4	1.0	0.0	1.0	582
Relationship m-in-law (1y)	4.81	2.5	4.0	1.0	9.0	585
Grandmother trajectory^a	0.17	1.1	0.1	-1.0	1.6	885
Grandmother present (7y)	0.39	0.5	0.0	0.0	1.0	885
Grandmother present (1y)	0.48	0.5	0.0	0.0	1.0	584
Grandmother present (6m)	0.54	0.5	1.0	0.0	1.0	584
Social support trajectory^a	0.35	1.1	0.4	-2.8	2.7	885
Perceived social support (6m) ^b	47.75	15.9	47.0	12.0	79.0	584
Perceived social support (1y) ^b	47.06	13.7	47.0	12.0	77.0	584
Perceived social support (7y)	39.21	11.7	40.0	12.0	60.0	885

Notes: Index variables, created such that the control group has mean 0, standard deviation 1, are in bold. The individual variables that make up each index are listed below. The sample includes the intervention (baseline depressed mothers in treatment and control groups).

^a Index variables were created following Anderson (2008), with positive values always associated with more favorable outcomes for all indices.

^b These outcomes were analyzed in Rahman et al. (2008).

Table B.6 – Correlates of Parental Investment Behavior at Age 7

	Time investment index			Monetary investment index			Parenting style index		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Girl	0.01 (0.11)	0.01 (0.11)	0.04 (0.09)	-0.38*** (0.08)	-0.35*** (0.08)	-0.33*** (0.07)	0.04 (0.11)	0.05 (0.11)	0.06 (0.09)
Age of index child	0.14 (0.27)	0.16 (0.27)	0.28 (0.25)	-0.13 (0.37)	-0.07 (0.38)	-0.08 (0.41)	0.52* (0.30)	0.55* (0.29)	0.57 (0.34)
Wealth score (at baseline)	0.06** (0.02)	0.06** (0.02)	0.08*** (0.02)	0.08** (0.04)	0.08** (0.04)	0.10*** (0.03)	0.00 (0.03)	0.00 (0.03)	0.02 (0.03)
Mother's years of education	0.05*** (0.01)	0.05*** (0.01)	0.03** (0.01)	0.07*** (0.01)	0.07*** (0.02)	0.06*** (0.02)	0.05*** (0.02)	0.05*** (0.02)	0.04** (0.02)
Father's years of education	0.04** (0.01)	0.03** (0.01)	0.01 (0.01)	0.07*** (0.01)	0.06*** (0.01)	0.06*** (0.02)	0.01 (0.01)	0.01 (0.01)	-0.00 (0.01)
Mother's age	0.06 (0.05)	0.06 (0.05)	0.01 (0.05)	0.03 (0.08)	0.03 (0.07)	-0.01 (0.07)	0.18** (0.08)	0.18** (0.07)	0.12* (0.07)
Mother's age ²	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)	0.00 (0.00)	-0.00** (0.00)	-0.00** (0.00)	-0.00 (0.00)
No. kids (at baseline)	-0.00 (0.03)	-0.00 (0.03)	0.01 (0.03)	-0.02 (0.05)	-0.01 (0.05)	0.00 (0.04)	0.01 (0.03)	0.01 (0.03)	0.05 (0.03)
Grandmother at baseline	0.10 (0.10)	0.08 (0.10)	0.03 (0.09)	-0.04 (0.12)	-0.08 (0.11)	-0.13 (0.10)	0.02 (0.10)	-0.01 (0.10)	-0.08 (0.12)
Mother depressed (at 7-year followup)		-0.16 (0.11)	0.03 (0.07)		-0.42*** (0.12)	-0.37*** (0.11)		-0.26** (0.12)	-0.11 (0.14)
Baseline depression severity		0.03 (0.06)	0.06 (0.04)		0.03 (0.04)	0.06* (0.03)		0.07 (0.05)	0.09 (0.06)
Mother play (at 1-year followup)			0.74*** (0.11)			0.23* (0.13)			0.30** (0.13)
Father play (at 1-year followup)			0.59*** (0.11)			0.30* (0.16)			0.51*** (0.11)
Diarrhea (at 1-year followup)			-0.10 (0.10)			-0.04 (0.10)			0.00 (0.09)
Breastfeeding (at 6-month followup)			0.03 (0.15)			0.18 (0.22)			0.32*** (0.11)
ARI (at 1-year followup)			0.09 (0.10)			-0.08 (0.10)			-0.00 (0.07)
Observations	295	295	276	295	295	276	295	295	276
R ²	0.44	0.44	0.65	0.31	0.35	0.40	0.23	0.24	0.33

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: This table shows associations of parenting behavior with potential mediating infant inputs and key demographic and socioeconomic characteristics (which were used as controls in the main analysis). The sample consists only of mothers in the control group. Column 1 shows the associations by regressing the child development outcome on baseline demographic/socioeconomic characteristics. Column 2 adds mother's depressed status at the 7-year follow-up and her baseline depression severity. Column 3 adds mediating infant inputs and infant health. The parental behavior indicators are measured using three broad domains and calculated as a summary index following Anderson (2008). All regressions control for interviewer fixed effects. Heteroskedasticity robust standard errors are clustered at the Union Council level.

Table B.7 – Correlates of Child Development at Age 7

	Cognitive development index			Physical development index			Socio-emotional development index		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Girl	0.10 (0.13)	0.10 (0.13)	0.09 (0.13)	-0.03 (0.13)	-0.02 (0.13)	-0.06 (0.14)	-0.25** (0.11)	-0.21* (0.11)	-0.24* (0.12)
Age of index child	0.31 (0.39)	0.33 (0.39)	0.22 (0.42)	0.45 (0.53)	0.46 (0.53)	0.54 (0.54)	0.46 (0.57)	0.50 (0.58)	0.47 (0.53)
Wealth score (at baseline)	0.06* (0.03)	0.06* (0.03)	0.06 (0.03)	0.02 (0.03)	0.02 (0.03)	-0.00 (0.03)	-0.01 (0.03)	-0.03 (0.03)	-0.05 (0.03)
Mother's years of education	0.05*** (0.01)	0.05*** (0.01)	0.04*** (0.01)	-0.00 (0.02)	-0.00 (0.02)	-0.01 (0.02)	0.02 (0.02)	0.01 (0.02)	0.02 (0.02)
Father's years of education	0.05*** (0.02)	0.05*** (0.02)	0.05*** (0.02)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)	0.03* (0.02)	0.03* (0.02)	0.04** (0.02)
Mother's age	0.16*** (0.06)	0.16** (0.06)	0.14** (0.05)	0.23** (0.08)	0.23** (0.08)	0.22** (0.08)	0.02 (0.07)	0.02 (0.06)	0.03 (0.06)
Mother's age ²	-0.00** (0.00)	-0.00** (0.00)	-0.00** (0.00)	-0.00** (0.00)	-0.00** (0.00)	-0.00** (0.00)	-0.00 (0.00)	-0.00 (0.00)	-0.00 (0.00)
No. kids (at baseline)	-0.09** (0.04)	-0.08** (0.04)	-0.09** (0.03)	-0.02 (0.05)	-0.02 (0.05)	-0.06 (0.04)	-0.00 (0.04)	-0.00 (0.03)	-0.02 (0.04)
Grandmother at baseline	0.04 (0.09)	0.02 (0.08)	-0.01 (0.08)	0.09 (0.12)	0.08 (0.12)	0.09 (0.12)	-0.06 (0.14)	-0.09 (0.14)	-0.14 (0.17)
Mother depressed (at 7-year followup)		-0.23** (0.10)	-0.17 (0.12)		-0.06 (0.16)	-0.01 (0.17)		-0.19 (0.13)	-0.19 (0.13)
Baseline depression severity		0.06 (0.05)	0.06 (0.05)		-0.05 (0.07)	-0.03 (0.06)		-0.16** (0.06)	-0.17** (0.07)
Mother play (at 1-year followup)			-0.03 (0.13)			0.04 (0.17)			-0.08 (0.19)
Father play (at 1-year followup)			0.35*** (0.07)			0.15 (0.14)			-0.14 (0.17)
Diarrhea (at 1-year followup)			-0.31*** (0.09)			-0.08 (0.17)			-0.12 (0.14)
Breastfeeding (at 6-month followup)			-0.01 (0.11)			-0.11 (0.18)			-0.16 (0.17)
ARI (at 1-year followup)			-0.07 (0.09)			-0.19 (0.12)			0.06 (0.09)
Observations	295	295	276	295	295	276	295	295	276
R ²	0.23	0.24	0.29	0.09	0.09	0.12	0.12	0.16	0.17

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: This table shows associations of child development with potential mediating infant inputs and key demographic and socioeconomic characteristics (which were used as controls in the main analysis). The sample consists only of mothers in the control group. Column 1 shows the associations by regressing the child development outcome on baseline demographic/socioeconomic characteristics. Column 2 adds mother's depressed status at the 7-year follow-up and her baseline depression severity. Column 3 adds mediating infant inputs and infant health. The child development indicators are measured using three broad domains and calculated as a summary index following Anderson (2008). All regressions control for interviewer fixed effects. Heteroskedasticity robust standard errors are clustered at the Union Council level.

C Baseline non-depressed

This Appendix Section reports further information on the mothers who were excluded from the intervention because they were not clinically depressed at baseline.

Sample selection for 300 baseline non-depressed was done according to the following protocol: we started from the original lists of women who screened negative from depression and their addresses. We contacted each local lady health worker (LHW) to ask about finding the women on the list. In some cases, the LHW was no longer there (retired, left the area, etc.) so we asked the new LHW. This allowed us to generate a new and cleaner list of 603 women and their most current addresses. Then, stratified by cluster, we started contacting women at random on the list until we reached a sample size of 300. Of these, 27 had children who died, 3 children disqualified, 17 moved, and 44 had no information, but these did not differ by treatment or control clusters. The remaining sample was dropped due to the target of 300 being reached. There was no issue of non-compliance, however, of the women who were successfully contacted. If a selected woman was not reachable, then the interviewer would look for another household in the proximity that was also on the list.

Table (C.8) checks for balance of baseline observable characteristics between the treatment and control clusters for mothers who were non-depressed at baseline. This is an additional check of the validity of the randomization that leverages information from the non-experimental sample. Table (C.9) reports the average outcomes for the baseline non-depressed sample, and the baseline depressed mother-child dyads (both treated and control).

Table C.8 – Balance in non-depressed sample: Characteristics by cluster assignment at 7-yr follow-up

	Non-experimental Sample at 7-year followup					
	Control Mean	(s.d.)	T-C Diff	(s.e.)	<i>p</i> -val	N
Age	33.86	(5.2)	0.42	(0.71)	0.56	300
Parity	4.65	(3.0)	-0.23	(0.30)	0.46	300
Mother's education	4.85	(4.3)	1.39	(0.73)	0.07*	300
Father's education	7.89	(3.3)	0.24	(0.47)	0.61	300
Grandmother lives with	0.40	(0.5)	0.09	(0.07)	0.20	300
Adults in house	4.01	(2.6)	0.27	(0.30)	0.38	299
Index child is girl	0.48	(0.5)	-0.03	(0.07)	0.69	300
Age of index child	7.57	(0.1)	0.00	(0.01)	0.80	300
Mother's Financial Autonomy Index	0.27	(1.1)	0.08	(0.14)	0.55	300
Father's Employment Index	0.03	(0.7)	0.04	(0.08)	0.60	299
Household Wealth Index	0.13	(0.8)	0.22	(0.14)	0.12	300
Relationship Quality Index	0.37	(0.8)	0.03	(0.09)	0.73	295
Mother's Health Index	0.14	(1.3)	0.19	(0.16)	0.24	300
Mental health index (7y)	0.52	(0.5)	0.03	(0.06)	0.63	300
Joint test (<i>p</i> -value)					0.38	
Observations		150				

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: This table tests for balance in characteristics at the 7-year follow-up for women excluded (non-depressed) at baseline, by treatment and control clusters.

^a The wealth index is a PCA-weighted index of household income, health worker SES rating, house materials, water and waste infrastructure, and a number of other assets.

