THE INFLUENCE OF COUSIN ORDER AND COUSIN GROUP SIZE ON EDUCATIONAL OUTCOMES

SUPPLEMENTARY MATERIALS

Supplementary Figures

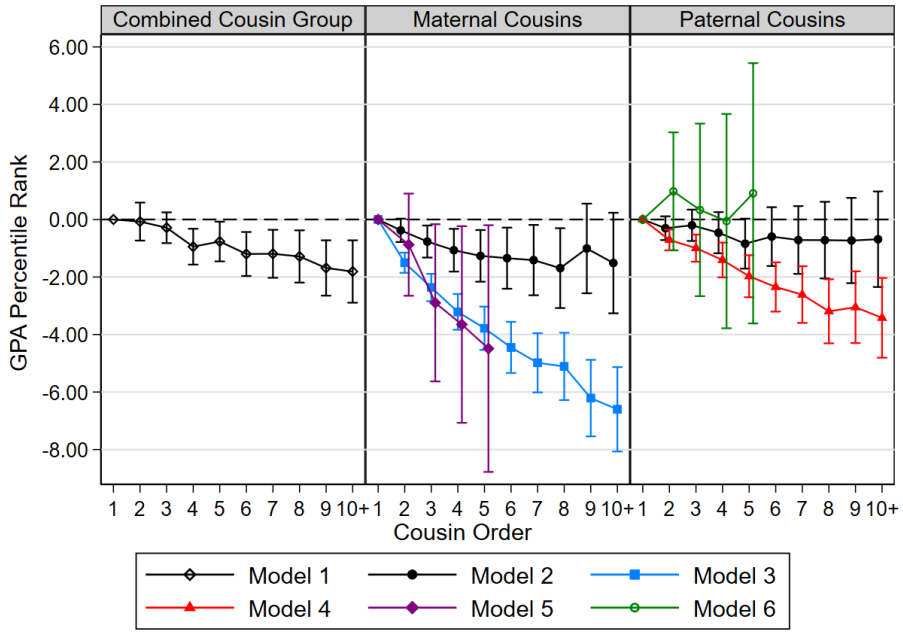

FIGURE S1. Estimates for the relationship between cousin order and grade point average (GPA) rank at age 16 amongst Swedish men and women, born 1972-1981. Based upon estimates from Models 1 to 6. Error bars are 95% confidence intervals.

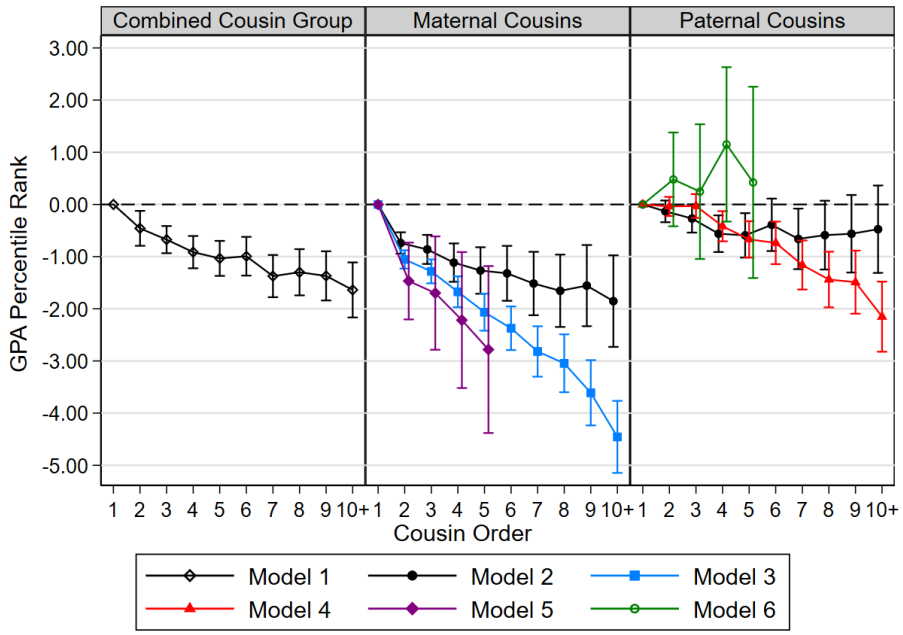

FIGURE S2. Estimates for the relationship between cousin order and grade point average (GPA) rank at age 16 amongst Swedish men and women, born 1982-2003. Based upon estimates from Models 1 to 6. Error bars are 95% confidence intervals.

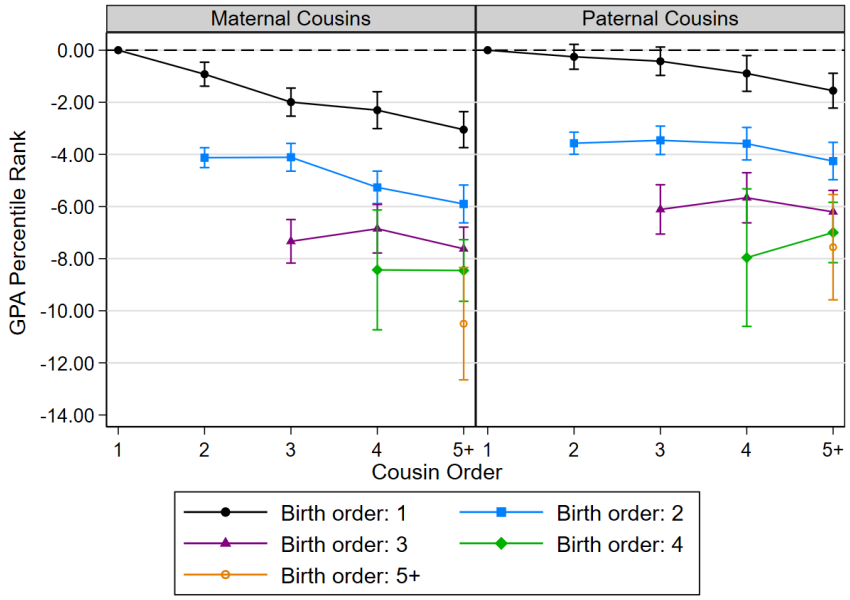

FIGURE S3. Estimates for the relationship between maternal and paternal cousin group size, birth order, and grade point average (GPA) rank at age 16 amongst Swedish men and women, born 1972-1981. Based upon estimates from Models 7 and 8. Error bars are 95% confidence intervals.

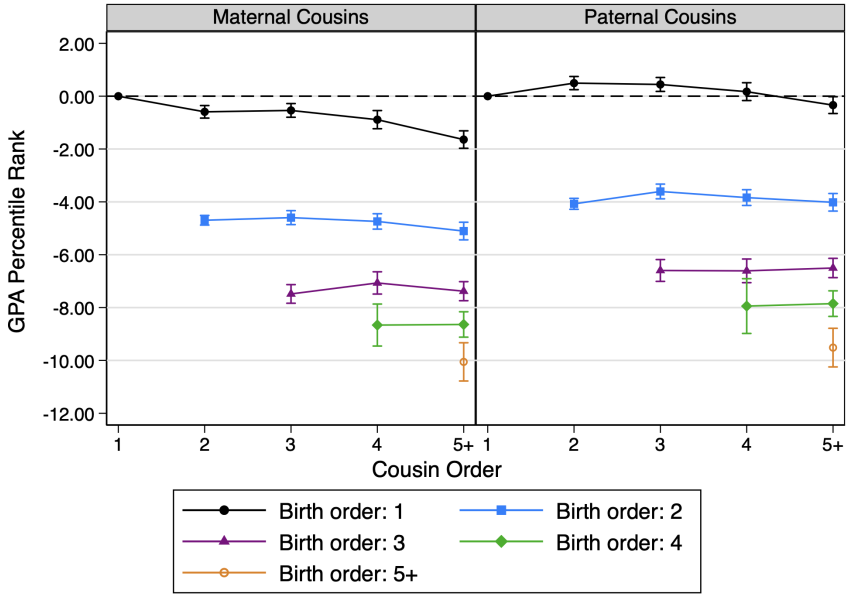

FIGURE S4. Estimates for the relationship between maternal and paternal cousin group size, birth order, and grade point average (GPA) rank at age 16 amongst Swedish men and women, born 1982-2003. Based upon estimates from Models 7 and 8. Error bars are 95% confidence intervals.

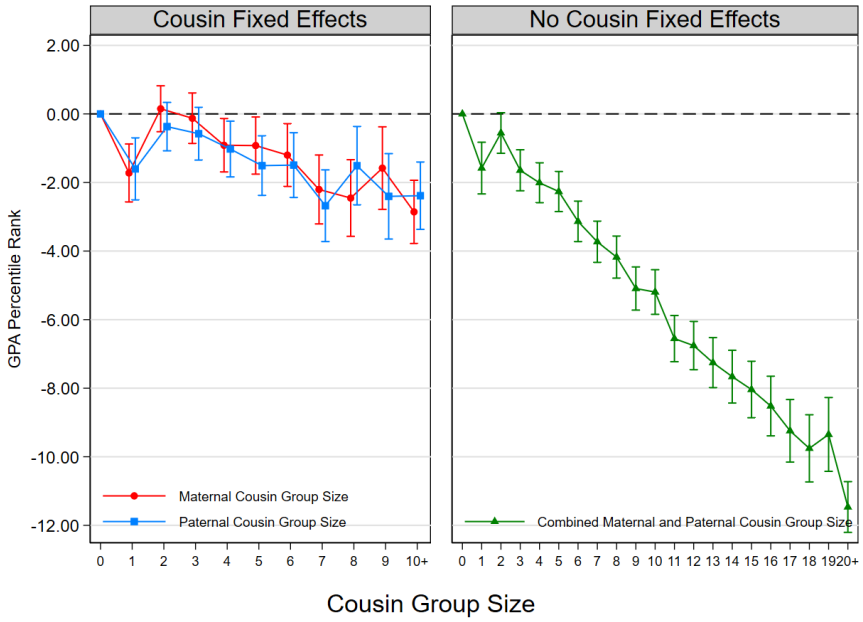

FIGURE S5. Estimates for the relationship between cousin group size and grade point average (GPA) rank at age 16 amongst Swedish men and women, born 1972-1981. Based upon estimates from Models 9-11. Error bars are 95% confidence intervals.

