

Supplemental Appendix Tables for
Strategic Parenting, Birth Order and School Performance

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Table A1 : Effect of Birth Order on Perceptions of School Performance (Family Fixed Effects Controlling for Child Ability, Using only Maternal Perceptions Elicited After Child Assessments)

	All Families	All Families	2-Child Family	3-Child Family	4-Child Family
	(1)	(2)	(3)	(4)	(5)
Number of Younger Siblings	0.0475*** [0.0162]				
2nd Child		-0.0417** [0.0196]	-0.0927*** [0.0339]	-0.0258 [0.0312]	0.0092 [0.0422]
3rd Child		-0.0963*** [0.0340]		-0.0733 [0.0499]	-0.0620 [0.0625]
4th Child		-0.145*** [0.0537]			-0.0845 [0.0843]
PIAT Math	0.00396*** [0.000914]	0.00396*** [0.000915]	0.00366** [0.00158]	0.00520*** [0.00137]	0.0022 [0.00184]
PIAT Reading Recognition	0.00237** [0.00106]	0.00239** [0.00106]	0.00494*** [0.00190]	0.0002 [0.00166]	0.0030 [0.00202]
PIAT Reading Comprehension	0.00283** [0.00113]	0.00284** [0.00113]	0.0023 [0.00198]	0.00336* [0.00184]	0.0024 [0.00204]
PPVT	0.00204*** [0.000636]	0.00206*** [0.000637]	0.00222* [0.00115]	0.00272*** [0.000941]	0.0006 [0.00135]
Female	0.103*** [0.0153]	0.103*** [0.0153]	0.0974*** [0.0261]	0.102*** [0.0243]	0.117*** [0.0299]
Mean Dep Var	0.32	0.32	0.34	0.32	0.29
Observations	7,310	7,310	3,122	2,841	1,347

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

Robust standard errors in brackets clustered at the household level.

Models include a set of year effects and age effects as well as family fixed effects effects. Dependent variable equals one if child is perceived to be one of the best students in his/her class, equals zero otherwise.

Table A2 : Non-linear Effects of Birth Order on Existence of Parental Rules about TV Watching

	No Ability Controls				Ability Controls			
	All Families	2-Child Family	3-Child Family	4-Child Family	All Families	2-Child Family	3-Child Family	4-Child Family
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A: OLS</i>								
2nd Child	-0.0574*** [0.0116]	-0.0866*** [0.0163]	-0.0369* [0.0200]	-0.0147 [0.0292]	-0.0538*** [0.0124]	-0.0809*** [0.0175]	-0.0384* [0.0213]	-0.0059 [0.0307]
3rd Child	-0.112*** [0.0172]		-0.127*** [0.0232]	0.0001 [0.0355]	-0.105*** [0.0188]		-0.123*** [0.0255]	0.00224 [0.0380]
4th Child	-0.144*** [0.0288]			-0.0562 [0.0376]	-0.127*** [0.0318]			-0.0498 [0.0410]
<i>Panel B: Family Fixed Effects</i>								
2nd Child	-0.0254 [0.0156]	-0.0139 [0.0269]	-0.0148 [0.0246]	-0.0156 [0.0329]	-0.0275 [0.0170]	-0.00364 [0.0310]	-0.0253 [0.0263]	-0.0107 [0.0351]
3rd Child	-0.0477* [0.0273]		-0.0790** [0.0398]	-0.0315 [0.0510]	-0.0479 [0.0307]		-0.0839* [0.0432]	-0.0297 [0.0573]
4th Child	-0.0692 [0.0421]			-0.0961 [0.0645]	-0.0787* [0.0466]			-0.115* [0.0689]
Mean Dep Var	0.490	0.480	0.500	0.510	0.500	0.480	0.500	0.510
Observations	10,982	4,633	4,200	2,149	9,894	4,202	3,785	1,907

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

Robust standard errors in brackets clustered at the household level.

Models include a set of year effects and age effects. Models in columns 1 and 5, panel A include family size effects. Models in panel B include family fixed effects. Specifications in columns 5 to 8 include controls for cognitive ability test scores. Dependent Variable is equal to one if the child reports that there exist rules about watching TV, equals zero otherwise.