Table C.9 – Characteristics in 2013 by Baseline Depression Status

Sample Characteristics:	(1) Non-depressed	(2) Depressed	(3) <i>p</i> -value
Mother's characteristics			
Mother's age	34.06	34.73	0.10 *
Mother's education	5.54	4.02	0.00 ***
Number of kids	4.00	4.31	0.00 ***
Number of kids born to mother in last 7 years	1.24	0.87	0.00 ***
Avg age if kids born to mother in last 7 yrs	3.68	3.71	0.81
Mother's general health (1=vgood 5=vbad)	2.87	3.14	0.00 ***
Mother's Mental Health			
Currently depressed	0.11	0.27	0.00 ***
Perceived social support score (MSPSS)	41.69	37.94	0.00 ***
Recovered permanently	0.00	0.39	0.00 ***
Never recovered	0.00	0.13	0.00 ***
Depressed ever between 2008-2013	0.13	0.31	0.00 ***
Depressed between 2008-2013 (recall only)	0.03	0.14	0.00 ***
Number of recalled depressive episodes	0.03	0.15	0.00 ***
Number of depressive episodes since 2007	0.12	0.33	0.00 ***
Duration of recalled depressive episodes (yrs)	0.03	0.11	0.00 ***
Family characteristics			
Joint/extended family structure	0.60	0.60	0.93
Grandmother lives with	0.44	0.37	0.03 **
Number of adults living with	4.14	3.72	0.01 ***
Father's characteristics			
Father's education	8.01	6.96	0.00 ***
Father employed	0.90	0.87	0.25
Father's occupation non-manual worker	0.09	0.05	0.01 ***
Household income and SES			
SES (1=Rich, 5=Poor)	3.34	3.48	0.01 ***
Has debt	0.56	0.63	0.05 **
Piped drinking water	0.06	0.08	0.28
Flush toilet	0.65	0.57	0.03 **
Sample size	300	585	885

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: The table shows sample means for characteristics for perinatally depressed and perinatally non-depressed mother measure at the time of the 7-year follow-up. Column 3 shows the *p*-value of the difference in means between the depressed and non-depressed groups.

D Compliance, Baseline Balance, and Attrition

D.1 Compliance

In our data 12 women moved between clusters within the first year (6 treatment, 6 control). In these cases, women who were assigned to control and moved to treatment clusters did not receive treatment; however those in treatment clusters who moved into control clusters no longer received treatment. Thus there are 12 cases where treatment take-up differs from random assignment variable that we actually know about. We use the original treatment assignment in our analysis, yielding an estimate of the ITT. However, instrumenting actual treatment take-up with the original assignment yields similar results.

D.2 Baseline Balance

Table 1 shows baseline characteristics for the sample of women who were interviewed at baseline, the 1-year follow-up (the target sample for the 7-year follow-up), and the 7-year follow-up.¹ At baseline, the samples were balanced along observable characteristics (p -value of the joint test is 0.13), with the exception of the composition of household: treated mothers were 10 percentage points ($p < 0.01$) more likely to have a grandmother of the index child (henceforth, just grandmother, though 90% of the cases this is the mother-in-law) living with them. This pattern remains in the 1-year follow-up sample, treated women are 12 percentage points more likely to have a grandmother of the index child, and the 7-year follow-up sample (difference of 11pp).

Additionally, there are several notable differences in characteristics between treated and control groups in both follow-up samples. Treated women reported 0.75 more years of education, and 0.29 fewer children. The 7-year follow-up sample displays similar patterns: perceived social support and presence of grandmothers were still greater in the intervention arm, and treatment women had more education and fewer children. Jointly testing all variables, we fail to reject the null hypothesis that treatment and control clusters were balanced in the 1-year follow-up sample ($p = 0.12$). While the magnitudes of the differences between treatment and control were similar using the 1-year sample, we reject the null that the 7-year follow-up sample is balanced by intervention arm. The differences between treatment and control clusters in mother's education, parity, and presence of a grandmother are also evident in the 300 women who were excluded at baseline (ie, perinatally non-depressed), and although the differences are not statistically significant, they are very similar in magnitude. See Table C.8. Differences that are observed between treatment and controls clusters of the baseline non-depressed sample would be subtracted away in a difference-in-differences analysis, providing an alternative method to "controlling" for baseline imbalance between treatment and controls clusters.

D.3 Attrition

Although attrition was not different by treatment status, the changes in balance from the baseline to 7-year follow-up samples are due to attrition. LTFU (attriters) and mothers that were re-enrolled at year 7 were fairly similar along most characteristics (Appendix Table A.IV); however, LTFU mothers were less empowered, perceived less social support, and were more likely to normally work. Table A.IV also shows baseline characteristics of the LTFU women by treatment group. Consistent with the similar balance between the original baseline sample and the 7-year follow-up sample reported in Table 1, there were no differences between treated and control LTFU mothers at the 5% significance level, and we fail to reject the joint test that characteristics of attriters in treatment were different to controls ($p=0.59$).²

¹The wealth index, also used as a control, is the first principal component of the following measures of house quality and asset ownership: brick walls, electricity, piped water, flush toilet, water pump, washing machine, air conditioning, refrigerator, TV, radio, bicycle, and car. Additionally, it includes if the mother reports having enough money for food, and the assessor-rated SES measure (5-point Likert scale from poorest to richest).

²Reasons for attrition were extensively monitored during the first year, but not thereafter, although the re-enrollment study at the 7-year follow-up did record reason for LTFU in some cases. Reasons such as death of a child or death of the mother are also not different by treatment status. Additionally, attrition due to moving or refusing were also not different by treatment status.

Another way to investigate whether differential attrition between the 1-year follow-up and 7-year follow-up affects our estimates is to compare *short-term* treatment effects on maternal depression outcomes calculated using the full samples at 6-month and 1-year follow-ups (N= 818 and 791 respectively) to treatment effects calculated using the 7-year follow-up sample (N=585). Table D.11 shows treatment effects at 6 and 12 months for five mental health outcomes (depressed, depression severity, disability score, functioning, and perceived social support) using the full and 7-year follow-up samples. The comparison reveals very little difference in treatment effects between the two samples: differences range between 2 and 5 percent of a standard deviation of that outcome, with an average different of 3 percent of a standard deviation across the five outcomes. Furthermore, the differences in treatment effects between the two samples are not statistically significant for any of the mental health outcomes (individually or jointly). Estimating a Seeming Unrelated Regression (SUR) model of the mental health outcomes at 6 and 12 months as a function of treatment and (future) attrition status and their interaction, the joint test of the coefficient on the interaction term yields a p -value=0.60 for the 6-month outcomes and 0.95 for 12-month outcomes.

We take two approaches to account for attrition: one parametric and one non-parametric. First, we present estimates of the main results using Inverse Probability Weighting, where the weights were calculated as the predicted probability of being in the 7-year follow-up sample based on the available baseline controls. Second, we calculate attrition bounds based on Lee (2009), which sorts the outcomes from best to worst within each treatment arm and then trims the sample from above and below to construct groups of equal size. Because neither test of whether rates of attrition differ by treatment status nor whether characteristics of attritors differ by treatment status was rejected, we do not adjust the treatment effects presented in the main tables. The attrition-corrected results are presented in Table 9.

Finally, we investigate whether attrition was different by gender. Table D.10 shows the sample flow by gender of the index child and treatment status. Attrition was not different by treatment status among women who had girls, however it was different by treatment status among women who had boys. For example, 60% of treatment dyads were located at 7-year follow-up compared to 69% of control. Furthermore, the different attrition in boy dyads was driven entirely by attrition between the 1-year and 7-year follow-up. Since our results are mainly driven by girls, the finding that attrition was greater among treated boys does not affect the interpretation of our results. Nevertheless, we present attrition bounds of treatment effects by gender in Table D.12. We still find that treatment impacted empowerment, and parental investment of time and monetary resources in mothers with girls. Meanwhile, the bounds of treatment effects for boys include zero and are generally fairly wide.

Table D.10 – Sample flow and attrition by gender

	Boy		Girl	
	(1) Treatment	(2) Control	(3) Treatment	(4) Control
Baseline	223	226	240	214
6-month	185	190	202	179
1-year	179	180	198	174
7-year	133	155	156	141
Follow-up rates at 7-year follow-up: from baseline (%)	0.60**	0.69	0.65	0.66

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: The upper panel reports the total number of mother-child dyads in our sample from baseline to the 7-year follow-up, split by gender and treatment status. The lower panel reports the ratio of dyads present at the 7-year follow-up over the total number of dyads present at baseline or at the 1-year follow-up. Stars indicate significant differences in follow-up rates between columns (1) and (2), or (3) and (4).

Table D.11 – Differences in short-term treatment effects by sample

	Coefficient on Treat (β / (s.e.))		Difference between samples		
	(1)	(2)	(3)	(4)	(5)
	Full sample	7-yr followup sample	Raw Diff.	Diff. in st.devs.	<i>p</i> -value
Depressed (6m)	−0.30***	−0.32***	0.03	5%	0.26
Depressed (1y)	−0.32***	−0.33***	0.02	4%	0.45
Depression severity (6m)	−4.20***	−4.34***	0.14	2%	0.76
Depression severity (1y)	−5.29***	−5.60***	0.31	4%	0.43
BDQ disability score (6m)	−1.91***	−1.97***	0.06	2%	0.81
BDQ disability score (1y)	−2.96***	−3.07***	0.11	3%	0.60
GAF general functioning (6m)	7.14***	7.54***	−0.41	4%	0.49
GAF general functioning (1y)	8.68***	9.11***	−0.43	4%	0.48
Perceived social support (6m)	7.06***	7.72***	−0.66	4%	0.40
Perceived social support (1y)	8.44***	8.76***	−0.32	2%	0.67
Joint test at 6m (<i>p</i> -value)					0.60
Joint test at 1y (<i>p</i> -value)					0.98

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: Table shows the treatment effects (as a simple difference in means between treatment and control, T-C) on short-term depression and mental health outcomes using the full samples at 6 and 12 months (N=818 and 791 respectively) and compares the estimated treatment effects to those using the 7-year follow-up sample (N=584). The third column reports the differences in the estimated treatment effects between the two samples, and the fourth column reports the difference in estimate effects as a percentage of a standard deviation in the outcome. Negative treatment effects in the first 3 outcomes (depressed, depression severity score, and disability score) correspond to more favorable outcomes, while positive treatment effects for the last 2 outcomes (functioning and social support scores) correspond to better outcomes. Across all mental health outcomes, the differences in treatment effects range between 2 and 5% of a standard deviation of the outcome, averaging at 3% of a standard deviation. The difference between the two samples always favors the non-attriting sample; however, no individual treatment effect differed statistically between the two samples nor jointly. The joint test was conducted by running a Seemingly Unrelated Regression (SUR) model on all 5 outcomes, with the GAF and social support outcomes flipped (so that higher values indicate worse mental health outcomes like the rest of the measures), regressing outcomes on treat, an indicator for attritor, and the interaction ($y^k = \beta_0^k + \beta_1^k \text{Treat} + \beta_2^k \text{LTFU} + \beta_3^k \text{Treat} \times \text{LTFU} + \epsilon^k$ for $k \in (1, \dots, 5)$ where each variable represents a vector and k denotes the outcome). The *p*-value reported in the last row is the joint test of the hypothesis that the interaction ($\text{Treat} \times \text{LTFU}$) is different from zero. The joint test of whether mental health outcomes favored nonattritors also suggests no differences ($p=0.96$).

Table D.12 – Attrition corrections by child gender

	Girls			Boys		
	(1) Unadjusted $\beta/(s.e.)$	(2) Lee bounds 95% CI		(3) Unadjusted $\beta/(s.e.)$	(4) Lee bounds 95% CI	
Depression index (7y)	−0.26*** (0.09)	−0.42	0.21	−0.15* (0.08)	−0.51	0.29
Depressed (7y)	−0.13*** (0.03)	−0.20	0.01	0.01 (0.04)	−0.14	0.19
Never recovered	−0.19*** (0.04)	−0.27	−0.05	−0.07* (0.04)	−0.20	0.16
Recovered permanently	0.28*** (0.06)	0.16	0.43	0.22*** (0.05)	0.08	0.48
Mother's financial empowerment (7y)	0.35*** (0.11)	0.15	0.72	0.04 (0.13)	−0.10	0.51
Mother's financial empowerment	0.46*** (0.14)	0.22	0.87	0.13 (0.15)	−0.23	0.60
Parental investment (monetary)	0.55*** (0.10)	0.17	0.85	0.16* (0.09)	−0.19	0.62
Parental investment (time-intensive)	0.25** (0.10)	0.04	0.60	0.15 (0.09)	−0.10	0.78
Parenting style	0.22** (0.08)	−0.18	0.47	−0.20 (0.13)	−0.63	0.27
Fertility trajectory	0.11 (0.11)	−0.28	0.52	−0.08 (0.13)	−0.47	0.48
Physical development	0.20 (0.13)	−0.24	0.40	0.08 (0.11)	−0.43	0.47
Cognitive development	0.15 (0.13)	−0.41	0.35	0.03 (0.09)	−0.42	0.35
Socio-emotional development	−0.06 (0.11)	−0.45	0.22	−0.16 (0.12)	−0.65	0.24
Sibling survival index	0.32*** (0.10)	−0.16	0.54	0.01 (0.10)	−0.42	0.29
Grandmother present (7y)	0.10* (0.06)	−0.01	0.21	0.13** (0.05)	−0.01	0.33
Perceived social support (7y)	3.17*** (0.96)	−1.14	6.11	3.53** (1.32)	−1.72	8.92

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. Columns 1 and 3 show the treatment effects on indices split by gender, controlling only for interview date and interviewer, and without adjustment for attrition. Columns 2 and 4 show 95% confidence intervals for the treatment effect using attrition bounds based on Lee (2009), split by child gender. The starting sample for the bound is 454 girls and 449 boys.