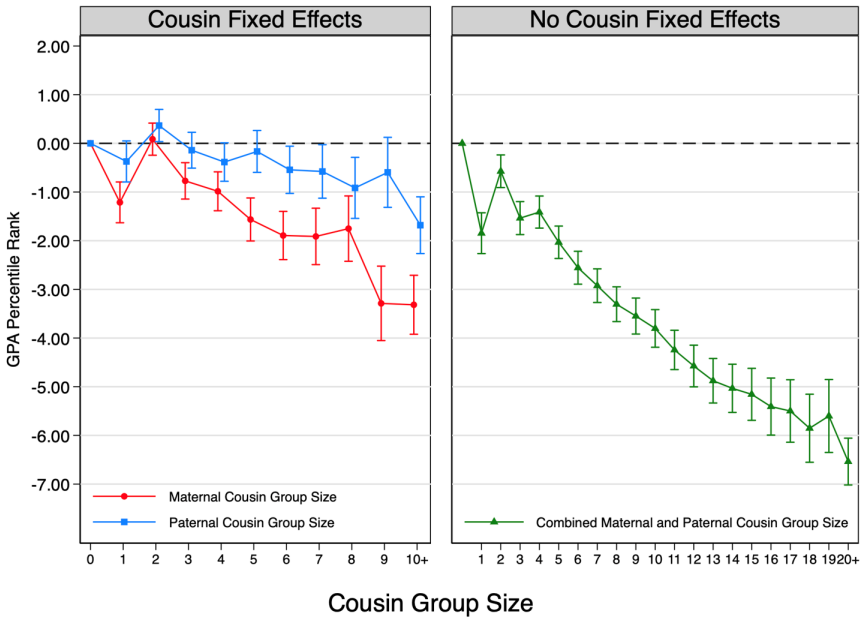

FIGURE S6. Estimates for the relationship between cousin group size and grade point average (GPA) rank at age 16 amongst Swedish men and women, born 1982-2003. Based upon estimates from Models 9-11. Error bars are 95% confidence intervals.

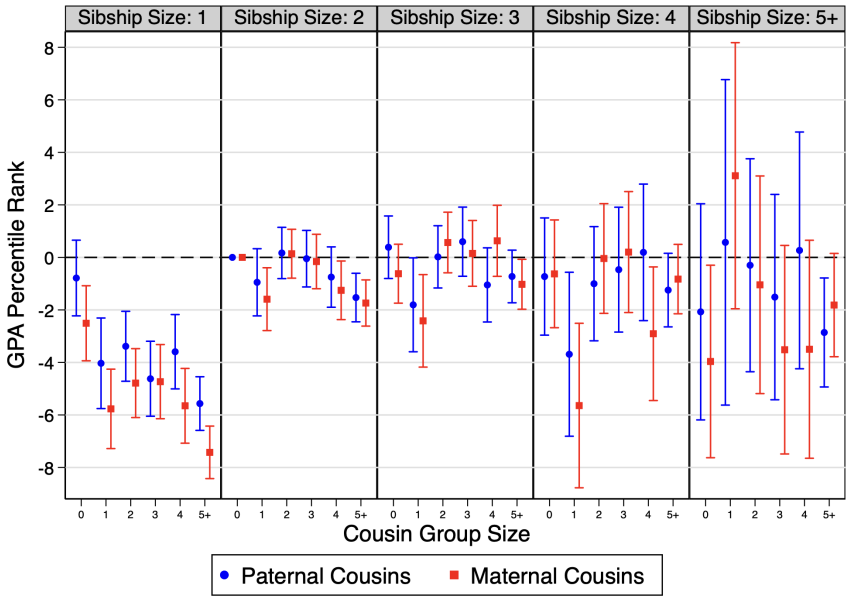

FIGURE S7. Estimates for the relationship between sibling group size, cousin group size, and grade point average (GPA) rank at age 16 amongst Swedish men and women, born 1972-1981. Based up-on estimates from Models 12 and 13. Error bars are 95% confidence intervals.

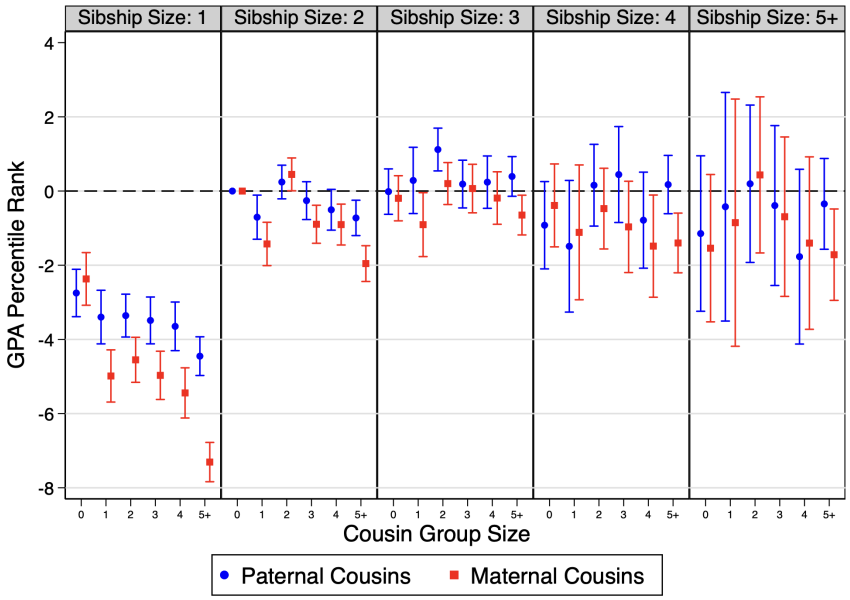

FIGURE S8. Estimates for the relationship between sibling group size, cousin group size, and grade point average (GPA) rank at age 16 amongst Swedish men and women, born 1982-2003. Based up-on estimates from Models 12 and 13. Error bars are 95% confidence intervals.

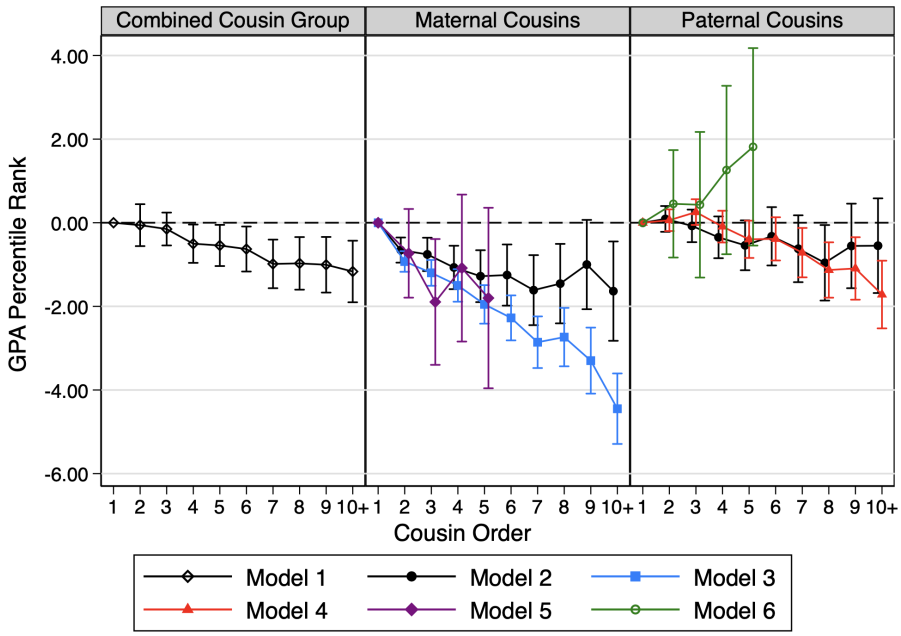

FIGURE S9. Estimates for the relationship between cousin order and grade point average (GPA) rank at age 16 amongst Swedish men, born 1972-1981. Based upon estimates from Models 1 to 6. Error bars are 95% confidence intervals.

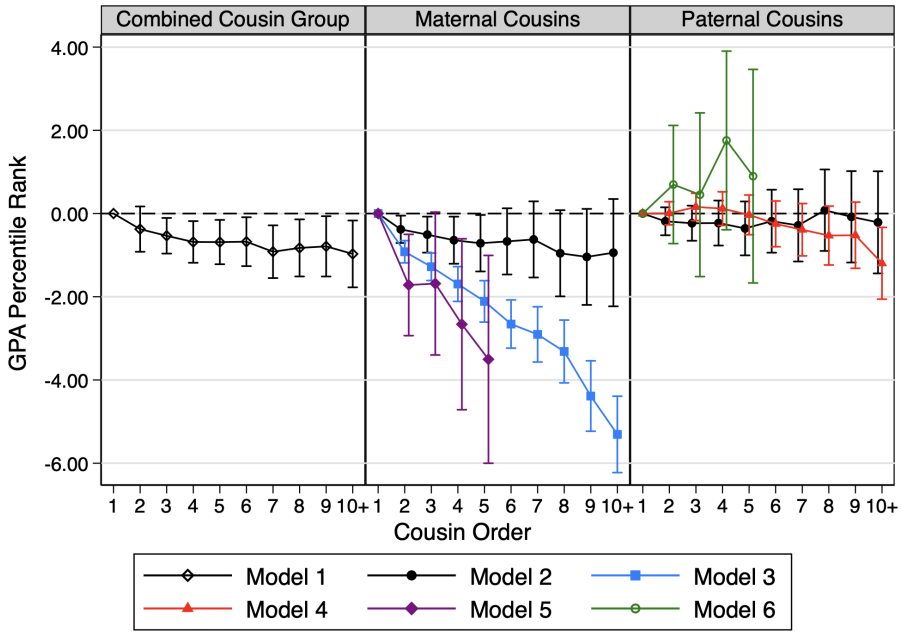

FIGURE S10. Estimates for the relationship between cousin order and grade point average (GPA) rank at age 16 amongst Swedish women, born 1972-1981. Based upon estimates from Models 1 to 6. Error bars are 95% confidence intervals.