Table A3 : Non-linear Effects of Birth Order on Intensity of Parental Monitoring of Homework

	No Ability Controls				Ability Controls			
	All Families	2-Child Family	3-Child Family	4-Child Family	All Families	2-Child Family	3-Child Family	4-Child Family
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A: OLS</i>								
2nd Child	-0.0286** [0.0134]	-0.0243 [0.0176]	-0.0270 [0.0232]	-0.0633 [0.0454]	-0.0386*** [0.0143]	-0.0361* [0.0185]	-0.0343 [0.0250]	-0.0582 [0.0498]
3rd Child	-0.0296 [0.0189]		-0.0284 [0.0259]	-0.0524 [0.0442]	-0.0487** [0.0204]		-0.0437 [0.0283]	-0.0574 [0.0479]
4th Child	-0.0131 [0.0296]			-0.0413 [0.0457]	-0.0426 [0.0322]			-0.0624 [0.0511]
<i>Panel B: Family Fixed Effects</i>								
2nd Child	-0.0627*** [0.0203]	-0.0221 [0.0375]	-0.0826*** [0.0294]	-0.105* [0.0539]	-0.0466** [0.0226]	0.0148 [0.0420]	-0.0681** [0.0324]	-0.102* [0.0585]
3rd Child	-0.0831** [0.0352]		-0.136*** [0.0513]	-0.0920 [0.0667]	-0.0705* [0.0391]		-0.142** [0.0558]	-0.0840 [0.0749]
4th Child	-0.0828 [0.0528]			-0.1030 [0.0889]	-0.0710 [0.0577]			-0.1090 [0.0994]
Mean Dep Var	0.43	0.45	0.41	0.40	0.42	0.45	0.40	0.38
Observations	8,127	3,604	3,002	1,521	7,166	3,222	2,624	1,320

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

Robust standard errors in brackets clustered at the household level.

Models include a set of year effects and age effects. Models in columns 1 and 5, panel A include family size effects. Models in panel B include family fixed effects. Specifications in columns 5 to 8 include controls for cognitive ability test scores. All models control for indicators that measure how often the teacher gives homework. Dependent variable equals one if parents check every day on homework, equals zero otherwise.

Table A4 : Differential Non-linear Effects of Birth Order on Monitoring Intensity Among Children with Bad and Good School Performance

	No Ability Controls				Ability Controls			
	All Families	2-Child Family	3-Child Family	4-Child Family	All Families	2-Child Family	3-Child Family	4-Child Family
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A: OLS</i>								
B x 2nd Child	-0.0331 [0.0269]	-0.0485 [0.0347]	-0.0086 [0.0498]	0.0169 [0.0879]	-0.0311 [0.0285]	-0.0520 [0.0370]	-0.0013 [0.0518]	0.0392 [0.0918]
B x 3rd Child	-0.0356 [0.0324]		-0.0134 [0.0490]	0.0078 [0.0867]	-0.0234 [0.0349]		0.0208 [0.0520]	-0.0063 [0.0923]
B x 4th Child	-0.0862* [0.0505]			-0.0544 [0.0853]	-0.0912* [0.0546]			-0.0547 [0.0934]
<i>Panel B: Family Fixed Effects</i>								
B x 2nd Child	-0.0693** [0.0308]	-0.0939** [0.0416]	-0.0390 [0.0535]	0.0253 [0.0974]	-0.0730** [0.0332]	-0.0970** [0.0448]	-0.0441 [0.0572]	0.0261 [0.107]
B x 3rd Child	-0.0279 [0.0366]		0.0043 [0.0542]	0.0835 [0.0954]	-0.0393 [0.0399]		0.0025 [0.0595]	0.0289 [0.105]
B x 4th Child	-0.126** [0.0620]			0.0049 [0.100]	-0.132* [0.0678]			-0.0317 [0.113]
Mean Dep Var	0.43	0.45	0.41	0.40	0.42	0.45	0.40	0.38
Observations	8,127	3,604	3,002	1,521	7,166	3,222	2,624	1,320

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

Robust standard errors in brackets clustered at the household level.

Models include a set of year effects and age effects. Models in columns 1 and 5, panel A include family size effects. Models in panel B include family fixed effects. Specifications in columns 5 to 8 include controls for cognitive ability test scores. All models control for indicators that measure how often the teacher gives homework. Dependent variable equals one if parents check every day on homework, equals zero otherwise.