E Robustness checks

E.1 Robustness

This section shows several robustness checks in terms of controls used, construction of indices, and observational associations between baseline covariates and outcomes of interest. The results are not sensitive to inclusion of different sets of controls (Table E.13), or the construction of summary indices using factor scores (Table E.14), or the fact of using only outcomes measured in year 7 instead of the full trajectory of mother financial empowerment (Table E.15).

E.2 Correlation between post-treatment variables

We then show that the observed conditional correlations between post-treatment variables are reasonable and of the expected sign: higher investment in children is usually associated with better child development measures (Table E.16), and maternal depression over the years is correlated with lower maternal empowerment (Table E.17).

In order to benchmark potential treatment effects, we use the correlational relationship between parental investments and child outcomes to calculate the change in child development indicators that is to be expected as a consequence of the treatment effect on parental investments.³ Specifically, we take the coefficients for the treatment sample displayed in the odd columns of Online Appendix Table E.16 and multiply them by the respective change in parental investments reported in the first column of Table 4, to obtain the following:

$$\begin{aligned}\Delta PhysicalDevelopment &= 0.11 * \Delta money - 0.05 * \Delta time - 0.01 * \Delta style + 0.07 * \Delta finempower - 0.02 * \Delta fertility \\ &= 0.11 * 0.35 - 0.05 * 0.20 - 0.01 * 0.04 + 0.07 * 0.29 - 0.02 * 0.01 \\ &= 0.0482\end{aligned}$$

$$\begin{aligned}\Delta CognitiveDevelopment &= 0.16 * \Delta money - 0.00 * \Delta time + 0.07 * \Delta style + 0.06 * \Delta finempower + 0.06 * \Delta fertility \\ &= 0.16 * 0.35 - 0.00 * 0.20 + 0.07 * 0.04 + 0.06 * 0.29 + 0.06 * 0.01 \\ &= 0.0768\end{aligned}$$

$$\begin{aligned}\Delta SocioemotionalDevelopment &= -0.04 * \Delta money + 0.08 * \Delta time + 0.30 * \Delta style - 0.03 * \Delta finempower + 0.02 * \Delta fertility \\ &= -0.04 * 0.35 + 0.08 * 0.20 + 0.30 * 0.04 - 0.03 * 0.29 + 0.02 * 0.01 \\ &= 0.0055\end{aligned}$$

These expected changes are quite small, and fall within the confidence intervals of our estimated effects.

E.3 Difference-in-Differences

We also show that results are similar when we estimate a difference-in-differences specification, exploiting availability of data from both treated and control clusters on women who were excluded from the trial because they were not perinatally depressed at baseline. The estimating equation is $Y_{ic} = \alpha + \beta T_c \times Depressed_{ic} + \delta Depressed_{ic} + \eta T_c + \Gamma' \tilde{X}_{ic} + \lambda_{LHW} + \varepsilon_{ic}$ where $Depressed_{ic}$ is a dummy that equals one if the mother was perinatally depressed at baseline. The coefficient β on the interaction $T_c \times Depressed_{ic}$ will pick up the intervention effect. The parameter η is of interest as it indicates the average

³We thank one of the referees for suggesting this calculation.

difference between treated and control clusters for mothers who were not depressed at baseline. We test if there is balance along fixed demographic characteristics among prenatally non-depressed women along the dimension of randomization and we cannot reject that the two samples are different (with p -value=0.38, Table C.8). If η were positive and significant, this would suggest that treatment clusters experienced favorable shocks relative to control. Alternatively, it could signify positive spillovers of the intervention to women in treated clusters who were not offered the treatment (because they were not depressed at baseline). The parameter δ provides an estimate of the difference in outcomes between control mothers who were and were not prenatally depressed. This descriptive difference gives an idea of the magnitude of the correlation between perinatal depression and medium-term outcomes, providing a useful benchmark for the potential effect of treatment. Given negative selection into depression, and under the assumption that women who were not prenatally depressed remain less likely to be depressed through the next seven years than women who were prenatally depressed, the parameter δ could provide an upper bound on treatment effects. However, this assumption may not hold, so we cast this comparison in descriptive terms.

The vector of controls in $\Gamma' \tilde{\mathbf{X}}_{ic}$ is different to that in main specification because we do not have baseline characteristics for prenatally non-depressed mothers. Instead, we include time-invariant individual specific demographic characteristics: mother's age and its square, mother's and father's education, parity at baseline (estimated based on parity in 2013 and the reported number of children born since the index child), date of interview and interviewer fixed effects. This specification affords a further sensitivity check, allowing us to control for Lady Health Worker fixed effects (λ_{LHW}) which would be collinear with the treatment variable in the main specification. The results are in Table E.18. In the 7-year follow-up data, we only identify the LHWs who are currently serving the families and this is not an identical set to the original 40 LHWs from the intervention since some LHWs moved, retired, or stopped work for other reasons. At the 7-year follow-up, there were a total of 65 LHWs. Shifting and reallocation of LHWs may be endogenous to treatment. The results, however, are similar without LHW fixed effects.

Table E.13 – Control sensitivity

	Coefficient on Treat (β / (s.e.))			
	(1) No controls	(2) Interviewer FEs	(3) + Individual controls	(4) + Ind. \times T controls
Depression index (12mo)	-0.72*** (0.10)	-0.70*** (0.09)	-0.66*** (0.09)	-0.66*** (0.09)
Depression index (7y)	-0.21** (0.10)	-0.22*** (0.06)	-0.19*** (0.06)	-0.18*** (0.06)
Mother's financial empowerment (7y)	0.23** (0.11)	0.18* (0.09)	0.18** (0.08)	0.18** (0.07)
Mother's financial empowerment	0.34** (0.13)	0.29** (0.11)	0.29*** (0.09)	0.29*** (0.09)
Parental investment (monetary)	0.36*** (0.09)	0.35*** (0.07)	0.28*** (0.06)	0.28*** (0.06)
Parental investment (time-intensive)	0.32** (0.16)	0.20*** (0.07)	0.19*** (0.06)	0.20*** (0.06)
Parenting style	0.06 (0.09)	0.04 (0.08)	0.06 (0.08)	0.05 (0.08)
Fertility trajectory	0.02 (0.11)	0.01 (0.10)	0.00 (0.09)	-0.00 (0.09)
Physical development	0.12 (0.12)	0.15 (0.09)	0.15 (0.09)	0.14 (0.09)
Cognitive development	0.03 (0.10)	0.09 (0.08)	0.06 (0.08)	0.04 (0.08)
Socio-emotional development	-0.12 (0.08)	-0.11 (0.07)	-0.07 (0.07)	-0.08 (0.07)
Sibling survival index	0.17** (0.08)	0.19** (0.08)	0.17** (0.08)	0.17** (0.08)
Mother's physical health	0.08 (0.09)	0.07 (0.07)	0.08 (0.08)	0.07 (0.08)
Husband's income trajectory	0.04 (0.10)	-0.02 (0.10)	-0.03 (0.09)	-0.04 (0.10)
Relationship quality	0.16* (0.09)	0.14* (0.09)	0.16* (0.09)	0.16* (0.09)
Grandmother trajectory	0.31*** (0.09)	0.34*** (0.08)	0.16** (0.06)	0.16** (0.07)
Social support trajectory	0.59*** (0.12)	0.58*** (0.10)	0.52*** (0.09)	0.52*** (0.09)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS).

Table E.14 – Control sensitivity (indices by factor score)

	Coefficient on Treat (β / (s.e.))			
	(1) No controls	(2) Interviewer FEs	(3) + Individual controls	(4) + Ind. \times T controls
Parental investment (monetary)	0.25*** (0.07)	0.27*** (0.07)	0.19*** (0.06)	0.18*** (0.05)
Parental investment (time-intensive)	0.28** (0.13)	0.19*** (0.06)	0.17*** (0.06)	0.17*** (0.06)
Parenting style	0.14 (0.09)	0.11 (0.07)	0.11* (0.07)	0.11 (0.07)
Physical development index	-0.01 (0.08)	-0.02 (0.07)	-0.03 (0.07)	-0.03 (0.07)
Cognitive development index	0.06 (0.10)	0.11 (0.08)	0.07 (0.07)	0.06 (0.07)
Socio-emotional development index	-0.11 (0.08)	-0.08 (0.06)	-0.06 (0.07)	-0.07 (0.06)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: Unlike for the GLS-weighted index, indices generated via factor score drop observations without full data, thus sample size varies by index. Financial autonomy N=560, monetary N=474, time N=585, style N=585, cognitive N=568, socio-emotional N=585, physical health N=576. Summary variables generated by factor score. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS).

Table E.15 – Mother's decision-making (only year 7 outcomes): financial empowerment, investment in children and fertility

	Coefficient on Treat (β / (s.e.))		FWER-adj. test
	(1) No controls	(2) All controls	(3) FWER p -val (all controls)
Mother's financial empowerment (7y)	0.18* (0.09)	0.18** (0.07)	0.07*
Parental investment (monetary)	0.35*** (0.07)	0.28*** (0.06)	0.00***
Parental investment (time-intensive)	0.20*** (0.07)	0.20*** (0.06)	0.01**
Parenting style	0.04 (0.08)	0.05 (0.08)	0.78
Fertility trajectory	0.01 (0.10)	-0.00 (0.09)	0.99

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993).

Table E.16 – Relationship between measures of parental investment and child development

	Physical development		Cognitive development		Socioemotional development	
	(1)	(2)	(3)	(4)	(5)	(6)
Monetary investment	0.11*	0.12**	0.16***	0.15***	−0.04	−0.01
	(0.06)	(0.05)	(0.04)	(0.04)	(0.05)	(0.04)
Time investment	−0.05	−0.03	−0.00	0.03	0.08	0.07
	(0.06)	(0.05)	(0.05)	(0.05)	(0.06)	(0.04)
Parenting style	−0.01	0.03	0.07*	0.07**	0.30***	0.32***
	(0.04)	(0.04)	(0.04)	(0.03)	(0.05)	(0.04)
Mother's financial empowerment	0.07**	0.04**	0.06*	0.02	−0.03	−0.04
	(0.03)	(0.02)	(0.04)	(0.03)	(0.05)	(0.03)
Fertility trajectory	−0.02	−0.03	0.06*	0.03	0.02	−0.01
	(0.04)	(0.03)	(0.03)	(0.03)	(0.04)	(0.03)
Baseline depressed		−0.14**		0.03		−0.18***
		(0.06)		(0.07)		(0.06)
Observations	584	884	584	884	584	884
R ²	0.13	0.12	0.26	0.21	0.19	0.19

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: Sample includes children of mothers who were depressed at baseline as well those who were not depressed at baseline, in both treatment and control clusters. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All regressions control for interviewer fixed effects, age of mother and its square, father's and mother's education, parity, the date of interview, and child gender and age at interview.

Table E.17 – Depression and empowerment: associations

	Empowered before 7y			Empowered at 7y followup					
	(1) at baseline	(2) at 6m	(3) at 1y	(4) All	(5) Girls	(6) Boys	(7) All	(8) Girls	(9) Boys
Depressed (7y)				−0.16**	−0.13*	−0.18**	−0.13	−0.05	−0.22*
				(0.06)	(0.07)	(0.08)	(0.08)	(0.07)	(0.12)
Depressed (1y)			−0.24***				−0.17**	−0.19**	−0.15
			(0.05)				(0.06)	(0.08)	(0.10)
Depressed (6m)		−0.36***							
		(0.06)							
Depressed (baseline)				−0.08**	−0.18**	0.02			
				(0.04)	(0.07)	(0.04)			
Dep. severity (baseline)	−0.07***	−0.05*	−0.02						
	(0.02)	(0.03)	(0.03)						
Index child is girl		−0.02	−0.01	−0.06			−0.16**		
		(0.06)	(0.05)	(0.04)			(0.07)		
Observations	903	369	351	596	279	317	295	139	156

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: Sample includes children of mothers who were depressed at baseline as well those who were not depressed at baseline, in both treatment and control clusters. Standard errors, clustered at the level of randomization, in parentheses.