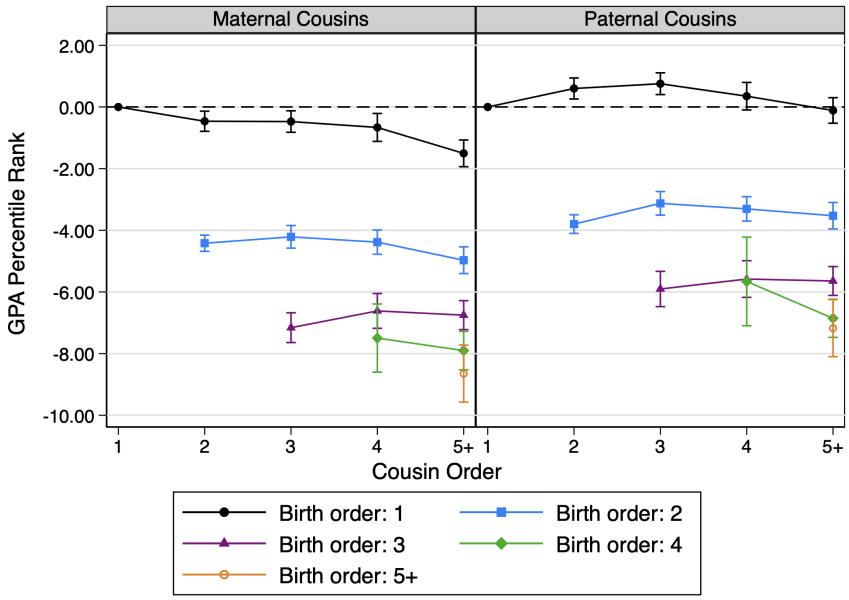

FIGURE S11. Estimates for the relationship between maternal and paternal cousin group size, birth order, and grade point average (GPA) rank at age 16 amongst Swedish men, born 1972-2003. Based upon estimates from Models 7 and 8. Error bars are 95% confidence intervals.

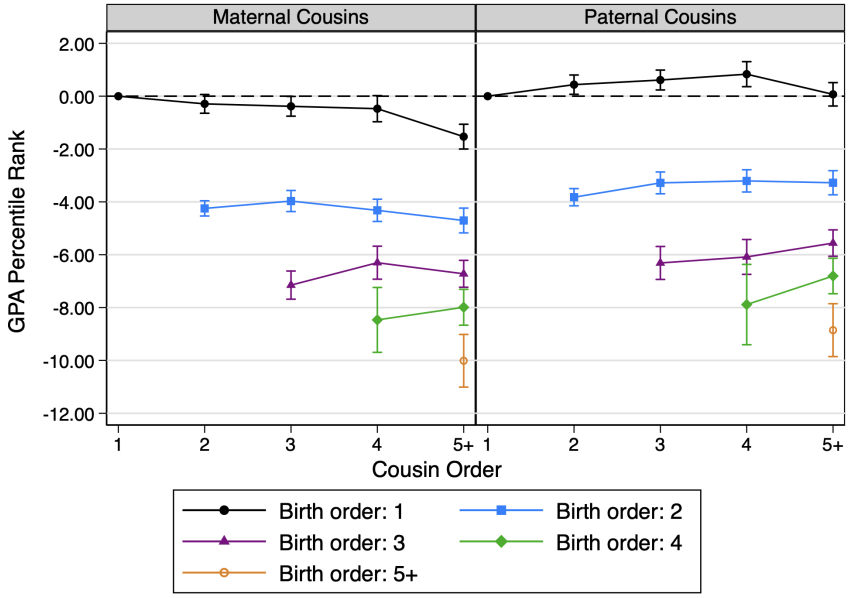

FIGURE S12. Estimates for the relationship between maternal and paternal cousin group size, birth order, and grade point average (GPA) rank at age 16 amongst Swedish women, born 1972-2003. Based upon estimates from Models 7 and 8. Error bars are 95% confidence intervals.

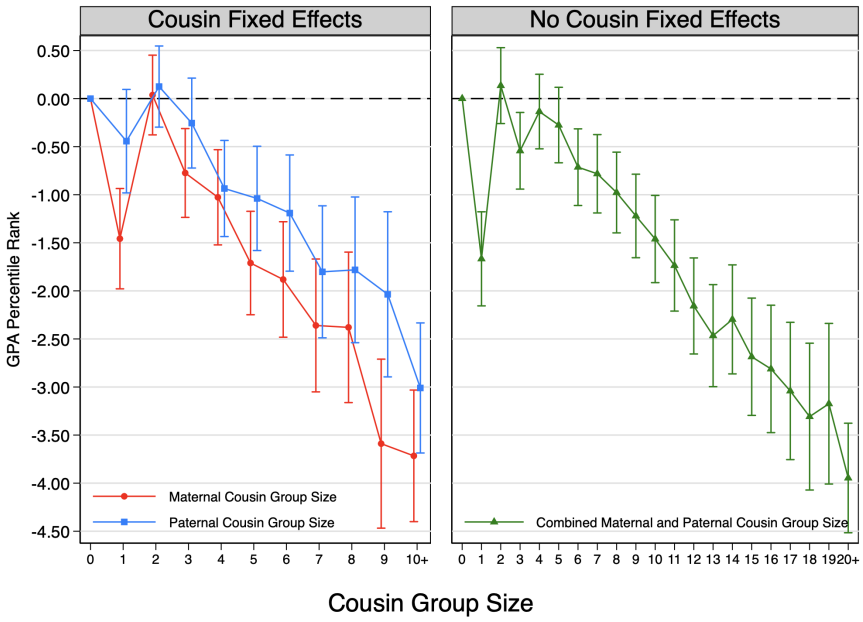

FIGURE S13. Estimates for the relationship between cousin group size and grade point average (GPA) rank at age 16 amongst Swedish men, born 1972-2003. Based upon estimates from Models 9-11. Error bars are 95% confidence intervals.

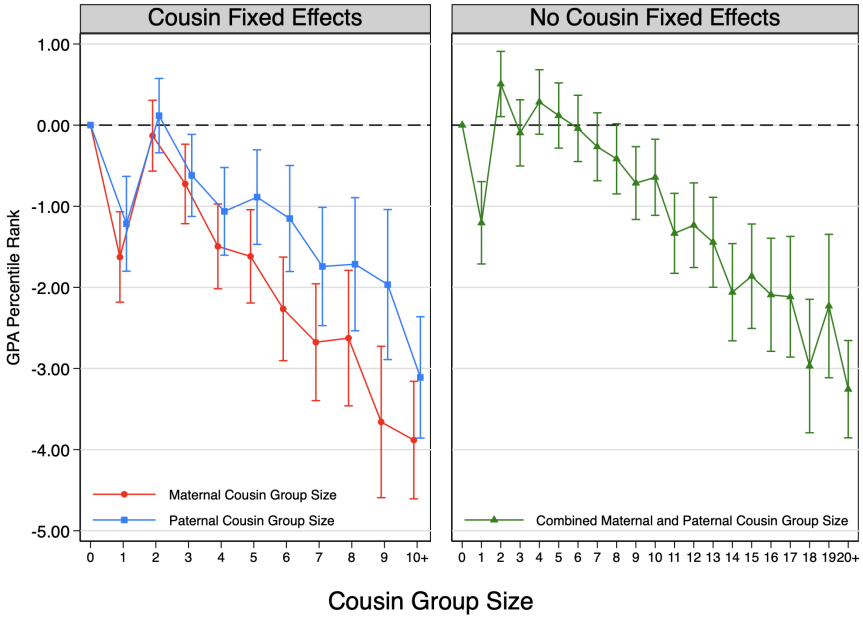

FIGURE S14. Estimates for the relationship between cousin group size and grade point average (GPA) rank at age 16 amongst Swedish women, born 1972-2003. Based upon estimates from Models 9-11. Error bars are 95% confidence intervals.

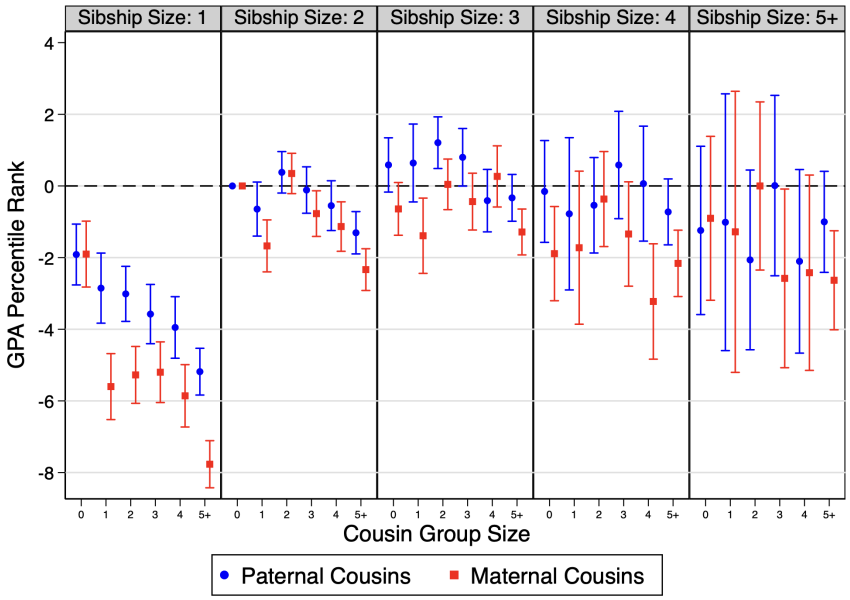

FIGURE S15. Estimates for the relationship between sibling group size, cousin group size, and grade point average (GPA) rank at age 16 amongst Swedish men, born 1972-2003. Based up-on estimates from Models 12 and 13. Error bars are 95% confidence intervals.