Table A5 : Non-linear Effects of Birth Order on Probability that Parent would be Very Likely to Increase Supervision if Child Brought on Poor Report Card

	No Ability Controls				Ability Controls			
	All Families	2-Child Family	3-Child Family	4-Child Family	All Families	2-Child Family	3-Child Family	4-Child Family
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>Panel A: OLS</i>								
2nd Child	-0.0104 [0.00776]	-0.0188* [0.00986]	-0.0045 [0.0140]	0.0169 [0.0232]	0.0004 [0.00857]	-0.0110 [0.0110]	0.0043 [0.0153]	0.0443* [0.0257]
3rd Child	-0.0334** [0.0132]		-0.0498*** [0.0183]	0.0114 [0.0315]	-0.0221 [0.0149]		-0.0355* [0.0202]	0.0283 [0.0363]
4th Child	-0.0386 [0.0239]			-0.0156 [0.0369]	-0.0289 [0.0268]			0.0090 [0.0413]
<i>Panel B: Family Fixed Effects</i>								
2nd Child	-0.0116 [0.0103]	-0.0180 [0.0162]	-0.0082 [0.0159]	0.0101 [0.0254]	-0.0078 [0.0116]	-0.0065 [0.0180]	-0.0024 [0.0176]	0.0136 [0.0285]
3rd Child	-0.0480** [0.0193]		-0.0733*** [0.0272]	-0.0034 [0.0406]	-0.0373* [0.0219]		-0.0587* [0.0306]	-0.0210 [0.0477]
4th Child	-0.0833*** [0.0300]			-0.0428 [0.0530]	-0.0939*** [0.0340]			-0.0852 [0.0618]
Mean Dep Var	0.81	0.84	0.81	0.76	0.81	0.84	0.81	0.77
Observations	11,982	5,084	4,549	2,349	10,379	4,400	3,969	2,010

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

Robust standard errors in brackets clustered at the household level.

Models include a set of year effects and age effects. Models in columns 1 and 5, panel A include family size effects. Models in panel B include family fixed effects. Specifications in columns 5 to 8 include controls for cognitive ability test scores.

Dependent variable equals one if parents report being very likely to supervise the child more closely in the event of low grades, equals zero otherwise.

Table A6 : Effect of Birth Order on Existence of Parental Rules about TV Watching in Intact Families

	OLS (1)	OLS (2)	Family FE (3)	Family FE (4)
Number of Younger Siblings	0.0330 [0.0290]	0.0195 [0.0320]	0.0296 [0.0709]	0.0158 [0.0806]
PIAT Math		-0.0030 [0.00182]		-0.0022 [0.00307]
PIAT Reading Recognition		0.0021 [0.00214]		0.00737** [0.00365]
PIAT Reading Comprehension		0.0009 [0.00209]		-0.0033 [0.00381]
PPVT		0.0008 [0.00125]		0.0004 [0.00163]
Female	-0.0594* [0.0323]	-0.0632* [0.0341]	-0.104** [0.0484]	-0.101* [0.0557]
Mean Dep Var	0.56	0.56	0.56	0.56
Observations	1,110	961	1,110	961

Robust standard errors in brackets clustered at the household level.

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

Models include a set of year effects and age effects. Models in columns 1 and 2 include family size effects. Models in columns 3 and 4 include family fixed effects. Dependent Variable is equal to one if the child reports that there exist rules about watching TV, equals zero otherwise.

Table A7 : Effect of Birth Order on Intensity of Parental Monitoring of Homework in Intact Families

	OLS	OLS	Family FE	Family FE
	(1)	(2)	(3)	(4)
Number of Younger Siblings	0.0233 [0.0305]	0.0096 [0.0367]	-0.0050 [0.0694]	0.0260 [0.0838]
PIAT Math		-0.0026 [0.00211]		0.0002 [0.00343]
PIAT Reading Recognition		-0.0011 [0.00242]		-0.0038 [0.00347]
PIAT Reading Comprehension		-0.0002 [0.00258]		0.0000 [0.00352]
PPVT		-0.0001 [0.000934]		-0.0002 [0.00166]
Female	-0.0580* [0.0342]	-0.0481 [0.0401]	-0.0296 [0.0440]	0.0261 [0.0528]
Mean Dep Var	0.44	0.44	0.44	0.44
Observations	929	770	929	770

Robust standard errors in brackets clustered at the household level.