Table E.18 – Estimation with baseline non-depressed and health worker fixed effects

	Coefficient on		
	(1)	(2)	(3)
	Treat	Treat × Prenatally Depressed	Prenatally Depressed
Depression index (7y)	0.04 (0.07)	−0.32*** (0.09)	0.49*** (0.07)
Mother’s financial empowerment (7y)	−0.04 (0.13)	0.30** (0.14)	−0.19* (0.10)
Mother’s financial empowerment	−0.08 (0.16)	0.51*** (0.17)	−0.25* (0.14)
Parental investment (monetary)	0.01 (0.13)	0.32** (0.12)	−0.15 (0.09)
Parental investment (time-intensive)	−0.08 (0.11)	0.20 (0.13)	−0.20* (0.10)
Parenting style	−0.27* (0.14)	0.32** (0.15)	−0.27** (0.12)
Fertility trajectory	−0.06 (0.15)	0.18 (0.18)	0.20 (0.13)
Physical development	0.20* (0.12)	0.01 (0.15)	−0.21** (0.10)
Cognitive development	0.16 (0.13)	−0.11 (0.16)	0.10 (0.11)
Socio-emotional development	−0.03 (0.13)	−0.16 (0.15)	−0.12 (0.10)
Sibling survival index	0.06 (0.11)	0.15 (0.13)	−0.12 (0.09)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=885. Sample includes children of mothers who were depressed at baseline as well those who were not depressed at baseline, in both treatment and control clusters. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All regressions control for interviewer fixed effects, age of mother and its square, father’s and mother’s education, parity, the date of interview, and health worker fixed effects.

Table E.19 – Magnitude of the estimated effect size compared to observational gaps in outcomes

	(1) Treatment effect	(2) Depression gap	(3) Gender gap (boy–girl)
<i>Mother's mental health</i>			
Depression index (7y)	−0.22 (0.06)	0.54 (0.07)	−0.02 (0.12)
Depression trajectory	−0.52 (0.07)		−0.09 (0.12)
<i>Mother's decision-making</i>			
Mother's financial empowerment (7y)	0.18 (0.09)	−0.31 (0.08)	−0.20 (0.12)
Mother's financial empowerment	0.29 (0.11)		−0.15 (0.12)
Parental investment (monetary)	0.35 (0.07)	−0.32 (0.08)	−0.34 (0.11)
Parental investment (time-intensive)	0.20 (0.07)	−0.39 (0.08)	0.03 (0.12)
Parenting style	0.04 (0.08)	−0.09 (0.08)	0.07 (0.12)
Fertility trajectory	0.01 (0.10)		−0.28 (0.12)
<i>Child development outcomes</i>			
Physical development	0.15 (0.09)	−0.23 (0.08)	0.02 (0.12)
Cognitive development	0.09 (0.08)	−0.12 (0.09)	0.05 (0.12)
Socio-emotional development	−0.11 (0.07)	−0.17 (0.08)	−0.03 (0.12)
Sibling survival index	0.19 (0.08)		0.29 (0.12)
# kids born past 7yrs	0.09 (0.09)	−0.24 (0.08)	0.13 (0.12)
<i>Potential mediators</i>			
Mother's physical health	0.07 (0.07)		0.10 (0.12)
Husband's income trajectory	−0.02 (0.10)		0.10 (0.12)
Relationship quality	0.14 (0.09)		0.09 (0.12)
Grandmother trajectory	0.34 (0.08)		0.02 (0.12)
Perceived social support (7y)	3.34 (0.92)	−5.34 (0.95)	1.14 (1.44)
Sample size	585	596	296

Notes: Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. Column 1 controls for interview date and interviewer. Column 2 reports raw difference in means between prenatally non-depressed mothers (N=300) and prenatally depressed controls (N=296) only for outcome indices and variables at the 7-year follow-up. Since prenatally non-depressed mothers were interviewed only at the 7-year follow-up, maternal financial empowerment index does not contain mother controls spending (6m) and mother gets pocket money (12m), and only the number of kids born in the past 7 years are reported after the fertility index. Column 3 reports the difference in control group means between mothers who were pregnant with a boy at the beginning of treatment and mothers pregnant with a girl.

F Additional analyses for maternal depression

Table F.20 – Subsequent child birth and long-run depression

	Dependent variable: MDE at 7-year followup			
	(1)	(2)	(3)	(4)
Treated	−0.063** (0.026)	−0.069** (0.029)	−0.068** (0.027)	−0.074 (0.062)
Treat × Birth within 2y		0.037 (0.084)		
Birth within 2y		−0.098 (0.062)		
Treat × Birth within 1y			0.019 (0.10)	
Birth within 1y			−0.13** (0.063)	
Treat × Index not last child				0.020 (0.082)
Index not last child				−0.042 (0.059)
Observations	585	585	585	585
R ²	0.11	0.11	0.11	0.11
Mean of interactant		0.17	0.10	0.64

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: Dependent variable is a binary indicator of whether the mother had a major depressive episode at the time of interview. All other models are estimated using OLS and include interviewer fixed effects and interview date controls. Standard errors, clustered at the level of randomization, in parentheses.

Table F.21 – Difference-in-difference with baseline non-depressed (with LHW fixed effects)

	Coefficient on		
	(1)	(2)	(3)
	Treat	Treat × Prenatally Depressed	Prenatally Depressed
Depression severity index at 7y	−0.04 (0.07)	0.32*** (0.09)	−0.49*** (0.07)
Currently depressed (MDE)	0.00 (0.04)	−0.09* (0.05)	0.15*** (0.03)
Depressive symptoms (%)	0.01 (0.02)	−0.07* (0.03)	0.13*** (0.02)
Symptoms impair	0.01 (0.04)	−0.15*** (0.05)	0.23*** (0.04)
MDE in previous 2yrs	0.01 (0.02)	−0.05* (0.03)	0.07*** (0.02)
Perceived social support ^a	−0.76 (1.10)	4.86*** (1.56)	−5.01*** (1.20)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=885. Sample includes children of mothers who were depressed at baseline as well those who were not depressed at baseline, in both treatment and control clusters. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All regressions control for interviewer fixed effects, age of mother and its square, father's and mother's education, parity, the date of interview, and health worker fixed effects.

G Heterogeneous treatment effects

In this section we test for heterogeneity of treatment effects by baseline depression severity, education, wealth, family structure, mother's age, and whether the index child is the first child. We present heterogeneous treatment effects by estimating an extension of the main equation: $Y_{ic} = \alpha + \beta_1 Het_i + \beta_2 T_c + \beta_3 Het_i \times T_c + \Gamma' X_{ic} + \varepsilon_{ic}$ where Het_i is the dimension of heterogeneity we are exploring, measured at baseline. The coefficient on the interaction term, β_3 , estimates the differential effect of the intervention along that specified dimension. Results are in Section G.

Table G.22 – Heterogeneous treatment effects for mother's depression trajectory

	Coefficient on:		
	(1) Treat	(2) Treat × Baseline characteristic	(3) Baseline characteristic
Baseline characteristic: Mother's education			
Depression index (6mo)	−0.56*** (0.14)	−0.01 (0.02)	−0.02 (0.02)
Depression index (12mo)	−0.60*** (0.12)	−0.02 (0.02)	−0.01 (0.01)
Depression index (7y)	−0.16 (0.12)	−0.01 (0.02)	−0.01 (0.02)
Baseline characteristic: Younger mother (age < 27)			
Depression index (6mo)	−0.54*** (0.14)	−0.16 (0.16)	0.05 (0.11)
Depression index (12mo)	−0.69*** (0.13)	−0.03 (0.16)	−0.00 (0.10)
Depression index (7y)	−0.22* (0.12)	−0.00 (0.17)	−0.07 (0.13)
Baseline characteristic: First child			
Depression index (6mo)	−0.63*** (0.10)	0.04 (0.17)	−0.12 (0.11)
Depression index (12mo)	−0.73*** (0.10)	0.15 (0.21)	−0.29 (0.18)
Depression index (7y)	−0.21*** (0.08)	−0.02 (0.20)	−0.15 (0.17)
Baseline characteristic: Wealth index			
Depression index (6mo)	−0.61*** (0.09)	0.05 (0.04)	−0.11*** (0.03)
Depression index (12mo)	−0.68*** (0.09)	0.04 (0.04)	−0.12*** (0.03)
Depression index (7y)	−0.20*** (0.07)	−0.01 (0.04)	−0.05 (0.03)
Baseline characteristic: Grandmother present			
Depression index (6mo)	−0.69*** (0.11)	0.20 (0.13)	−0.39*** (0.10)
Depression index (12mo)	−0.82*** (0.11)	0.31** (0.13)	−0.44*** (0.10)
Depression index (7y)	−0.39*** (0.09)	0.38*** (0.11)	−0.40*** (0.07)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. Controls include interviewer FEs and date of interviewer.

Table G.23 – Heterogeneous treatment effects for mother’s decision-making

	Coefficient on:		
	(1) Treat	(2) Treat × Baseline characteristic	(3) Baseline characteristic
Baseline characteristic: Mother’s education			
Mother’s financial empowerment	0.05 (0.13)	0.05** (0.02)	0.01 (0.02)
Parental investment (monetary)	0.20* (0.11)	0.02 (0.02)	0.07*** (0.01)
Parental investment (time-intensive)	0.16* (0.09)	0.00 (0.02)	0.04*** (0.01)
Parenting style	0.01 (0.10)	0.00 (0.02)	0.03* (0.02)
Fertility trajectory	−0.02 (0.14)	0.01 (0.02)	−0.01 (0.01)
Baseline characteristic: Younger mother (age < 27)			
Mother’s financial empowerment	0.48*** (0.13)	−0.34** (0.14)	0.09 (0.08)
Parental investment (monetary)	0.49*** (0.15)	−0.25 (0.21)	0.10 (0.18)
Parental investment (time-intensive)	0.29*** (0.10)	−0.16 (0.14)	0.07 (0.11)
Parenting style	0.06 (0.12)	−0.02 (0.17)	−0.19 (0.13)
Fertility trajectory	0.14 (0.13)	−0.23 (0.14)	−0.24** (0.11)
Baseline characteristic: First child			
Mother’s financial empowerment	0.27** (0.12)	0.10 (0.18)	−0.16 (0.15)
Parental investment (monetary)	0.35*** (0.08)	−0.04 (0.21)	0.18 (0.15)
Parental investment (time-intensive)	0.24*** (0.07)	−0.20 (0.16)	0.10 (0.11)
Parenting style	−0.01 (0.09)	0.34 (0.26)	−0.33* (0.19)
Fertility trajectory	0.01 (0.10)	0.03 (0.23)	−0.48** (0.19)
Baseline characteristic: Wealth index			
Mother’s financial empowerment	0.26** (0.11)	−0.00 (0.04)	0.09*** (0.03)
Parental investment (monetary)	0.30*** (0.07)	0.05 (0.04)	0.15*** (0.03)
Parental investment (time-intensive)	0.18** (0.07)	−0.00 (0.03)	0.09*** (0.02)
Parenting style	0.02 (0.08)	0.07** (0.03)	0.04 (0.02)
Fertility trajectory	0.01 (0.10)	0.01 (0.04)	−0.01 (0.03)
Baseline characteristic: Grandmother present			
Mother’s financial empowerment	0.53*** (0.13)	−0.53** (0.20)	0.42*** (0.13)
Parental investment (monetary)	0.35*** (0.10)	−0.04 (0.14)	0.22** (0.11)
Parental investment (time-intensive)	0.23** (0.10)	−0.08 (0.14)	0.14 (0.12)
Parenting style	0.01 (0.10)	0.08 (0.14)	−0.04 (0.10)
Fertility trajectory	−0.00 (0.12)	0.07 (0.15)	−0.22*** (0.08)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. Controls include interviewer FEs and date of interviewer.