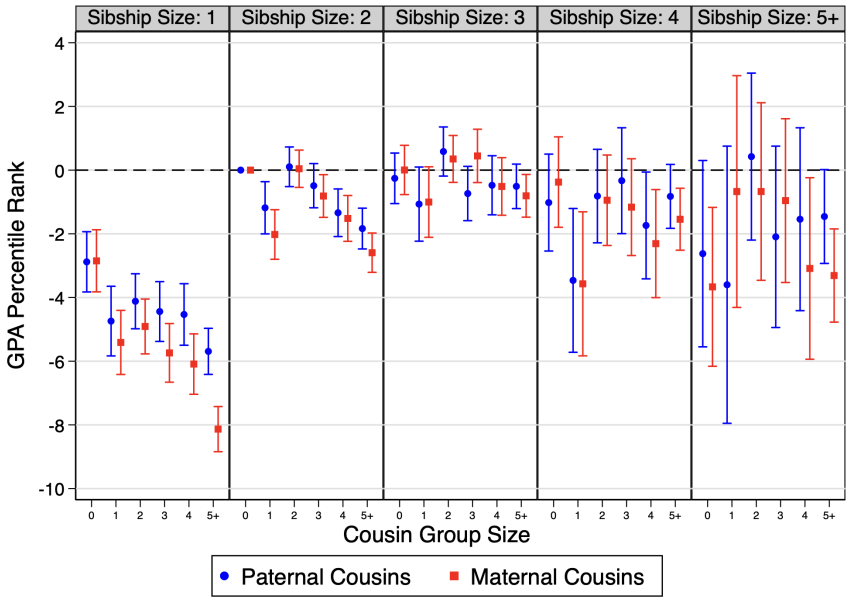

FIGURE S16. Estimates for the relationship between sibling group size, cousin group size, and grade point average (GPA) rank at age 16 amongst Swedish women, born 1972-2003. Based up-on estimates from Models 12 and 13. Error bars are 95% confidence intervals.

Supplementary Tables

TABLE S1. Descriptive statistics showing the distribution of key variables by categories of maternal and paternal cousin order, Swedish men and women, born 1972–2003.

			Cousin Order										
Grandparents			1	2	3	4	5	6	7	8	9	10+	All
Maternal	N		586,209	531,769	365,518	267,908	181,691	121,823	82,221	55,424	38,108	95,638	2,326,309
	%		25.20	22.86	15.71	11.52	7.81	5.24	3.53	2.38	1.64	4.11	100.00
	GPA Rank	Mean	55.19	53.29	53.52	53.54	52.90	52.38	51.66	50.99	50.41	48.27	53.39
	Sex	Mean	1.49	1.49	1.49	1.48	1.49	1.49	1.49	1.49	1.49	1.49	1.49
	Maternal cousin order	Mean	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	12.98	3.46
	Paternal cousin order	Mean	2.67	3.69	4.04	4.27	4.56	4.76	4.91	5.08	5.22	5.76	3.86
	Maternal cousin group size	Mean	2.13	2.26	3.04	3.80	4.70	5.67	6.69	7.70	8.76	13.17	3.74
	Paternal cousin group size	Mean	3.73	3.73	3.85	3.87	3.99	4.11	4.23	4.33	4.44	5.01	3.90
	Birth order	Mean	1.00	1.69	1.81	1.92	2.06	2.13	2.18	2.24	2.29	2.42	1.68
	Sibling group size	Mean	2.10	2.28	2.42	2.43	2.54	2.60	2.65	2.71	2.76	2.93	2.37
	Birth year	Mean	1987.87	1987.84	1987.92	1987.94	1987.80	1987.72	1987.60	1987.44	1987.36	1987.08	1987.81
	Parental Education	Predicted GPA values	164.83	157.70	153.56	150.47	146.83	143.88	140.86	137.97	135.30	128.29	153.80
	Father Log Income	Mean	3.82	3.83	3.82	3.82	3.81	3.80	3.78	3.77	3.76	3.72	3.81
	Mother Log Income	Mean	3.63	3.60	3.58	3.58	3.56	3.54	3.53	3.51	3.50	3.46	3.58
	Maternal Grandparents Education	Predicted GPA values	164.29	158.53	153.99	150.55	146.87	143.64	140.70	137.56	135.03	127.36	153.86
	Maternal Grandfather Log Income	Mean	2.99	2.90	2.82	2.76	2.69	2.64	2.59	2.54	2.49	2.36	2.82
	Maternal Grandmother Log Income	Mean	3.57	3.55	3.53	3.52	3.50	3.47	3.45	3.42	3.39	3.30	3.52
	Paternal Grandparents Education	Predicted GPA values	159.93	155.33	153.35	151.92	150.04	148.81	147.72	146.29	145.21	142.35	153.85
	Paternal Grandfather Log Income	Mean	2.84	2.76	2.72	2.70	2.67	2.64	2.62	2.60	2.58	2.54	2.73
	Paternal Grandmother Log Income	Mean	3.54	3.52	3.51	3.50	3.49	3.47	3.46	3.45	3.43	3.39	3.51
Paternal	N		504,200	463,822	366,774	291,232	207,708	144,631	100,578	70,276	48,566	128,522	2,326,309
	%		21.67	19.94	15.77	12.52	8.93	6.22	4.32	3.02	2.09	5.52	100.00
	GPA Rank	Mean	54.70	53.66	54.19	53.96	53.28	52.73	52.01	51.12	50.37	48.04	53.39
	Sex	Mean	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49
	Maternal cousin order	Mean	2.31	3.23	3.46	3.70	4.00	4.17	4.33	4.46	4.60	5.06	3.46
	Paternal cousin order	Mean	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	13.08	3.86
	Maternal cousin group size	Mean	3.52	3.53	3.64	3.67	3.80	3.91	4.04	4.12	4.26	4.78	3.74
	Paternal cousin group size	Mean	1.93	2.10	2.91	3.66	4.51	5.49	6.48	7.50	8.56	12.96	3.90
	Birth order	Mean	1.00	1.65	1.70	1.84	1.99	2.05	2.11	2.16	2.21	2.35	1.68
	Sibling group size	Mean	2.06	2.27	2.37	2.40	2.52	2.57	2.62	2.68	2.73	2.90	2.37
	Birth year	Mean	1987.95	1987.70	1987.80	1987.89	1987.87	1987.82	1987.77	1987.71	1987.61	1987.48	1987.81
	Parental Education	Predicted GPA values	164.86	157.61	154.64	152.21	148.97	146.54	144.18	142.05	139.44	133.24	153.80
	Father Log Income	Mean	3.84	3.84	3.83	3.82	3.81	3.79	3.77	3.76	3.74	3.69	3.81
	Mother Log Income	Mean	3.62	3.60	3.59	3.58	3.57	3.56	3.55	3.54	3.53	3.50	3.58
	Maternal Grandparents Education	Predicted GPA values	159.75	155.22	154.02	152.87	151.35	150.32	149.37	148.52	147.25	144.63	153.86
	Maternal Grandfather Log Income	Mean	2.92	2.84	2.81	2.79	2.77	2.76	2.74	2.73	2.71	2.68	2.82
	Maternal Grandmother Log Income	Mean	3.55	3.54	3.53	3.53	3.52	3.50	3.49	3.48	3.46	3.43	3.52
	Paternal Grandparents Education	Predicted GPA values	165.19	159.12	155.08	152.21	148.81	145.62	142.64	140.18	137.48	130.34	153.85
	Paternal Grandfather Log Income	Mean	2.93	2.83	2.76	2.70	2.64	2.58	2.54	2.49	2.44	2.31	2.73
	Paternal Grandmother Log Income	Mean	3.56	3.54	3.53	3.51	3.49	3.46	3.44	3.41	3.38	3.28	3.51