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

Models include a set of year effects and age effects as well as family size effects in columns 1 and 2. Columns 3 and 4 control for family fixed effects. All models control for indicators that measure how often the teacher gives homework. Dependent variable equals one if parents check every day on homework, equals zero otherwise.

Table A8 : Differential Effect of Birth Order on Monitoring Intensity Among Children with Bad and Good School Performance in Intact Families

	OLS (1)	OLS (2)	Family FE (3)	Family FE (4)
B	0.0719 [0.0644]	0.0395 [0.0773]	0.0963 [0.0687]	0.0465 [0.0764]
B x Number of Younger Siblings	0.0139 [0.0560]	-0.0211 [0.0668]	-0.0102 [0.0587]	-0.0228 [0.0690]
Number of Younger Siblings	0.0233 [0.0323]	0.0146 [0.0383]	-0.0027 [0.0694]	0.0276 [0.0842]
PIAT Math		-0.0025 [0.00214]		0.0003 [0.00340]
PIAT Reading Recognition		-0.0011 [0.00242]		-0.0038 [0.00343]
PIAT Reading Comprehension		0.0000 [0.00256]		0.0001 [0.00349]
PPVT		-0.0001 [0.000928]		-0.0001 [0.00165]
Female	-0.0481 [0.0344]	-0.0471 [0.0404]	-0.0253 [0.0435]	0.0273 [0.0527]
Mean Dep Var	0.44	0.44	0.44	0.44
Observations	929	770	929	770

Robust standard errors in brackets clustered at the household level.

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

Models include a set of year effects and age effects as well as family size effects in columns 1 and 2. Columns 3 and 4 control for family fixed effects. All models control for indicators that measure how often the teacher gives homework. Dependent variable equals one if parents check every day on homework, equals zero otherwise.

Table A9 : Effect of Birth Order on Probability that Parent would be Very Likely to Increase Supervision if Child Brought on Poor Report Card in Intact Families

	OLS	OLS	Family FE	Family FE
	(1)	(2)	(3)	(4)
Number of Younger Siblings	0.0022 [0.0196]	-0.0015 [0.0228]	0.0517* [0.0305]	0.0542 [0.0418]
PIAT Math		-0.0014 [0.00120]		0.00372** [0.00153]
PIAT Reading Recognition		0.0003 [0.00128]		-0.0017 [0.00151]
PIAT Reading Comprehension		0.0015 [0.00134]		0.0007 [0.00170]
PPVT		-0.0006 [0.000679]		-0.0002 [0.000880]
Female	-0.0076 [0.0196]	-0.0022 [0.0230]	-0.0408* [0.0216]	-0.0348 [0.0274]
Mean Dep Var	0.86	0.85	0.86	0.85
Observations	1,266	1,008	1,266	1,008

Robust standard errors in brackets clustered at the household level.

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

Models include a set of year effects and age effects. Dependent variable equals one if parents report being very likely to supervise the child more closely in the event of low grades, equals zero otherwise.

Table A10 : Effect of Birth Order on Perceptions of School Performance (Family Fixed Effects, Subsample with Complete Measures of Cognitive Ability but Not Controlling for these Measures)

	All Families (1)	All Families (2)	2-Child Family (3)	3-Child Family (4)	4-Child Family (5)
Number of Younger Siblings	0.0466*** [0.0131]				
2nd Child		-0.0492*** [0.0164]	-0.0806*** [0.0291]	-0.038 [0.0262]	-0.041 [0.0348]
3rd Child		-0.0935*** [0.0275]		-0.038 [0.0401]	-0.133*** [0.0490]
4th Child		-0.137*** [0.0434]			-0.149** [0.0656]
Female	0.115*** [0.0126]	0.115*** [0.0126]	0.106*** [0.0215]	0.119*** [0.0201]	0.126*** [0.0243]
Mean Dep Var	0.33	0.33	0.35	0.33	0.30
Observations	11,354	11,354	4,833	4,338	2,183

Robust standard errors in brackets clustered at the household level.

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

Models include a set of year effects and age effects as well as family fixed effects effects. Dependent variable equals one if child is perceived to be one of the best students in his/her class, equals zero otherwise.