Table G.24 – Heterogeneous treatment effects for child outcomes

	Coefficient on:		
	(1) Treat	(2) Treat × Baseline characteristic	(3) Baseline characteristic
Baseline characteristic: Mother's education			
Physical development	0.24* (0.12)	−0.02 (0.02)	−0.00 (0.01)
Cognitive development	0.06 (0.11)	−0.01 (0.02)	0.07*** (0.01)
Socio-emotional development	−0.18 (0.11)	0.01 (0.02)	0.02 (0.02)
Sibling survival index	0.09 (0.13)	0.02 (0.02)	0.01 (0.02)
Baseline characteristic: Younger mother (age < 27)			
Physical development	0.17 (0.12)	−0.04 (0.15)	−0.02 (0.12)
Cognitive development	0.22* (0.13)	−0.25 (0.16)	0.07 (0.11)
Socio-emotional development	−0.23* (0.12)	0.24 (0.16)	−0.34*** (0.11)
Sibling survival index	0.24 (0.15)	−0.09 (0.17)	0.10 (0.13)
Baseline characteristic: First child			
Physical development	0.15 (0.10)	0.00 (0.23)	0.08 (0.18)
Cognitive development	0.05 (0.10)	0.13 (0.21)	0.23 (0.17)
Socio-emotional development	−0.09 (0.08)	−0.07 (0.23)	−0.02 (0.13)
Sibling survival index	0.18 (0.11)	0.08 (0.22)	−0.07 (0.17)
Baseline characteristic: Wealth index			
Physical development	0.14 (0.09)	0.01 (0.03)	0.01 (0.02)
Cognitive development	0.04 (0.09)	0.03 (0.04)	0.11*** (0.03)
Socio-emotional development	−0.13* (0.07)	0.11*** (0.04)	0.00 (0.02)
Sibling survival index	0.18** (0.08)	−0.03 (0.04)	0.08*** (0.02)
Baseline characteristic: Grandmother present			
Physical development	0.11 (0.11)	0.05 (0.14)	0.07 (0.10)
Cognitive development	0.09 (0.14)	−0.06 (0.16)	0.25*** (0.08)
Socio-emotional development	−0.17 (0.14)	0.12 (0.20)	0.04 (0.11)
Sibling survival index	0.36*** (0.13)	−0.36* (0.19)	0.25 (0.15)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. Controls include interviewer FEs and date of interviewer.

Table G.25 – Heterogeneous treatment effects for specific outcomes

	Coefficient on:		
	(1) Treat	(2) Treat × characteristic	(3) Baseline characteristic
Baseline characteristic: Mother's education			
Depressed (7y)	−0.01 (0.05)	−0.01 (0.01)	−0.00 (0.01)
Mother controls spending (7y)	0.03 (0.05)	0.01 (0.01)	0.01 (0.01)
HOME inventory	0.45 (0.94)	0.25* (0.15)	0.51*** (0.12)
School quality	0.67* (0.35)	−0.02 (0.05)	0.09* (0.04)
Height-for-age (z)	0.10 (0.10)	−0.03* (0.02)	0.03** (0.02)
WPPSI Full Scale IQ	0.17 (1.16)	0.11 (0.21)	0.57*** (0.18)
Baseline characteristic: Younger mother (age < 27)			
Depressed (7y)	−0.06 (0.06)	−0.00 (0.09)	−0.04 (0.06)
Mother controls spending (7y)	0.10** (0.05)	−0.05 (0.07)	−0.00 (0.05)
HOME inventory	2.69** (1.14)	−1.25 (1.49)	−0.33 (1.02)
School quality	0.80** (0.34)	−0.27 (0.42)	0.09 (0.33)
Height-for-age (z)	0.01 (0.13)	−0.07 (0.15)	−0.09 (0.10)
WPPSI Full Scale IQ	2.49 (1.70)	−2.45 (1.94)	0.75 (1.41)
Baseline characteristic: First child			
Depressed (7y)	−0.07* (0.04)	0.05 (0.11)	−0.09 (0.07)
Mother controls spending (7y)	0.08** (0.04)	−0.03 (0.11)	−0.01 (0.07)
HOME inventory	2.02*** (0.71)	−0.28 (1.41)	1.02 (0.97)
School quality	0.66*** (0.24)	−0.07 (0.48)	0.29 (0.37)
Height-for-age (z)	−0.00 (0.10)	−0.15 (0.19)	0.22* (0.11)
WPPSI Full Scale IQ	0.62 (1.26)	2.56 (2.25)	2.02 (1.41)
Baseline characteristic: Wealth index			
Depressed (7y)	−0.06* (0.03)	−0.01 (0.02)	−0.02* (0.01)
Mother controls spending (7y)	0.07** (0.03)	0.01 (0.02)	0.01 (0.01)
HOME inventory	1.60** (0.63)	0.26 (0.29)	1.24*** (0.19)
School quality	0.58** (0.23)	0.09 (0.10)	0.13* (0.07)
Height-for-age (z)	−0.05 (0.09)	−0.01 (0.04)	0.07** (0.03)
WPPSI Full Scale IQ	0.75 (1.06)	0.45 (0.56)	1.01** (0.40)
Baseline characteristic: Grandmother present			
Depressed (7y)	−0.10** (0.04)	0.09 (0.06)	−0.14*** (0.03)
Mother controls spending (7y)	0.14*** (0.05)	−0.16* (0.08)	0.12** (0.06)
HOME inventory	2.25** (0.84)	−0.81 (1.17)	1.54 (0.92)
School quality	0.67** (0.30)	−0.14 (0.38)	0.51* (0.27)
Height-for-age (z)	−0.00 (0.12)	−0.06 (0.16)	0.06 (0.10)
WPPSI Full Scale IQ	1.22 (1.64)	−0.68 (1.82)	2.48** (1.06)

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Standard errors, clustered at the level of randomization, in parentheses. Controls include interviewer FEs and date of interviewer.

H Treatment effects for index components

In this section we show in detail all of the treatment effects for the individual outcomes we measure in the dataset. We group outcomes based on the index they belong to, and show the treatment effect on the index as a whole as well as for each of the individual outcomes, controlling for multiple hypothesis testing within each family of outcomes. In addition to the outcomes reported in the main text, Tables [H.44](#) and [H.45](#) respectively report the results for parental investments and child development measures available in the 6 and 12 month follow-ups. Finally, we report treatment effects for the total HOME score (Table [\(H.46\)](#)) as well as the components of the school quality index (Table [\(H.47\)](#)).

Table H.26 – Depression and depression severity at 7 years

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Depression index (7y)	–0.00 (1.00)	–0.22*** (0.06)	–0.18*** (0.06)	0.00***	–0.01	0.01	–0.21** (0.10)	–0.15* (0.08)	0.63
Depressed (7y)	0.30 (0.46)	–0.06** (0.03)	–0.05* (0.03)	0.18	0.33	0.28	–0.10*** (0.04)	0.00 (0.04)	0.08
# symptoms present (7y)	4.76 (2.88)	–0.52** (0.22)	–0.44* (0.22)	0.17	5.01	4.53	–0.85*** (0.23)	–0.02 (0.37)	0.06
Symptoms cause impairment (7y)	0.40 (0.48)	–0.10*** (0.03)	–0.09** (0.03)	0.08*	0.40	0.40	–0.10** (0.04)	–0.07 (0.05)	0.68
Depressed in previous 2 years (7y)	0.07 (0.26)	–0.03* (0.02)	–0.03* (0.02)	0.18	0.06	0.09	–0.02 (0.02)	–0.04 (0.03)	0.55

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.27 – Depression and depression severity at 1 year

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Depression index (12mo)	0.00 (1.00)	–0.70*** (0.09)	–0.66*** (0.09)	0.00***	–0.01	0.01	–0.70*** (0.13)	–0.61*** (0.10)	0.52
Depressed (1y) ^a	0.58 (0.49)	–0.32*** (0.04)	–0.30*** (0.05)	0.00***	0.58	0.58	–0.35*** (0.07)	–0.25*** (0.05)	0.21
Depression severity (1y) ^a	10.61 (8.18)	–5.38*** (0.76)	–5.02*** (0.78)	0.00***	10.60	10.62	–5.40*** (1.09)	–4.62*** (0.83)	0.50
BDQ disability score (1y) ^a	5.17 (4.54)	–2.96*** (0.39)	–2.78*** (0.40)	0.00***	5.11	5.23	–2.80*** (0.56)	–2.78*** (0.44)	0.98
GAF general functioning (1y) ^a	20.65 (12.20)	–8.84*** (1.08)	–8.30*** (1.10)	0.00***	20.41	20.87	–8.35*** (1.55)	–8.25*** (1.20)	0.95

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

^a These outcomes were analyzed in Rahman et al. (2008).

Table H.28 – Depression and depression severity at 6 months

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Depression index (6mo)	0.00 (1.00)	-0.62*** (0.10)	-0.60*** (0.08)	0.00***	-0.08	0.07	-0.52*** (0.11)	-0.69*** (0.11)	0.26
Depressed (6m) ^a	0.52 (0.50)	-0.32*** (0.05)	-0.32*** (0.04)	0.00***	0.48	0.56	-0.30*** (0.05)	-0.34*** (0.06)	0.59
Depression severity (6m) ^a	8.45 (7.36)	-4.28*** (0.69)	-4.18*** (0.58)	0.00***	8.09	8.79	-3.81*** (0.72)	-4.59*** (0.85)	0.46
BDQ disability score (6m) ^a	4.11 (3.83)	-1.88*** (0.35)	-1.77*** (0.29)	0.00***	3.85	4.34	-1.39*** (0.46)	-2.17*** (0.37)	0.20
GAF general functioning (6m) ^a	17.84 (11.78)	-7.52*** (1.10)	-7.16*** (0.87)	0.00***	17.28	18.36	-6.18*** (1.16)	-8.33*** (1.30)	0.21

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

^a These outcomes were analyzed in Rahman et al. (2008).

Table H.29 – Mother's financial empowerment

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Empowerment index	0.00 (1.00)	0.29** (0.11)	0.29*** (0.09)	0.00***	-0.08	0.07	0.45*** (0.11)	0.12 (0.14)	0.06
Controls spending (6m)	0.53 (0.50)	0.07 (0.06)	0.09** (0.04)	0.19	0.52	0.53	0.15*** (0.05)	0.02 (0.07)	0.11
Gets pocket money (1y)	0.68 (0.47)	0.12** (0.05)	0.11** (0.05)	0.16	0.67	0.69	0.14** (0.06)	0.08 (0.06)	0.46
Controls spending (7y)	0.52 (0.50)	0.08** (0.03)	0.09*** (0.03)	0.09*	0.44	0.59	0.20*** (0.05)	-0.03 (0.05)	0.01
Gets pocket money (7y)	0.57 (0.50)	0.08*** (0.03)	0.09*** (0.03)	0.07*	0.51	0.63	0.18*** (0.05)	-0.00 (0.05)	0.03
Employed (7y)	0.10 (0.30)	0.02 (0.03)	0.01 (0.03)	0.75	0.11	0.09	-0.00 (0.03)	0.03 (0.04)	0.57
Income (100s PKR) (7y)	3.09 (12.07)	1.41 (1.70)	0.85 (1.39)	0.75	3.09	3.08	0.49 (1.57)	1.27 (1.82)	0.69

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.30 – Parental investment: monetary-intensive investment

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Money-intensive investment	-0.00 (1.00)	0.35*** (0.07)	0.28*** (0.06)	0.00***	-0.18	0.16	0.47*** (0.11)	0.11 (0.08)	0.02
HOME: Learning materials	2.64 (1.48)	0.32*** (0.11)	0.31** (0.12)	0.14	2.56	2.70	0.40*** (0.14)	0.23 (0.15)	0.37
HOME: Physical environment	4.65 (2.37)	0.27 (0.17)	0.20 (0.15)	0.37	4.64	4.66	0.39* (0.20)	0.00 (0.28)	0.31
Monthly educ expend. (log)	7.31 (1.18)	0.20* (0.11)	0.13 (0.10)	0.37	7.22	7.38	0.21 (0.15)	0.06 (0.12)	0.39
Expected grade attainment	14.06 (2.69)	0.46** (0.20)	0.33* (0.19)	0.33	13.56	14.53	0.77*** (0.28)	-0.06 (0.24)	0.03
Private school	0.38 (0.49)	0.15*** (0.06)	0.12** (0.05)	0.20	0.29	0.46	0.16** (0.07)	0.10 (0.07)	0.48
School quality	-0.42 (2.21)	0.64*** (0.21)	0.51** (0.23)	0.20	-0.65	-0.21	0.80** (0.36)	0.19 (0.24)	0.14

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.31 – Parental investment: time-intensive investment

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Time-intensive investment	0.00 (1.00)	0.20*** (0.07)	0.20*** (0.06)	0.00***	0.02	-0.02	0.28*** (0.10)	0.10 (0.09)	0.23
HOME: Enrichment	2.65 (1.39)	0.31** (0.13)	0.31** (0.13)	0.12	2.50	2.79	0.51*** (0.15)	0.14 (0.16)	0.07
HOME: Family companionship	2.95 (1.77)	0.38*** (0.12)	0.31** (0.12)	0.12	2.77	3.11	0.64*** (0.16)	-0.02 (0.19)	0.01
HOME: Family integration	2.61 (0.92)	0.20** (0.07)	0.17** (0.06)	0.12	2.61	2.62	0.21* (0.11)	0.11 (0.10)	0.52
Frequency of mother play	0.17 (0.31)	0.00 (0.02)	-0.00 (0.02)	0.83	0.18	0.16	-0.00 (0.03)	-0.01 (0.02)	0.94
Someone helps with studies	0.54 (0.50)	0.04 (0.03)	0.06* (0.03)	0.21	0.60	0.50	0.06 (0.04)	0.04 (0.05)	0.79