TABLE S2. Title

Grandparents			Cousin Group Size											
			0	1	2	3	4	5	6	7	8	9	10+	All
Maternal	N		412,960	185,256	459,773	306,777	249,071	194,149	140,172	98,844	71,130	52,116	156,061	2,326,309
	%		17.75	7.96	19.76	13.19	10.71	8.35	6.03	4.25	3.06	2.24	6.71	100.00
	GPA Rank	Mean	55.57	51.45	55.98	54.07	53.33	52.95	52.07	50.96	49.88	49.36	47.22	53.39
	Sex	Mean	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49
	Maternal cousin order	Mean	1.69	2.01	2.50	2.99	3.45	3.98	4.54	5.10	5.69	6.30	9.10	3.46
	Paternal cousin order	Mean	3.75	3.66	3.66	3.78	3.81	3.92	3.98	4.08	4.19	4.25	4.66	3.86
	Maternal cousin group size	Mean	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	13.63	3.74
	Paternal cousin group size	Mean	3.59	3.75	3.61	3.81	3.87	4.01	4.07	4.23	4.33	4.46	5.10	3.90
	Birth order	Mean	1.69	1.58	1.64	1.66	1.66	1.69	1.71	1.73	1.75	1.77	1.85	1.68
	Sibling group size	Mean	2.39	2.20	2.31	2.34	2.34	2.37	2.41	2.43	2.46	2.47	2.62	2.37
	Birth year	Mean	1988.07	1988.68	1988.99	1988.25	1988.04	1987.58	1986.97	1986.52	1986.03	1985.72	1984.68	1987.81
	Parental Education	Predicted GPA values	154.73	156.99	160.62	157.38	155.91	153.97	150.57	147.32	144.02	141.52	132.39	153.80
	Father Log Income	Mean	3.84	3.80	3.86	3.83	3.82	3.81	3.79	3.77	3.76	3.74	3.71	3.81
	Mother Log Income	Mean	3.58	3.59	3.61	3.60	3.59	3.59	3.57	3.56	3.54	3.53	3.49	3.58
	Maternal Grandparents Education	Predicted GPA values	153.40	156.82	159.63	157.30	156.13	154.62	151.84	148.65	146.28	143.70	135.22	153.86
	Maternal Grandfather Log Income	Mean	2.86	2.90	2.89	2.86	2.83	2.80	2.76	2.72	2.68	2.63	2.51	2.82
	Maternal Grandmother Log Income	Mean	3.51	3.53	3.58	3.56	3.55	3.54	3.52	3.49	3.46	3.44	3.34	3.52
	Paternal Grandparents Education	Predicted GPA values	154.43	155.81	157.72	155.56	154.81	153.77	151.67	149.96	148.43	146.94	142.97	153.85
	Paternal Grandfather Log Income	Mean	2.74	2.79	2.79	2.76	2.76	2.73	2.70	2.68	2.66	2.62	2.56	2.73
	Paternal Grandmother Log Income	Mean	3.52	3.51	3.54	3.52	3.51	3.50	3.48	3.47	3.45	3.44	3.39	3.51
Paternal	N		400,545	172,704	444,731	301,731	251,202	199,391	145,322	104,737	76,551	55,482	173,913	2,326,309
	%		17.22	7.42	19.12	12.97	10.80	8.57	6.25	4.50	3.29	2.38	7.48	100.00
	GPA Rank	Mean	54.95	52.32	55.87	54.34	53.53	53.37	52.44	51.31	50.55	49.77	47.11	53.39
	Sex	Mean	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49	1.49
	Maternal cousin order	Mean	3.38	3.31	3.30	3.39	3.41	3.47	3.56	3.62	3.68	3.76	4.09	3.46
	Paternal cousin order	Mean	1.68	2.11	2.69	3.27	3.78	4.38	5.00	5.67	6.30	6.94	10.11	3.86
	Maternal cousin group size	Mean	3.47	3.57	3.45	3.62	3.68	3.77	3.93	4.01	4.12	4.22	4.83	3.74
	Paternal cousin group size	Mean	0.00	1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00	9.00	13.72	3.90
	Birth order	Mean	1.68	1.61	1.64	1.67	1.66	1.68	1.70	1.72	1.74	1.75	1.84	1.68
	Sibling group size	Mean	2.36	2.25	2.32	2.35	2.34	2.37	2.40	2.41	2.43	2.45	2.61	2.37
	Birth year	Mean	1987.84	1988.56	1988.89	1988.29	1988.10	1987.75	1987.28	1986.84	1986.32	1986.06	1985.24	1987.81
	Parental Education	Predicted GPA values	155.15	156.49	160.35	157.53	155.41	154.12	151.27	148.19	144.78	143.14	134.95	153.80
	Father Log Income	Mean	3.83	3.80	3.86	3.84	3.83	3.82	3.80	3.78	3.76	3.74	3.68	3.81
	Mother Log Income	Mean	3.58	3.60	3.61	3.60	3.60	3.59	3.58	3.57	3.55	3.54	3.51	3.58
	Maternal Grandparents Education	Predicted GPA values	153.53	155.85	157.34	155.78	154.99	154.28	152.91	151.19	149.43	148.74	144.35	153.86
	Maternal Grandfather Log Income	Mean	2.80	2.86	2.86	2.84	2.84	2.82	2.80	2.78	2.76	2.74	2.70	2.82
	Maternal Grandmother Log Income	Mean	3.53	3.54	3.55	3.54	3.53	3.52	3.52	3.50	3.48	3.47	3.42	3.52
	Paternal Grandparents Education	Predicted GPA values	153.10	155.89	159.66	157.34	156.34	155.25	152.49	149.63	147.20	145.18	136.78	153.85
	Paternal Grandfather Log Income	Mean	2.79	2.82	2.82	2.78	2.75	2.73	2.69	2.64	2.60	2.56	2.42	2.73
	Paternal Grandmother Log Income	Mean	3.49	3.51	3.56	3.54	3.54	3.53	3.50	3.47	3.45	3.42	3.31	3.51

TABLE S3. The relationship between maternal and paternal cousin order and GPA percentile rank, cohorts born 1972-2003 in Sweden. Estimates based on sibling fixed effects model (Model 1).

Variable	Category	β	SE	95% CI
Combined	1 (ref)	0.000		
Cousin Order	2	-0.278	0.143	-0.558, 0.003
	3	-0.498	0.113	-0.718, -0.277
	4	-0.756	0.132	-1.014, -0.498
	5	-0.807	0.142	-1.086, -0.529
	6	-0.863	0.157	-1.169, -0.556
	7	-1.091	0.170	-1.424, -0.759
	8	-1.050	0.184	-1.411, -0.688
	9	-1.129	0.196	-1.513, -0.746
	10	-1.288	0.218	-1.715, -0.861
Birth Order	1 (ref)	0.000		
	2	-4.556	0.078	-4.709, -4.404
	3	-7.745	0.152	-8.042, -7.447
	4	-9.847	0.232	-10.301, -9.393
	5	-11.931	0.359	-12.634, -11.228
	6	-12.696	0.556	-13.786, -11.606
	7	-13.663	0.867	-15.363, -11.963
	8	-16.366	1.262	-18.839, -13.893
	9	-15.883	1.893	-19.592, -12.173
	10	-13.376	2.472	-18.220, -8.532
Sex	Male (ref)	0.000		
	Female	11.863	0.047	11.771, 11.956
Birth Year	1972	-9.369	0.364	-10.083, -8.655
	1973	-9.068	0.345	-9.745, -8.391
	1974	-8.368	0.323	-9.001, -7.735
	1975	-7.869	0.307	-8.472, -7.267
	1976	-7.343	0.293	-7.917, -6.769
	1977	-6.832	0.279	-7.379, -6.285
	1978	-6.067	0.268	-6.592, -5.542
	1979	-5.525	0.254	-6.023, -5.028
	1980	-5.335	0.242	-5.810, -4.861
	1981	-4.629	0.231	-5.081, -4.176
	1982	-4.327	0.219	-4.755, -3.898
	1983	-3.458	0.207	-3.863, -3.052
	1984	-3.414	0.195	-3.797, -3.031
	1985	-2.484	0.182	-2.841, -2.127
	1986	-1.843	0.172	-2.180, -1.507
	1987	-1.383	0.162	-1.700, -1.066
	1988	-1.002	0.148	-1.293, -0.711
	1989	-0.301	0.151	-0.598, -0.004
	1990 (ref)	0.000		
	1991	0.358	0.150	0.063, 0.652
	1992	0.579	0.147	0.291, 0.868
	1993	1.017	0.160	0.703, 1.331
	1994	1.047	0.173	0.709, 1.386
	1995	1.392	0.188	1.023, 1.761
	1996	1.499	0.202	1.103, 1.895
	1997	1.474	0.218	1.048, 1.901
	1998	1.872	0.230	1.422, 2.322
	1999	1.921	0.245	1.441, 2.401
	2000	2.408	0.260	1.899, 2.918
	2001	3.171	0.279	2.624, 3.717
	2002	2.918	0.302	2.327, 3.510
	2003	3.640	0.322	3.009, 4.270
N			1,591,979	

Table S4: The relationship between maternal and paternal cousin order and GPA percentile rank, cohorts born 1972-2003 in Sweden. Estimates based on sibling fixed effects model (Model 2).

Variable	Category	β	SE	95% CI
Maternal	1 (ref)	0.000		
Cousin Order	2	-0.602	0.086	-0.772, -0.433
	3	-0.731	0.116	-0.958, -0.504
	4	-0.922	0.152	-1.219, -0.624
	5	-1.092	0.183	-1.451, -0.734
	6	-1.131	0.215	-1.553, -0.708
	7	-1.208	0.248	-1.694, -0.723
	8	-1.368	0.282	-1.919, -0.816
	9	-1.169	0.315	-1.787, -0.552
	10	-1.473	0.352	-2.163, -0.783
Paternal	1 (ref)	0.000		
Cousin Order	2	-0.108	0.088	-0.281, 0.064
	3	-0.152	0.113	-0.373, 0.069
	4	-0.377	0.146	-0.663, -0.092
	5	-0.474	0.175	-0.817, -0.131
	6	-0.249	0.206	-0.652, 0.154
	7	-0.359	0.237	-0.823, 0.105
	8	-0.379	0.268	-0.903, 0.146
	9	-0.381	0.300	-0.970, 0.208
	10	-0.266	0.337	-0.927, 0.394
Birth Order	1 (ref)	0.000		
	2	-4.407	0.091	-4.586, -4.229
	3	-7.549	0.173	-7.889, -7.209
	4	-9.602	0.266	-10.123, -9.081
	5	-11.627	0.398	-12.406, -10.847
	6	-12.360	0.591	-13.519, -11.201
	7	-13.306	0.894	-15.058, -11.553
	8	-15.982	1.284	-18.500, -13.465
	9	-15.504	1.907	-19.242, -11.765
	10	-12.996	2.481	-17.858, -8.134
Sex	Male (ref)	0.000		
	Female	11.864	0.047	11.772, 11.956
Birth Year	1972	-9.462	0.378	-10.202, -8.722
	1973	-9.157	0.358	-9.858, -8.456
	1974	-8.454	0.334	-9.110, -7.798
	1975	-7.948	0.318	-8.571, -7.325
	1976	-7.420	0.303	-8.012, -6.827
	1977	-6.902	0.288	-7.466, -6.338
	1978	-6.132	0.276	-6.672, -5.592
	1979	-5.586	0.261	-6.097, -5.075
	1980	-5.393	0.248	-5.879, -4.907
	1981	-4.680	0.236	-5.143, -4.217

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Table S4 – *Continued from previous page*

		β	SE	95% CI
	1982	-4.374	0.223	-4.811, -3.937
	1983	-3.500	0.210	-3.912, -3.087
	1984	-3.451	0.198	-3.840, -3.063
	1985	-2.516	0.184	-2.878, -2.155
	1986	-1.869	0.173	-2.209, -1.530
	1987	-1.401	0.163	-1.720, -1.082
	1988	-1.015	0.149	-1.307, -0.723
	1989	-0.307	0.152	-0.604, -0.010
	1990 (ref)	0.000		
	1991	0.363	0.150	0.068, 0.658
	1992	0.593	0.148	0.303, 0.882
	1993	1.035	0.161	0.719, 1.351
	1994	1.069	0.174	0.727, 1.410
	1995	1.421	0.190	1.048, 1.794
	1996	1.530	0.205	1.129, 1.930
	1997	1.511	0.221	1.079, 1.944
	1998	1.912	0.233	1.455, 2.368
	1999	1.967	0.249	1.480, 2.455
	2000	2.457	0.264	1.939, 2.974
	2001	3.227	0.283	2.671, 3.782
	2002	2.980	0.307	2.379, 3.582
	2003	3.704	0.327	3.063, 4.345
N			1,591,979	

Table S5: The relationship between maternal and paternal cousin order and GPA percentile rank, cohorts born 1972–2003 in Sweden. Estimates based on maternal cousin fixed effects model (Model 3).