Table A11 : Effect of Birth Order on Perceptions of School Performance in Intact Families (Family Fixed Effects, Subsample with Complete Measures of Cognitive Ability but Not Controlling for these Measures)

	All Families	All Families	2-Child Family	3-Child Family	4-Child Family
	(1)	(2)	(3)	(4)	(5)
Number of Younger Siblings	0.156** [0.0759]				
2nd Child		-0.148* [0.0801]	-0.280** [0.115]	0.0473 [0.141]	-0.1190 [0.154]
3rd Child		-0.335** [0.160]		0.0852 [0.257]	-0.5390 [0.323]
4th Child		-0.3940 [0.242]			-0.6360 [0.501]
Female	0.0482 [0.0537]	0.0490 [0.0537]	0.0854 [0.0745]	-0.0647 [0.0919]	0.1300 [0.115]
Mean Dep Var	0.41	0.41	0.42	0.39	0.45
Observations	1,173	1,173	665	368	140

Robust standard errors in brackets clustered at the household level.

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

Models include a set of year effects and age effects as well as family fixed effects effects.

Dependent variable equals one if child is perceived to be one of the best students in his/her class, equals zero otherwise.

Table A12 : Effect of Birth Order on Existence of Parental Rules about TV Watching (Subsample with Complete Measures of Cognitive Ability but Not Controlling for these Measures)

	OLS	Family FE
	(1)	(2)
Number of Younger Siblings	0.0478*** [0.00777]	0.0222 [0.0140]
Female	-0.0355*** [0.0113]	-0.0248* [0.0137]
Mean Dep Var	0.50	0.50
Observations	9,894	9,894

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

Robust standard errors in brackets clustered at the household level.

Models include a set of year effects and age effects. Model in column 1 includes family size effects. Model in columns 2 include a family fixed effects. Dependent Variable is equal to one if the child reports that there exist rules about watching TV, equals zero otherwise.

Table A13 : Effect of Birth Order on Intensity of Parental Monitoring of Homework (Subsample with Complete Measures of Cognitive Ability but Not Controlling for these Measures)

	OLS	Family FE
	(1)	(2)
Number of Younger Siblings	0.0154* [0.00862]	0.0328* [0.0184]
Female	-0.0367*** [0.0125]	-0.0228 [0.0165]
Mean Dep Var	0.42	0.42
Observations	7,166	7,166

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

Robust standard errors in brackets clustered at the household level.

Models include a set of year effects and age effects as well as family size effects in column 1. Column 2 controls for family fixed effects. All models control for indicators that measure how often the teacher gives homework. Dependent variable equals one if parents check every day on homework, equals zero otherwise.

Table A14 : Differential Effect of Birth Order on Monitoring Intensity Among Children with Bad and Good School Performance (Subsample with Complete Measures of Cognitive Ability but Not Controlling for these Measures)

	OLS	Family FE
	(1)	(2)
B	0.0092 [0.0171]	0.0095 [0.0213]
B x Number of Younger Siblings	0.0069 [0.0157]	0.0040 [0.0186]
Number of Younger Siblings	0.0139 [0.0104]	0.0322* [0.0191]
Female	-0.0351*** [0.0126]	-0.0214 [0.0165]
Mean Dep Var	0.42	0.42
Observations	7,166	7,166

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

Robust standard errors in brackets clustered at the household level.

Models include a set of year effects and age effects as well as family size effects in columns 1 and 2. Columns 3 and 4 control for family fixed effects. All models control for indicators that measure how often the teacher gives homework. Dependent variable equals one if parents check every day on homework, equals zero otherwise.

Table A15: Effect of Birth Order on Probability that Parent would be Very Likely to Increase Supervision if Child Brought on Poor Report Card (Subsample with Complete Measures of Cognitive Ability but Not Controlling for these Measures)

	OLS	Family FE
	(1)	(2)
Number of Younger Siblings	0.0112* [0.00653]	0.0215** [0.0101]
Female	0.0080 [0.00867]	0.0010 [0.00934]
Mean Dep Var	0.81	0.81
Observations	10,379	10,379

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

Robust standard errors in brackets clustered at the household level.

Models include a set of year effects and age effects. Dependent variable equals one if parents report being very likely to supervise the child more closely in the event of low grades, equals zero otherwise.