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.32 – Parental investment: parenting style

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Parenting style	–0.00 (1.00)	0.04 (0.08)	0.05 (0.08)	0.52	0.04	–0.03	0.24*** (0.08)	–0.20 (0.12)	0.00
PPI: Not harsh	13.46 (8.22)	0.81 (0.50)	0.76 (0.54)	0.62	13.83	13.12	1.53* (0.80)	–0.35 (0.59)	0.05
PPI: Not harsh for age	8.71 (1.04)	–0.17* (0.10)	–0.12 (0.09)	0.62	8.77	8.66	–0.05 (0.11)	–0.23 (0.16)	0.41
PPI: Consistent	9.57 (3.62)	0.40 (0.30)	0.40 (0.30)	0.62	9.74	9.41	0.55 (0.35)	0.17 (0.46)	0.47
HOME: Responsivity	8.75 (1.75)	0.21 (0.13)	0.22* (0.12)	0.39	8.58	8.91	0.63*** (0.15)	–0.22 (0.19)	0.00
HOME: Encourages maturity	5.25 (1.56)	–0.11 (0.14)	–0.16 (0.13)	0.62	5.36	5.15	–0.03 (0.16)	–0.36* (0.20)	0.20
HOME: Emotional climate	4.50 (1.93)	0.35** (0.16)	0.37** (0.17)	0.29	4.43	4.57	0.90*** (0.21)	–0.24 (0.25)	0.00

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.33 – Mother's fertility trajectory

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Fertility trajectory	0.00 (1.00)	0.01 (0.10)	–0.00 (0.09)	0.99	–0.15	0.13	0.13 (0.10)	–0.10 (0.13)	0.12
Ideal # kids (7y)	3.36 (1.23)	–0.14 (0.11)	–0.04 (0.11)	0.93	3.50	3.23	–0.14 (0.13)	0.05 (0.16)	0.31
# kids born past 7yrs	1.01 (1.00)	0.09 (0.09)	0.03 (0.06)	0.93	1.08	0.95	–0.05 (0.08)	0.08 (0.08)	0.19
Pregnant at 1y	0.08 (0.27)	–0.01 (0.02)	–0.01 (0.02)	0.93	0.11	0.05	–0.04 (0.04)	0.01 (0.03)	0.34
Index not last child	0.60 (0.49)	0.08* (0.04)	0.04 (0.04)	0.68	0.61	0.60	0.03 (0.04)	0.05 (0.05)	0.62

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.34 – Mother’s financial empowerment (at 7-year follow-up)

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Mother’s financial empowerment (7y)	−0.00 (1.00)	0.18* (0.09)	0.18** (0.07)	0.02**	−0.10	0.09	0.32*** (0.10)	0.03 (0.14)	0.11
Mother controls spending (7y)	0.52 (0.50)	0.08** (0.03)	0.09*** (0.03)	0.05**	0.44	0.59	0.20*** (0.05)	−0.03 (0.05)	0.01
Mother gets pocket money (7y)	0.57 (0.50)	0.08*** (0.03)	0.09*** (0.03)	0.04**	0.51	0.63	0.18*** (0.05)	−0.00 (0.05)	0.03
Mother employed (7y)	0.10 (0.30)	0.02 (0.03)	0.01 (0.03)	0.75	0.11	0.09	−0.00 (0.03)	0.03 (0.04)	0.57
Mother’s income (100s PKR) (7y)	3.09 (12.07)	1.41 (1.70)	0.85 (1.39)	0.75	3.09	3.08	0.49 (1.57)	1.27 (1.82)	0.69

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother’s age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother’s education, father’s education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.35 – Child physical development and health at age 7

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Physical development index	−0.00 (1.00)	0.15 (0.09)	0.14 (0.09)	0.13	0.01	−0.01	0.19 (0.13)	0.08 (0.12)	0.49
Height-for-age (z) ^a	−0.83 (1.11)	−0.02 (0.09)	−0.05 (0.08)	0.98	−0.76	−0.90	−0.13 (0.13)	0.03 (0.14)	0.47
BMI-for-age (z) ^a	−0.98 (1.18)	0.06 (0.11)	0.05 (0.11)	0.98	−1.08	−0.88	0.34*** (0.12)	−0.28* (0.15)	0.00
Not stunted	0.84 (0.36)	0.03 (0.03)	0.02 (0.03)	0.98	0.87	0.83	−0.01 (0.04)	0.05 (0.04)	0.32
Motor function	−0.02 (0.68)	0.03 (0.05)	0.05 (0.05)	0.97	−0.15	0.10	0.14* (0.08)	−0.01 (0.06)	0.12
No hospitalization	0.81 (0.39)	0.05 (0.03)	0.06 (0.04)	0.68	0.84	0.79	0.05 (0.05)	0.07 (0.05)	0.70
No severe illness	0.70 (0.46)	0.03 (0.03)	0.02 (0.03)	0.98	0.72	0.68	−0.02 (0.05)	0.06 (0.04)	0.15
No eyesight problems	0.94 (0.23)	0.01 (0.02)	0.01 (0.02)	0.98	0.97	0.92	−0.01 (0.02)	0.03 (0.03)	0.28
No hearing problems	0.98 (0.14)	0.01 (0.01)	0.01 (0.01)	0.98	0.98	0.98	0.02 (0.02)	−0.00 (0.02)	0.44

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother’s age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother’s education, father’s education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

^a These outcomes were analyzed in Maselko et al. (2015).

Table H.36 – Child cognitive development at age 7

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Cognitive development index	–0.00 (1.00)	0.09 (0.08)	0.04 (0.08)	0.62	0.03	–0.02	0.11 (0.11)	–0.04 (0.11)	0.30
WPPSI: Verbal comprehension ^a	85.15 (13.59)	1.54 (1.37)	0.67 (1.30)	0.98	85.31	84.99	1.75 (1.65)	–0.43 (1.56)	0.27
WPPSI: Visual spatial ^a	87.34 (15.06)	–0.41 (1.07)	–0.83 (1.05)	0.97	86.74	87.88	0.41 (1.60)	–2.03 (1.49)	0.29
WPPSI: Fluid reasoning	77.26 (11.42)	1.76** (0.80)	1.43* (0.76)	0.49	76.65	77.82	3.19*** (1.05)	–0.37 (1.32)	0.06
WPPSI: Working memory	99.57 (15.69)	0.88 (1.10)	0.42 (1.02)	0.98	99.26	99.85	1.37 (1.59)	–0.30 (1.35)	0.42
WPPSI: Processing speed	76.32 (9.58)	2.44*** (0.74)	2.52*** (0.77)	0.05*	77.28	75.43	3.29*** (1.15)	1.30 (1.05)	0.22
WPPSI Full Scale IQ^a	81.95 (11.43)	1.27 (1.02)	0.85 (0.96)	0.38	81.99	81.92	2.48* (1.31)	–1.01 (1.17)	0.04
Urdu score	6.33 (3.50)	0.37 (0.31)	0.04 (0.25)	0.98	6.69	6.01	0.16 (0.32)	–0.20 (0.40)	0.49
Math score	8.98 (3.63)	0.54* (0.32)	0.25 (0.30)	0.97	8.90	9.06	0.73** (0.35)	–0.27 (0.39)	0.03
Executive function (Stroop)	14.11 (3.20)	0.08 (0.24)	–0.09 (0.24)	0.98	13.98	14.24	0.05 (0.34)	–0.19 (0.31)	0.61
Grade-for-age	0.75 (0.33)	–0.02 (0.03)	–0.02 (0.03)	0.98	0.78	0.73	–0.03 (0.04)	–0.02 (0.04)	0.82

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

^a These outcomes were analyzed in Maselko et al. (2015).

Table H.37 – Child’s socio-emotional development at age 7

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Socio-emotional index	0.00 (1.00)	-0.11 (0.07)	-0.08 (0.07)	0.22	-0.02	0.01	-0.02 (0.09)	-0.14 (0.13)	0.51
SDQ: Emotional ^a	2.34 (2.06)	0.14 (0.14)	0.14 (0.14)	0.97	2.50	2.19	-0.07 (0.23)	0.35* (0.20)	0.19
SDQ: Conduct problems ^a	3.33 (2.04)	-0.05 (0.16)	-0.14 (0.17)	0.97	3.18	3.46	-0.50*** (0.18)	0.36 (0.26)	0.01
SDQ: Hyperactivity ^a	3.50 (2.56)	0.13 (0.18)	0.02 (0.17)	0.97	2.99	3.96	0.09 (0.22)	0.09 (0.30)	0.99
SDQ: Peer problems ^a	1.93 (1.57)	0.04 (0.10)	0.08 (0.10)	0.97	1.99	1.88	0.12 (0.16)	0.03 (0.16)	0.70
SDQ: Prosocial ^a	2.49 (2.53)	-0.09 (0.18)	-0.09 (0.17)	0.97	2.06	2.87	-0.19 (0.20)	0.17 (0.27)	0.27
SDQ Total Score^a	11.10 (5.24)	0.26 (0.37)	0.11 (0.37)	0.77	10.67	11.50	-0.36 (0.46)	0.83 (0.64)	0.15
SCAS: Panic and agoraphobia ^a	1.54 (2.71)	0.31 (0.22)	0.33 (0.20)	0.71	1.64	1.46	0.23 (0.34)	0.42 (0.33)	0.73
SCAS: Separation ^a	5.96 (4.05)	0.24 (0.28)	0.16 (0.27)	0.97	6.50	5.48	-0.21 (0.43)	0.45 (0.34)	0.26
SCAS: Injury fear ^a	6.07 (3.65)	-0.05 (0.27)	-0.08 (0.27)	0.97	7.15	5.10	-0.26 (0.38)	-0.25 (0.39)	0.99
SCAS: Social phobia ^a	2.40 (2.93)	-0.11 (0.21)	-0.19 (0.21)	0.97	2.71	2.12	-0.63 (0.41)	0.25 (0.35)	0.17
SCAS: Obsessive-compulsive ^a	1.18 (1.93)	0.56*** (0.17)	0.50*** (0.18)	0.13	1.16	1.20	0.65*** (0.20)	0.31 (0.28)	0.32
SCAS: General anxiety ^a	3.40 (3.28)	0.23 (0.26)	0.28 (0.27)	0.97	3.77	3.06	-0.06 (0.39)	0.56 (0.37)	0.25
SCAS Total Score^a	20.56 (13.32)	1.18 (0.91)	1.00 (0.85)	0.25	22.93	18.41	-0.28 (1.47)	1.74 (1.28)	0.37

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother’s age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother’s education, father’s education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

^a These outcomes were analyzed in Maselko et al. (2015).