Variable	Category	β	SE	95% CI
Maternal	1 (ref)	0.000		
Cousin Order	2	-1.042	0.075	-1.190, -0.895
	3	-1.310	0.097	-1.499, -1.120
	4	-1.753	0.124	-1.997, -1.509
	5	-2.173	0.149	-2.465, -1.881
	6	-2.586	0.175	-2.928, -2.244
	7	-2.993	0.201	-3.388, -2.599
	8	-3.239	0.230	-3.689, -2.789
	9	-3.974	0.259	-4.481, -3.466
	10	-4.970	0.281	-5.521, -4.419
Paternal	1 (ref)	0.000		
Cousin Order	2	-0.033	0.072	-0.175, 0.108
	3	0.258	0.090	0.081, 0.435
	4	0.259	0.113	0.038, 0.480
	5	0.433	0.132	0.175, 0.691
	6	0.839	0.153	0.540, 1.138
	7	0.877	0.175	0.534, 1.220
	8	1.202	0.199	0.812, 1.592
	9	1.406	0.227	0.962, 1.850
	10	1.652	0.236	1.191, 2.114
Paternal	0	0.745	0.185	0.382, 1.107
Cousin Group Size	1 (ref)	0.000		
	2	0.887	0.180	0.535, 1.239
	3	0.318	0.191	-0.056, 0.692
	4	-0.093	0.199	-0.482, 0.296
	5	-0.112	0.210	-0.523, 0.300
	6	-0.454	0.229	-0.903, -0.005
	7	-0.933	0.252	-1.427, -0.439
	8	-1.048	0.280	-1.596, -0.500
	9	-0.953	0.310	-1.560, -0.346
	10	-2.021	0.252	-2.514, -1.527
Birth Order	1 (ref)	0.000		
	2	-3.550	0.062	-3.671, -3.429
	3	-5.615	0.101	-5.813, -5.417
	4	-6.656	0.173	-6.995, -6.317
	5	-7.514	0.315	-8.131, -6.896
	6	-7.772	0.541	-8.833, -6.712
	7	-8.793	0.932	-10.619, -6.967
	8	-9.750	1.377	-12.450, -7.050
	9	-9.596	1.983	-13.482, -5.709
	10	-4.950	2.900	-10.635, 0.734
Sibling	1	-3.412	0.109	-3.625, -3.198

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Table S5 – *Continued from previous page*

		β	SE	95% CI
Group Size	2 (ref)	0.000		
	3	0.665	0.113	0.443, 0.887
	4	0.087	0.208	-0.320, 0.494
	5	-0.586	0.420	-1.410, 0.238
	6	-0.471	0.770	-1.980, 1.038
	7	0.184	1.305	-2.374, 2.742
	8	1.847	2.320	-2.701, 6.394
	9	-3.886	2.884	-9.539, 1.767
	10	-3.873	2.777	-9.316, 1.570
Sex	Male (ref)	0.000		
	Female	12.024	0.044	11.937, 12.111
Birth Year	1972	-4.226	0.270	-4.754, -3.697
	1973	-3.821	0.258	-4.326, -3.315
	1974	-3.855	0.243	-4.331, -3.379
	1975	-3.569	0.234	-4.027, -3.110
	1976	-3.497	0.225	-3.939, -3.056
	1977	-3.105	0.216	-3.529, -2.681
	1978	-2.781	0.211	-3.194, -2.368
	1979	-2.564	0.201	-2.959, -2.169
	1980	-2.619	0.194	-3.000, -2.239
	1981	-2.331	0.189	-2.701, -1.961
	1982	-2.321	0.181	-2.675, -1.967
	1983	-1.858	0.175	-2.200, -1.515
	1984	-1.792	0.169	-2.122, -1.462
	1985	-1.469	0.160	-1.783, -1.154
	1986	-1.062	0.155	-1.365, -0.759
	1987	-0.865	0.149	-1.157, -0.573
	1988	-0.638	0.140	-0.912, -0.363
	1989	-0.366	0.144	-0.649, -0.083
	1990 (ref)	0.000		
	1991	0.093	0.143	-0.187, 0.373
	1992	0.057	0.138	-0.214, 0.327
	1993	0.305	0.147	0.018, 0.592
	1994	0.381	0.153	0.081, 0.682
	1995	0.439	0.162	0.121, 0.757
	1996	0.424	0.170	0.090, 0.757
	1997	0.200	0.178	-0.149, 0.549
	1998	0.415	0.184	0.055, 0.776
	1999	0.604	0.191	0.230, 0.978
	2000	0.928	0.199	0.538, 1.317
	2001	1.429	0.208	1.022, 1.836
	2002	1.104	0.220	0.673, 1.535
	2003	1.325	0.229	0.875, 1.774
Parental Education	Predicted GPA values	0.047	0.001	0.044, 0.049

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Table S5 – *Continued from previous page*

		β	SE	95% CI
Father Log Income		8.187	0.124	7.944, 8.430
Mother Log Income		3.637	0.182	3.281, 3.994
Paternal Grandparents Education	Predicted GPA values	0.021	0.001	0.018, 0.024
Paternal Grandfather Log Income		-0.994	0.053	-1.098, -0.889
Paternal Grandmother Log Income		1.239	0.110	1.023, 1.455
N			1,555,714	

Table S6: The relationship between maternal and paternal cousin order and GPA percentile rank, cohorts born 1972–2003 in Sweden. Estimates based on paternal cousin fixed effects model (Model 4).

Variable	Category	β	SE	95% CI
Maternal	1 (ref)	0.000		
Cousin Order	2	-0.620	0.072	-0.760, -0.479
	3	-0.404	0.091	-0.583, -0.225
	4	-0.183	0.115	-0.408, 0.043
	5	-0.051	0.135	-0.316, 0.215
	6	0.340	0.158	0.030, 0.649
	7	0.540	0.182	0.183, 0.898
	8	0.558	0.210	0.148, 0.969
	9	0.850	0.238	0.383, 1.317
	10	1.166	0.245	0.686, 1.646
Paternal	1 (ref)	0.000		
Cousin Order	2	-0.017	0.078	-0.170, 0.137
	3	0.097	0.096	-0.092, 0.285
	4	-0.227	0.121	-0.463, 0.010
	5	-0.462	0.144	-0.744, -0.180
	6	-0.548	0.168	-0.877, -0.220
	7	-0.839	0.192	-1.216, -0.462
	8	-1.179	0.217	-1.605, -0.753
	9	-1.203	0.245	-1.684, -0.723
	10	-1.860	0.268	-2.386, -1.334
Paternal	0	1.607	0.179	1.257, 1.957
Cousin Group Size	1 (ref)	0.000		
	2	1.489	0.172	1.152, 1.826
	3	0.722	0.184	0.361, 1.083
	4	0.351	0.193	-0.027, 0.730
	5	-0.172	0.206	-0.575, 0.231
	6	-0.461	0.225	-0.902, -0.020
	7	-0.948	0.252	-1.443, -0.454
	8	-1.012	0.283	-1.567, -0.457
	9	-1.954	0.314	-2.570, -1.339
	10	-2.404	0.248	-2.891, -1.918
Birth Order	1 (ref)	0.000		
	2	-3.752	0.063	-3.875, -3.628
	3	-6.013	0.103	-6.215, -5.811
	4	-7.135	0.174	-7.475, -6.794
	5	-8.230	0.312	-8.843, -7.618
	6	-7.739	0.534	-8.785, -6.693
	7	-9.120	0.914	-10.910, -7.329
	8	-12.173	1.382	-14.881, -9.465
	9	-10.841	1.937	-14.637, -7.045
	10	-7.295	2.737	-12.659, -1.931
Sibling	1	-4.687	0.108	-4.899, -4.475

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Table S6 – *Continued from previous page*