Table H.38 – Sibling survival

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Sibling survival index	0.00 (1.00)	0.19** (0.08)	0.17** (0.08)	0.04**	0.15	-0.14	0.27*** (0.09)	-0.02 (0.10)	0.02
Share of boys	0.52 (0.25)	-0.03 (0.02)	-0.04* (0.02)	0.32	0.40	0.63	-0.03 (0.02)	0.00 (0.02)	0.23
# died <1 year of age	0.29 (0.62)	-0.02 (0.05)	0.00 (0.05)	1.00	0.33	0.25	-0.05 (0.07)	0.05 (0.06)	0.18
# died btw 1 & 5 years old	0.05 (0.23)	-0.02 (0.01)	-0.01 (0.01)	0.71	0.05	0.05	-0.02 (0.02)	-0.00 (0.02)	0.67
# died > 5 years old	0.04 (0.19)	-0.03* (0.02)	-0.02 (0.02)	0.40	0.06	0.01	-0.05* (0.02)	-0.01 (0.02)	0.10

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.39 – Husband's income trajectory

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Husband's income trajectory	0.00 (1.00)	-0.02 (0.10)	-0.04 (0.10)	0.70	0.05	-0.05	-0.05 (0.13)	-0.03 (0.12)	0.93
Monthly income (ln) (7y)	8.94 (1.40)	0.11 (0.18)	0.03 (0.17)	0.99	9.00	8.89	0.06 (0.21)	-0.01 (0.18)	0.76
Monthly income (ln) (1y)	7.16 (2.33)	0.05 (0.20)	0.06 (0.21)	0.99	7.12	7.20	0.36 (0.30)	-0.30 (0.33)	0.16
Monthly income (ln) (6m)	7.24 (2.19)	0.04 (0.21)	0.04 (0.22)	0.99	7.40	7.09	-0.03 (0.29)	0.11 (0.31)	0.73

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.40 – Trajectory of mother’s physical health

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Mother’s physical health	−0.00 (1.00)	0.07 (0.07)	0.07 (0.08)	0.42	0.05	−0.05	0.14 (0.10)	−0.04 (0.13)	0.25
Mother never been unwell (7y)	0.63 (0.48)	−0.01 (0.03)	−0.01 (0.03)	0.98	0.67	0.59	−0.06 (0.04)	0.05 (0.06)	0.17
Overall health (0-4) (7y)	1.83 (0.97)	0.06 (0.07)	0.05 (0.08)	0.96	1.84	1.83	0.12 (0.11)	−0.04 (0.11)	0.32
Healthy days in past 30 (7y)	26.16 (7.66)	0.20 (0.57)	0.05 (0.62)	0.98	26.22	26.10	0.32 (0.91)	−0.36 (0.99)	0.63
Weight (kg) (6m)	53.87 (11.08)	0.39 (0.80)	0.46 (0.81)	0.96	53.93	53.82	2.41** (1.15)	−1.90 (1.30)	0.02
Weight (kg) (1y)	52.41 (10.93)	1.15 (0.84)	1.14 (0.87)	0.67	52.60	52.23	2.98** (1.29)	−1.07 (1.22)	0.04

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother’s age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother’s education, father’s education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.41 – Trajectory of social support: presence of grandmothers in the household

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Grandmother trajectory index	−0.00 (1.00)	0.34*** (0.08)	0.16** (0.07)	0.02**	0.01	−0.01	0.13 (0.10)	0.20** (0.08)	0.56
Grandmother present (7y)	0.31 (0.46)	0.11*** (0.04)	0.06 (0.04)	0.19	0.33	0.30	0.06 (0.06)	0.06 (0.05)	0.98
Grandmother present (1y)	0.42 (0.49)	0.15*** (0.04)	0.06** (0.03)	0.12	0.43	0.41	0.04 (0.05)	0.08** (0.03)	0.55
Grandmother present (6m)	0.47 (0.50)	0.16*** (0.04)	0.07** (0.03)	0.12	0.45	0.48	0.05 (0.04)	0.11** (0.05)	0.30

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother’s age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother’s education, father’s education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.42 – Trajectory of perceived social support

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Social support index	0.00 (1.00)	0.58*** (0.10)	0.52*** (0.09)	0.00***	0.05	-0.04	0.52*** (0.10)	0.53*** (0.11)	0.95
Perceived social support (7y)	36.36 (12.40)	3.34*** (0.92)	2.85*** (0.84)	0.01***	36.96	35.82	2.91*** (0.92)	2.81** (1.22)	0.94
Perceived social support (1y) ^a	42.72 (13.97)	8.32*** (1.68)	7.60*** (1.52)	0.00***	43.38	42.12	7.45*** (1.93)	7.74*** (1.68)	0.88
Perceived social support (6m) ^a	43.93 (15.76)	7.62*** (1.37)	6.77*** (1.27)	0.00***	44.11	43.77	6.84*** (1.56)	6.85*** (1.86)	1.00

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

^a These outcomes were analyzed in Rahman et al. (2008).

Table H.43 – Trajectory of relationship quality with husband and mother-in-law

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Relationships	-0.00 (1.00)	0.14* (0.09)	0.16* (0.09)	0.08*	0.05	-0.04	0.14 (0.12)	0.19 (0.12)	0.76
Marital quality scale (7y)	5.10 (1.59)	0.11 (0.13)	0.17 (0.13)	0.74	5.18	5.03	0.11 (0.16)	0.22 (0.20)	0.64
Relationship husband (7y)	3.91 (0.98)	0.03 (0.08)	0.05 (0.08)	0.77	3.93	3.90	0.01 (0.11)	0.12 (0.11)	0.49
Husband nonviolent (7y)	0.74 (0.44)	-0.01 (0.04)	-0.02 (0.04)	0.77	0.75	0.73	-0.04 (0.05)	0.01 (0.07)	0.52
Relationship m-in-law (7y)	3.27 (1.10)	0.15 (0.11)	0.16 (0.13)	0.74	3.30	3.25	0.15 (0.18)	0.17 (0.15)	0.90
Marital quality scale (1y)	3.49 (1.07)	0.13 (0.10)	0.16 (0.10)	0.56	3.59	3.40	0.10 (0.12)	0.20 (0.13)	0.54
Relationship husband (1y)	3.91 (0.89)	0.26*** (0.09)	0.25** (0.10)	0.15	3.97	3.85	0.22* (0.12)	0.28** (0.13)	0.67
Husband nonviolent (1y)	0.70 (0.46)	0.06 (0.04)	0.04 (0.03)	0.74	0.71	0.69	0.04 (0.04)	0.04 (0.05)	0.96
Relationship m-in-law (1y)	4.72 (2.68)	0.17 (0.19)	0.40** (0.20)	0.38	4.80	4.65	0.31 (0.29)	0.51* (0.27)	0.62

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.44 – Parenting inputs during infancy

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Parenting inputs index (1y)	−0.00 (1.00)	0.63*** (0.11)	0.59*** (0.11)	0.00***	0.08	−0.07	0.55*** (0.15)	0.62*** (0.15)	0.73
Exclusive breastfeeding (6m) ^a	0.11 (0.32)	0.09** (0.04)	0.09** (0.04)	0.10	0.11	0.11	0.09* (0.05)	0.10* (0.06)	0.89
Breastfeeding (6m)	0.91 (0.28)	0.00 (0.02)	−0.00 (0.02)	0.92	0.93	0.90	−0.01 (0.03)	0.00 (0.03)	0.83
Mother play frequency (1y) ^a	2.37 (0.77)	0.39*** (0.07)	0.35*** (0.07)	0.00***	2.35	2.39	0.38*** (0.11)	0.32*** (0.09)	0.69
Father play frequency (1y) ^a	2.28 (0.91)	0.28*** (0.09)	0.24*** (0.09)	0.08*	2.35	2.21	0.20 (0.14)	0.27** (0.11)	0.69
Completed immunization ^a	0.84 (0.36)	0.10*** (0.03)	0.11*** (0.03)	0.04**	0.84	0.85	0.10** (0.04)	0.11** (0.04)	0.90
Discussed child's dev. (1y)	0.14 (0.35)	0.07* (0.04)	0.05 (0.03)	0.28	0.19	0.10	0.02 (0.05)	0.08** (0.04)	0.21
Appropriate place for delivery	0.75 (0.44)	0.18*** (0.04)	0.16*** (0.04)	0.01***	0.74	0.75	0.19*** (0.05)	0.15*** (0.05)	0.58
Arranged transport for delivery	0.70 (0.46)	0.22*** (0.05)	0.19*** (0.05)	0.01**	0.69	0.71	0.20*** (0.06)	0.19*** (0.06)	0.78
Arranged finances for delivery	0.75 (0.44)	0.17*** (0.05)	0.16*** (0.05)	0.04**	0.74	0.75	0.17*** (0.06)	0.14** (0.06)	0.69
Practicing birth spacing (1y) ^a	0.55 (0.50)	0.10** (0.04)	0.11*** (0.04)	0.05**	0.55	0.55	0.13* (0.07)	0.10** (0.04)	0.76

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

^a These outcomes were analyzed in Rahman et al. (2008).

Table H.45 – Infant development

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
Infant development index	–0.00 (1.00)	0.38*** (0.09)	0.32*** (0.08)	0.00***	0.10	–0.09	0.34*** (0.11)	0.28** (0.12)	0.70
Height-for-age (z) 6m ^a	–0.70 (0.98)	0.07 (0.08)	0.01 (0.07)	0.97	–0.58	–0.82	0.03 (0.09)	–0.04 (0.12)	0.63
Weight-for-age (z) 6m ^a	–0.82 (0.99)	0.02 (0.08)	–0.03 (0.08)	0.97	–0.74	–0.90	0.00 (0.11)	–0.09 (0.12)	0.60
No Diarrhea episodes (6mo) ^a	0.55 (0.50)	0.09** (0.04)	0.06 (0.04)	0.61	0.57	0.53	0.04 (0.05)	0.07 (0.06)	0.68
No ARI (6mo) ^a	0.55 (0.50)	0.06 (0.04)	0.06 (0.04)	0.64	0.55	0.55	0.09 (0.06)	0.03 (0.06)	0.54
Height-for-age (z) 1y ^a	–1.34 (1.18)	0.23** (0.09)	0.16** (0.08)	0.36	–1.11	–1.56	0.09 (0.13)	0.19 (0.13)	0.61
Weight-for-age (z) 1y ^a	–2.12 (1.04)	0.06 (0.08)	0.02 (0.07)	0.97	–1.95	–2.28	0.06 (0.11)	–0.07 (0.12)	0.49
No Diarrhea episodes (12mo) ^a	0.58 (0.49)	0.08* (0.05)	0.06 (0.05)	0.64	0.60	0.57	0.05 (0.06)	0.08 (0.06)	0.77
No ARI (12mo) ^a	0.47 (0.50)	0.24*** (0.04)	0.24*** (0.04)	0.00***	0.46	0.48	0.26*** (0.05)	0.22*** (0.05)	0.60

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: N=585. Summary indices are normalized to be mean 0 and SD 1 in the control group, with positive values are associated with more favorable outcomes. Index construction is described in the text (Section 4.1) and Appendix Tables A.I-A.III. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples. ARI = Acute Respiratory Infection.

^a These outcomes were analyzed in Rahman et al. (2008).

Table H.46 – HOME score components

	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
HOME inventory	34.01 (8.98)	1.92*** (0.67)	1.72*** (0.63)	0.01**	33.45	34.52	3.65*** (0.81)	–0.35 (0.93)	0.00
HOME: Responsivity	8.75 (1.75)	0.21 (0.13)	0.22* (0.12)	0.29	8.58	8.91	0.63*** (0.15)	–0.22 (0.19)	0.00
HOME: Encouragement of maturity	5.25 (1.56)	–0.11 (0.14)	–0.16 (0.13)	0.44	5.36	5.15	–0.03 (0.16)	–0.36* (0.20)	0.20
HOME: Emotional climate	4.50 (1.93)	0.35** (0.16)	0.37** (0.17)	0.23	4.43	4.57	0.90*** (0.21)	–0.24 (0.25)	0.00
HOME: Learning materials	2.64 (1.48)	0.32*** (0.11)	0.31** (0.12)	0.18	2.56	2.70	0.40*** (0.14)	0.23 (0.15)	0.37
HOME: Enrichment	2.65 (1.39)	0.31** (0.13)	0.31** (0.13)	0.18	2.50	2.79	0.51*** (0.15)	0.14 (0.16)	0.07
HOME: Family companionship	2.95 (1.77)	0.38*** (0.12)	0.31** (0.12)	0.18	2.77	3.11	0.64*** (0.16)	–0.02 (0.19)	0.01
HOME: Family integration	2.61 (0.92)	0.20** (0.07)	0.17** (0.06)	0.18	2.61	2.62	0.21* (0.11)	0.11 (0.10)	0.52
HOME: Physical environment	4.65 (2.37)	0.27 (0.17)	0.20 (0.15)	0.44	4.64	4.66	0.39* (0.20)	0.00 (0.28)	0.31
Positive parenting (interviewer obs.)	9.18 (2.33)	0.30 (0.18)	0.33* (0.17)	0.29	8.92	9.41	0.84*** (0.21)	–0.19 (0.27)	0.00

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

Table H.47 – School quality components

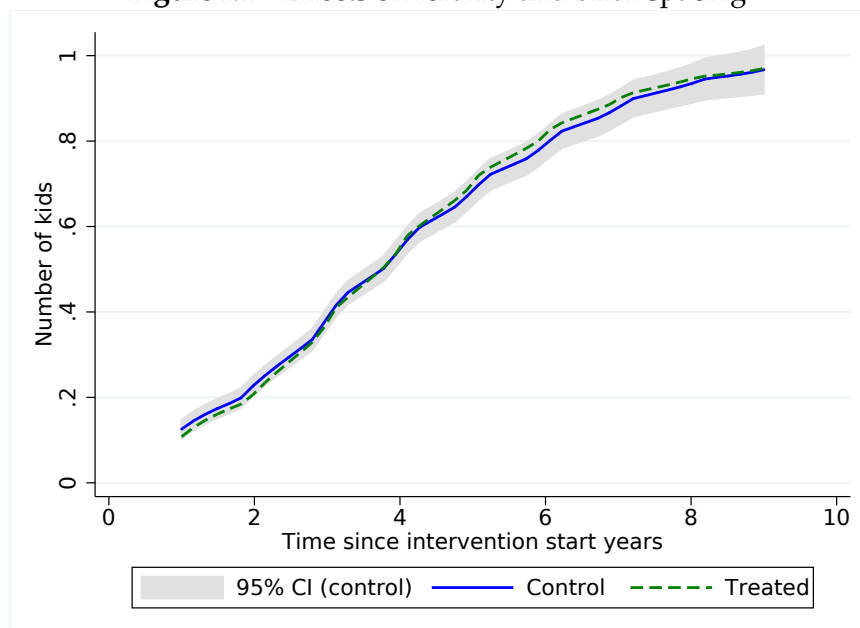
	Full sample				By child gender				
	(1) Control mean	(2) No controls β (s.e.)	(3) All controls β (s.e.)	(4) FWER p-value	(5) Girl control mean	(6) Boy control mean	(7) β^{Girl} (s.e.)	(8) β^{Boy} (s.e.)	(9) $\beta^{Girl} =$ β^{Boy} p-value
School quality	−0.42 (2.21)	0.64*** (0.21)	0.51** (0.23)	0.04**	−0.65	−0.21	0.80** (0.36)	0.19 (0.24)	0.14
Classroom amenities	2.94 (0.26)	−0.02 (0.03)	−0.02 (0.03)	0.96	2.96	2.93	−0.05* (0.03)	0.02 (0.04)	0.04
School has office	0.76 (0.43)	0.08* (0.04)	0.06 (0.04)	0.81	0.68	0.84	0.17** (0.07)	−0.05 (0.04)	0.01
School has playground	0.81 (0.39)	0.06 (0.04)	0.06 (0.04)	0.77	0.79	0.83	0.04 (0.04)	0.09 (0.06)	0.53
School has library	0.38 (0.49)	0.10* (0.05)	0.08 (0.05)	0.77	0.34	0.42	0.15* (0.08)	0.00 (0.05)	0.16
Library books visibly in use	0.35 (0.48)	0.10** (0.05)	0.09* (0.05)	0.68	0.32	0.39	0.15* (0.08)	0.03 (0.05)	0.18
School has water source	0.89 (0.32)	0.03 (0.04)	0.02 (0.03)	0.96	0.87	0.90	0.05 (0.04)	−0.01 (0.04)	0.15
School has clean drinking water	0.92 (0.26)	−0.01 (0.03)	−0.00 (0.03)	0.96	0.89	0.96	0.04 (0.05)	−0.05 (0.03)	0.13
School has fencing	0.97 (0.16)	0.02 (0.01)	0.01 (0.01)	0.88	0.96	0.98	0.03 (0.02)	−0.01 (0.02)	0.19
School has computers	0.26 (0.44)	0.12*** (0.04)	0.09* (0.04)	0.61	0.24	0.28	0.10 (0.07)	0.08 (0.06)	0.86
Computers visibly in use	0.24 (0.43)	0.13*** (0.04)	0.09* (0.05)	0.61	0.21	0.25	0.10 (0.07)	0.09 (0.06)	0.90
Has toilets for girls	0.46 (0.50)	0.07 (0.04)	0.06 (0.04)	0.77	0.51	0.41	0.08 (0.06)	0.03 (0.06)	0.51
Total teachers (ln)	2.10 (0.70)	0.19*** (0.07)	0.14* (0.07)	0.61	2.01	2.18	0.20** (0.10)	0.09 (0.08)	0.29
Total rooms (ln)	1.99 (0.78)	0.17** (0.08)	0.12 (0.09)	0.81	1.88	2.09	0.23* (0.13)	0.02 (0.10)	0.12
Class size	20.21 (10.74)	0.85 (1.26)	0.86 (1.38)	0.96	19.48	20.88	1.54 (1.59)	0.24 (1.79)	0.50

* $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Notes: The school quality index is computed as the principal component of individual measures. Standard errors, clustered at the level of randomization, in parentheses. All models control for interview date and interviewer. Specifications with all controls additionally adjust for baseline characteristics (all centered and interacted with the treatment indicator). The set of baseline characteristics include mother's age and its square, parity, family structure, presence of grandmother (mother or mother-in-law of depressed mother), mother's education, father's education, if mother was employed, if mother empowered, PCA-weighted wealth index, depression severity (Hamilton score), and perceived social support (MSPSS). Inference is conducted using p -values which are adjusted to control for the family-wise error rate (FWER), calculated using a free step-down resampling method (Westfall and Young, 1993). Columns 7 and 8 report treatment effects by gender of the index child (controlling for all baseline characteristics) and Column 9 reports the test of equality in treatment effects between the two samples.

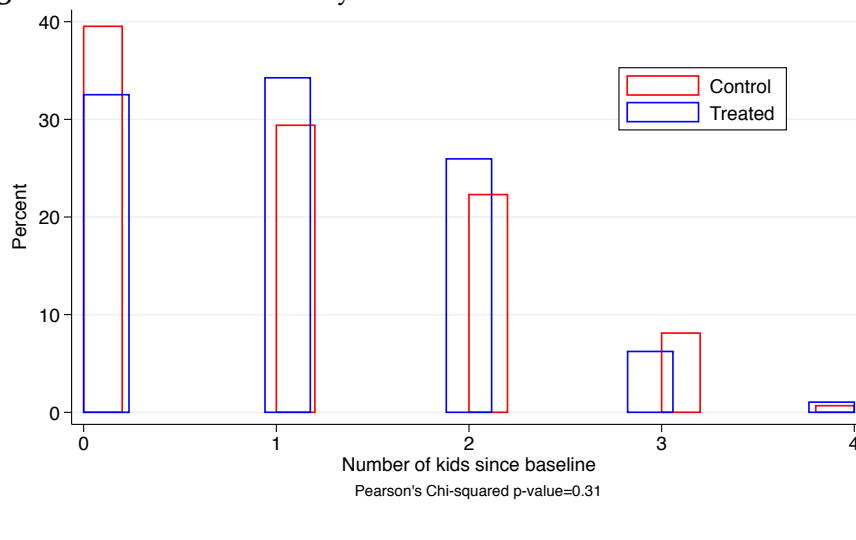
I Appendix Figures

Figure I.1 – Effects on fertility and birth-spacing



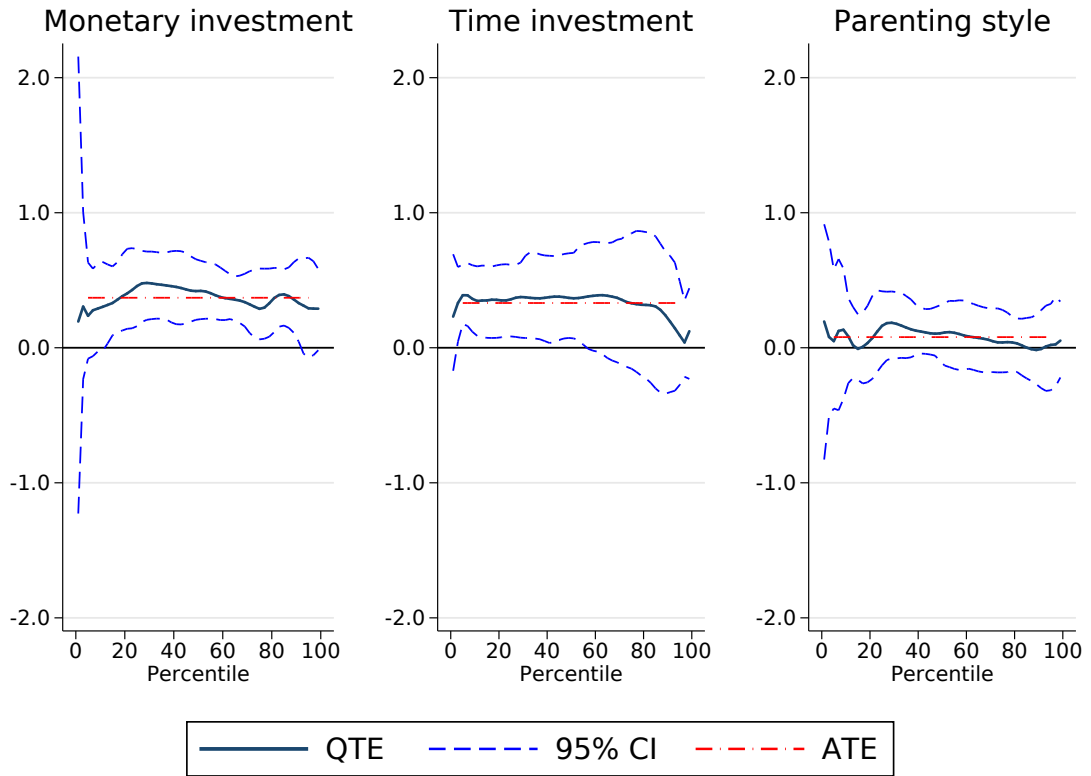
Notes: This figure show the average number of births women reported since the start of the intervention until the 7-year follow-up. Birth histories were constructed from the listing of children and their ages at the 7-year follow-up. 95% confidence interval, not adjusted for clustered errors or autocorrelation, is presented (and is thus tighter than the true CI).

Figure I.2 – Effects on fertility: Number of children born since treatment

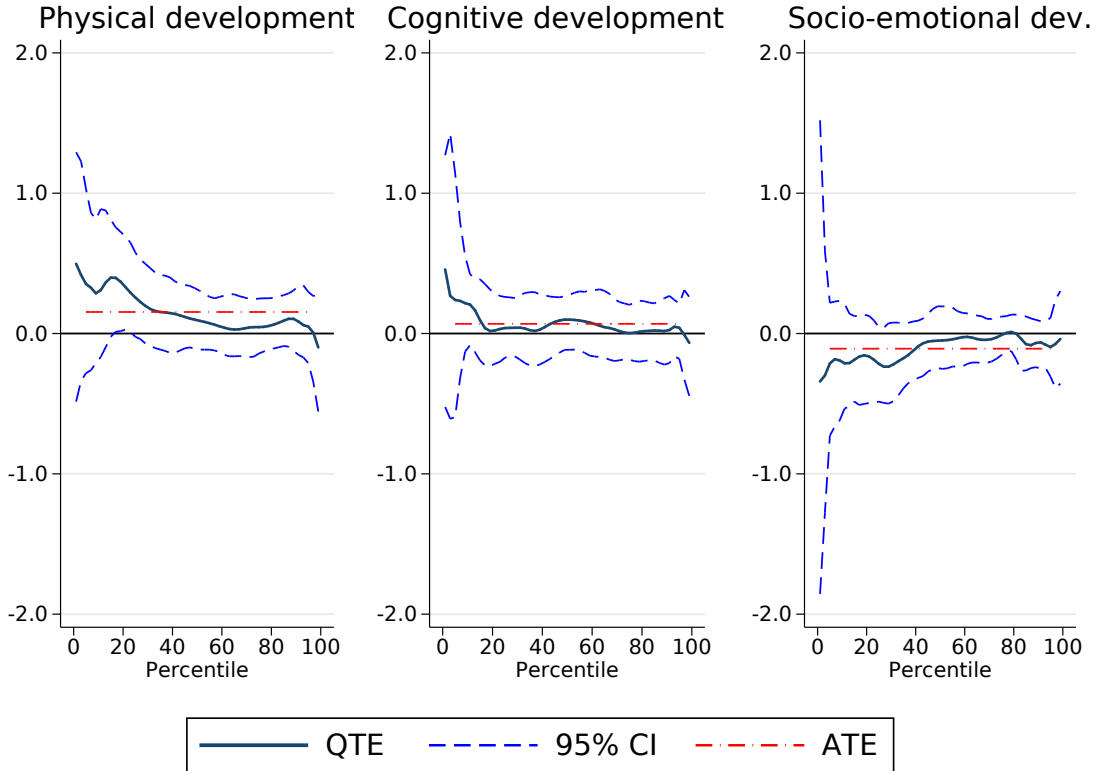


Notes: This figure plots the histograms of total number of births women reported since the start of the intervention until the 7-year follow-up. Birth histories were constructed from the listing of children and their ages at the 7-year follow-up.

Figure I.4 – Quantile Treatment Effects on parenting and child development



(a) Parenting



(b) Child development

Notes: Quantile Treatment Effects (QTE) of THP Intervention on parenting and child development outcomes measured at the 7-year follow-up. 95% confidence intervals for the QTE were calculated by bootstrapping using 1,000 replications, clustering at the UC level.

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