		β	SE	95% CI
Group Size	2 (ref)	0.000		
	3	0.590	0.111	0.373, 0.808
	4	-0.234	0.203	-0.631, 0.164
	5	-0.694	0.413	-1.505, 0.116
	6	-1.229	0.770	-2.739, 0.281
	7	-2.121	1.318	-4.705, 0.463
	8	1.189	1.824	-2.387, 4.764
	9	0.868	2.521	-4.072, 5.808
	10	2.943	2.496	-1.948, 7.834
Sex	Male (ref)	0.000		
	Female	12.013	0.044	11.926, 12.099
Birth Year	1972	-3.072	0.254	-3.570, -2.575
	1973	-2.839	0.243	-3.314, -2.363
	1974	-2.625	0.230	-3.076, -2.174
	1975	-2.580	0.222	-3.016, -2.145
	1976	-2.731	0.215	-3.152, -2.309
	1977	-2.429	0.207	-2.835, -2.023
	1978	-2.081	0.203	-2.478, -1.684
	1979	-1.930	0.194	-2.309, -1.550
	1980	-2.090	0.188	-2.458, -1.723
	1981	-1.928	0.184	-2.288, -1.568
	1982	-1.766	0.177	-2.113, -1.418
	1983	-1.469	0.172	-1.806, -1.132
	1984	-1.505	0.166	-1.831, -1.179
	1985	-1.143	0.160	-1.456, -0.830
	1986	-0.911	0.154	-1.212, -0.609
	1987	-0.819	0.148	-1.109, -0.529
	1988	-0.532	0.140	-0.806, -0.258
	1989	-0.273	0.144	-0.555, 0.010
	1990 (ref)	0.000		
	1991	0.092	0.143	-0.188, 0.372
	1992	0.042	0.138	-0.227, 0.312
	1993	0.334	0.146	0.048, 0.620
	1994	0.266	0.153	-0.033, 0.564
	1995	0.385	0.160	0.071, 0.699
	1996	0.318	0.168	-0.012, 0.648
	1997	0.092	0.176	-0.254, 0.438
	1998	0.088	0.180	-0.265, 0.441
	1999	0.267	0.187	-0.099, 0.633
	2000	0.490	0.193	0.111, 0.868
	2001	1.055	0.204	0.656, 1.454
	2002	0.889	0.214	0.469, 1.309
	2003	0.857	0.222	0.423, 1.292
Parental Education	Predicted GPA values	0.029	0.001	0.027, 0.032

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Table S6 – *Continued from previous page*

		β	SE	95% CI
Father Log Income		8.082	0.156	7.777, 8.387
Mother Log Income		7.067	0.152	6.770, 7.365
Maternal Grandparents Education	Predicted GPA values	0.007	0.002	0.004, 0.010
Maternal Grandfather Log Income		-1.390	0.057	-1.502, -1.278
Maternal Grandmother Log Income		2.352	0.113	2.130, 2.573
N			1,592,165	

Table S7: The relationship between maternal and paternal cousin order and GPA percentile rank amongst 'only children', cohorts born 1972–2003 in Sweden. Estimates based on maternal cousin fixed effects model (Model 5).

Variable	Category	β	SE	95% CI
Maternal	1 (ref)	0.000		
Cousin Order	2	-1.159	0.299	-1.746, -0.573
	3	-1.537	0.434	-2.387, -0.687
	4	-2.010	0.514	-3.018, -1.003
	5	-2.655	0.623	-3.876, -1.434
Paternal	1 (ref)	0.000		
Cousin Order	2	-0.262	0.372	-0.992, 0.467
	3	1.143	0.386	0.386, 1.899
	4	0.966	0.468	0.049, 1.883
	5	0.876	0.437	0.018, 1.733
Paternal	0	1.527	0.531	0.487, 2.567
Cousin Group Size	1 (ref)	0.000		
	2	0.094	0.497	-0.881, 1.068
	3	-0.289	0.517	-1.302, 0.725
	4	-0.436	0.525	-1.465, 0.592
	5	-0.836	0.560	-1.933, 0.261
	6	-1.772	0.599	-2.947, -0.598
	7	-0.832	0.657	-2.119, 0.455
	8	-0.658	0.718	-2.065, 0.749
	9	-0.275	0.784	-1.812, 1.262
	10	-2.577	0.615	-3.782, -1.372
Sex	Male (ref)	0.000		
	Female	10.703	0.224	10.265, 11.142
Birth Year	1972	-3.598	1.091	-5.736, -1.460
	1973	-2.421	1.072	-4.523, -0.320
	1974	-4.542	0.996	-6.494, -2.590
	1975	-3.324	0.988	-5.260, -1.388
	1976	-2.337	0.983	-4.264, -0.409
	1977	-2.857	0.959	-4.736, -0.979
	1978	-1.510	0.939	-3.351, 0.331
	1979	-3.749	0.934	-5.580, -1.918
	1980	-1.999	0.878	-3.721, -0.278
	1981	-3.055	0.879	-4.777, -1.333
	1982	-1.163	0.854	-2.837, 0.510
	1983	-2.496	0.851	-4.163, -0.829
	1984	-1.083	0.834	-2.718, 0.551
	1985	-1.562	0.795	-3.119, -0.004
	1986	-0.697	0.779	-2.223, 0.829
	1987	-0.331	0.787	-1.873, 1.210
	1988	-0.830	0.757	-2.315, 0.654
	1989	0.171	0.752	-1.303, 1.646
	1990 (ref)	0.000		

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Table S7 – *Continued from previous page*

		β	SE	95% CI
	1991	1.003	0.754	-0.474, 2.479
	1992	-0.627	0.754	-2.105, 0.852
	1993	1.329	0.779	-0.198, 2.856
	1994	1.115	0.762	-0.379, 2.609
	1995	0.613	0.787	-0.930, 2.155
	1996	-0.483	0.820	-2.090, 1.124
	1997	1.343	0.817	-0.258, 2.944
	1998	0.221	0.879	-1.502, 1.945
	1999	0.802	0.902	-0.965, 2.569
	2000	1.320	0.904	-0.451, 3.091
	2001	2.757	0.909	0.975, 4.540
	2002	-0.052	0.947	-1.909, 1.804
	2003	1.484	0.979	-0.435, 3.402
Parental Education	Predicted GPA values	0.039	0.004	0.032, 0.047
Father Log Income		6.076	0.306	5.476, 6.676
Mother Log Income		4.633	0.783	3.097, 6.168
Paternal Grandparents Education	Predicted GPA values	0.019	0.004	0.012, 0.027
Paternal Grandfather Log Income		-0.704	0.159	-1.016, -0.392
Paternal Grandmother Log Income		1.437	0.301	0.848, 2.027
N			227,764	

Table S8: The relationship between maternal and paternal cousin order and GPA percentile rank amongst 'only children', cohorts born 1972–2003 in Sweden. Estimates based on paternal cousin fixed effects model (Model 6).

Variable	Category	β	SE	95% CI
Maternal	1 (ref)	0.000		
Cousin Order	2	-1.060	0.403	-1.850, -0.270
	3	-0.200	0.441	-1.065, 0.665
	4	-0.650	0.546	-1.720, 0.420
	5	-0.715	0.491	-1.678, 0.248
Paternal	1 (ref)	0.000		
Cousin Order	2	0.477	0.356	-0.221, 1.174
	3	0.582	0.496	-0.390, 1.553
	4	1.006	0.562	-0.095, 2.107
	5	0.308	0.667	-0.999, 1.615
Paternal	0	3.118	0.596	1.950, 4.286
Cousin Group Size	1 (ref)	0.000		
	2	0.214	0.529	-0.823, 1.252
	3	0.086	0.555	-1.002, 1.174
	4	-0.372	0.569	-1.488, 0.744
	5	-1.200	0.609	-2.394, -0.006
	6	-1.116	0.650	-2.389, 0.157
	7	-2.086	0.737	-3.530, -0.641
	8	-2.978	0.793	-4.533, -1.424
	9	-2.434	0.870	-4.139, -0.730
	10	-3.023	0.667	-4.331, -1.716
Sex	Male (ref)	0.000		
	Female	10.782	0.257	10.279, 11.285
Birth Year	1972	-2.356	1.129	-4.569, -0.143
	1973	-1.297	1.079	-3.412, 0.818
	1974	-1.408	1.064	-3.492, 0.677
	1975	-2.158	1.050	-4.215, -0.101
	1976	-1.071	1.038	-3.106, 0.963
	1977	-1.059	1.011	-3.041, 0.923
	1978	-0.913	1.028	-2.928, 1.103
	1979	-0.515	1.010	-2.494, 1.464
	1980	-2.613	0.970	-4.515, -0.712
	1981	-1.424	0.971	-3.327, 0.479
	1982	-2.311	0.952	-4.177, -0.446
	1983	-2.104	0.945	-3.956, -0.252
	1984	-1.275	0.938	-3.114, 0.563
	1985	-0.803	0.928	-2.622, 1.016
	1986	-0.447	0.890	-2.191, 1.297
	1987	-0.680	0.897	-2.439, 1.078
	1988	-1.409	0.888	-3.149, 0.331
	1989	-0.535	0.877	-2.253, 1.183
	1990 (ref)	0.000		

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Table S8 – *Continued from previous page*

		β	SE	95% CI
	1991	0.093	0.863	-1.598, 1.784
	1992	0.373	0.883	-1.358, 2.105
	1993	1.226	0.893	-0.525, 2.977
	1994	1.052	0.920	-0.752, 2.855
	1995	1.952	0.922	0.145, 3.760
	1996	1.372	0.936	-0.462, 3.205
	1997	0.534	0.961	-1.350, 2.417
	1998	-0.307	0.968	-2.205, 1.590
	1999	3.286	0.997	1.332, 5.240
	2000	1.071	1.038	-0.964, 3.106
	2001	2.711	1.048	0.657, 4.766
	2002	1.703	1.066	-0.386, 3.793
	2003	1.496	1.082	-0.625, 3.616
Parental Education	Predicted GPA values	0.015	0.006	0.005, 0.026
Father Log Income		6.284	0.604	5.100, 7.468
Mother Log Income		7.816	0.484	6.867, 8.764
Maternal Grandparents Education	Predicted GPA values	0.007	0.005	-0.003, 0.018
Maternal Grandfather Log Income		-0.894	0.196	-1.279, -0.510
Maternal Grandmother Log Income		2.298	0.348	1.616, 2.980
N			227,239	

Table S9: The relationship between GPA percentile rank and an interaction between birth order and maternal cousin order, cohorts born 1972–2003 in Sweden. Estimates based on maternal cousin fixed effects model (Model 7).

Variable	Category	β	SE	95% CI
Birth Order x	1, 1 (ref)	0.000		
Maternal	1, 2	-0.485	0.101	-0.684, -0.287
Cousin Order	1, 3	-0.526	0.111	-0.743, -0.309
Interaction	1, 4	-0.867	0.146	-1.153, -0.582
	1, 5	-1.679	0.139	-1.952, -1.407
	2, 2	-4.419	0.079	-4.574, -4.265
	2, 3	-4.143	0.113	-4.364, -3.922
	2, 4	-4.457	0.124	-4.701, -4.214
	2, 5	-4.955	0.140	-5.230, -4.679
	3, 3	-7.123	0.154	-7.424, -6.822
	3, 4	-6.425	0.180	-6.778, -6.072
	3, 5	-6.831	0.152	-7.128, -6.534
	4, 4	-8.138	0.360	-8.844, -7.432
	4, 5	-8.073	0.204	-8.472, -7.674
	5, 5	-9.321	0.310	-9.929, -8.714
Paternal	1 (ref)	0.000		
Cousin Order	2	-0.113	0.071	-0.252, 0.027
	3	0.137	0.088	-0.036, 0.309
	4	0.080	0.109	-0.134, 0.293
	5	0.387	0.127	0.139, 0.636
Paternal Cousin	0	0.714	0.185	0.352, 1.076
Group Size	1 (ref)	0.000		
	2	0.907	0.180	0.555, 1.259
	3	0.366	0.191	-0.007, 0.740
	4	-0.017	0.198	-0.406, 0.372
	5	-0.483	0.179	-0.833, -0.133
Sibling	1	-3.398	0.110	-3.613, -3.183
Group Size	2 (ref)	0.000		
	3	0.675	0.113	0.453, 0.897
	4	0.170	0.208	-0.237, 0.577
	5	-0.332	0.362	-1.042, 0.377
Sex	Male (ref)	0.000		
	Female	12.024	0.044	11.937, 12.110
Birth Year	1972	-2.832	0.249	-3.320, -2.345
	1973	-2.519	0.239	-2.987, -2.052
	1974	-2.643	0.225	-3.085, -2.202
	1975	-2.439	0.218	-2.866, -2.012
	1976	-2.448	0.211	-2.861, -2.035
	1977	-2.129	0.204	-2.528, -1.730
	1978	-1.873	0.199	-2.264, -1.483
	1979	-1.725	0.192	-2.101, -1.350
	1980	-1.853	0.185	-2.216, -1.490

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Table S9 – *Continued from previous page*

		β	SE	95% CI
	1981	-1.633	0.182	-1.989, -1.277
	1982	-1.698	0.175	-2.041, -1.356
	1983	-1.310	0.170	-1.643, -0.977
	1984	-1.308	0.165	-1.631, -0.985
	1985	-1.056	0.158	-1.365, -0.747
	1986	-0.724	0.153	-1.024, -0.425
	1987	-0.610	0.148	-0.899, -0.320
	1988	-0.467	0.140	-0.740, -0.193
	1989	-0.276	0.144	-0.558, 0.007
	1990 (ref)	0.000		
	1991	0.010	0.143	-0.270, 0.289
	1992	-0.113	0.138	-0.383, 0.157
	1993	0.050	0.145	-0.234, 0.335
	1994	0.051	0.151	-0.246, 0.348
	1995	0.036	0.160	-0.277, 0.349
	1996	-0.047	0.167	-0.374, 0.279
	1997	-0.342	0.174	-0.682, -0.001
	1998	-0.192	0.178	-0.541, 0.158
	1999	-0.070	0.184	-0.431, 0.291
	2000	0.183	0.191	-0.192, 0.557
	2001	0.609	0.199	0.219, 1.000
	2002	0.210	0.210	-0.202, 0.622
	2003	0.346	0.219	-0.082, 0.775
Parental Education	Predicted GPA values	0.046	0.001	0.043, 0.049
Father Log Income		8.203	0.124	7.960, 8.446
Mother Log Income		3.595	0.182	3.239, 3.952
Paternal Grandparents Education	Predicted GPA values	0.020	0.001	0.017, 0.023
Paternal Grandfather Log Income		-1.011	0.053	-1.115, -0.907
Paternal Grandmother Log Income		1.248	0.110	1.032, 1.463
N			1,555,714	

Table S10: The relationship between GPA percentile rank and an interaction between birth order and paternal cousin order, cohorts born 1972–2003 in Sweden. Estimates based on paternal cousin fixed effects model (Model 8).

Variable	Category	β	SE	95% CI
Birth Order x	1, 1 (ref)	0.000		
Paternal	1, 2	0.508	0.105	0.302, 0.715
Cousin Order	1, 3	0.610	0.112	0.391, 0.829
Interaction	1, 4	0.353	0.141	0.076, 0.630
	1, 5	-0.213	0.132	-0.472, 0.047
	2, 2	-3.816	0.090	-3.992, -3.640
	2, 3	-3.249	0.118	-3.480, -3.019
	2, 4	-3.386	0.125	-3.632, -3.141
	2, 5	-3.553	0.138	-3.823, -3.283
	3, 3	-6.103	0.180	-6.457, -5.750
	3, 4	-5.874	0.190	-6.245, -5.502
	3, 5	-5.754	0.151	-6.050, -5.458
	4, 4	-7.185	0.463	-8.093, -6.276
	4, 5	-6.925	0.201	-7.318, -6.531
	5, 5	-8.055	0.310	-8.662, -7.447
Maternal	1 (ref)	0.000		
Cousin Order	2	-0.698	0.071	-0.837, -0.560
	3	-0.536	0.089	-0.711, -0.362
	4	-0.377	0.111	-0.595, -0.158
	5	-0.124	0.131	-0.380, 0.133
Maternal Cousin	0	1.572	0.178	1.222, 1.922
Group Size	1 (ref)	0.000		
	2	1.504	0.172	1.167, 1.841
	3	0.763	0.184	0.402, 1.124
	4	0.431	0.193	0.053, 0.809
	5	-0.675	0.172	-1.011, -0.338
Sibling	1	-4.654	0.109	-4.868, -4.441
Group Size	2 (ref)	0.000		
	3	0.593	0.111	0.375, 0.810
	4	-0.229	0.202	-0.626, 0.168
	5	-0.759	0.350	-1.445, -0.073
Sex	Male (ref)	0.000		
	Female	12.013	0.044	11.927, 12.100
Birth Year	1972	-2.449	0.235	-2.909, -1.988
	1973	-2.256	0.225	-2.697, -1.815
	1974	-2.082	0.214	-2.502, -1.662
	1975	-2.074	0.208	-2.482, -1.665
	1976	-2.257	0.203	-2.654, -1.859
	1977	-1.990	0.196	-2.374, -1.606
	1978	-1.671	0.193	-2.049, -1.294
	1979	-1.553	0.185	-1.916, -1.190
	1980	-1.748	0.180	-2.101, -1.395

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Table S10 – *Continued from previous page*

		β	SE	95% CI
	1981	-1.618	0.177	-1.966, -1.271
	1982	-1.484	0.172	-1.822, -1.146
	1983	-1.220	0.168	-1.549, -0.891
	1984	-1.288	0.163	-1.608, -0.969
	1985	-0.957	0.157	-1.265, -0.648
	1986	-0.763	0.152	-1.061, -0.465
	1987	-0.702	0.147	-0.991, -0.414
	1988	-0.450	0.139	-0.723, -0.177
	1989	-0.230	0.144	-0.513, 0.052
	1990 (ref)	0.000		
	1991	0.052	0.143	-0.228, 0.332
	1992	-0.037	0.137	-0.306, 0.232
	1993	0.215	0.145	-0.068, 0.499
	1994	0.108	0.151	-0.188, 0.403
	1995	0.190	0.158	-0.120, 0.500
	1996	0.087	0.165	-0.237, 0.411
	1997	-0.175	0.173	-0.514, 0.163
	1998	-0.213	0.175	-0.557, 0.131
	1999	-0.067	0.181	-0.423, 0.288
	2000	0.119	0.187	-0.246, 0.485
	2001	0.655	0.197	0.270, 1.040
	2002	0.447	0.206	0.043, 0.851
	2003	0.376	0.212	-0.040, 0.792
Parental Education	Predicted GPA values	0.029	0.001	0.026, 0.032
Father Log Income		8.107	0.156	7.802, 8.412
Mother Log Income		7.042	0.152	6.744, 7.339
Maternal Grandparents Education	Predicted GPA values	0.007	0.002	0.004, 0.010
Maternal Grandfather Log Income		-1.398	0.057	-1.510, -1.286
Maternal Grandmother Log Income		2.371	0.113	2.150, 2.593
N			1,592,165	

Table S11: The relationship between GPA percentile rank and combined cousin group size, cohorts born 1972–2003 in Sweden. Estimates based on linear regression without family fixed effects (Model 9).

Variable	Category	β	SE	95% CI
Combined	0 (ref)	0.000		
Cousin Group Size	1	-1.440	0.194	-1.819, -1.061
	2	0.317	0.155	0.013, 0.620
	3	-0.327	0.157	-0.634, -0.020
	4	0.069	0.153	-0.230, 0.368
	5	-0.085	0.154	-0.387, 0.218
	6	-0.390	0.157	-0.698, -0.083
	7	-0.534	0.161	-0.848, -0.219
	8	-0.702	0.166	-1.026, -0.377
	9	-0.974	0.172	-1.311, -0.637
	10	-1.061	0.180	-1.414, -0.709
	11	-1.538	0.189	-1.908, -1.168
	12	-1.706	0.199	-2.097, -1.315
	13	-1.968	0.212	-2.385, -1.552
	14	-2.182	0.229	-2.629, -1.734
	15	-2.291	0.246	-2.774, -1.809
	16	-2.466	0.267	-2.990, -1.942
	17	-2.593	0.287	-3.156, -2.030
	18	-3.156	0.313	-3.769, -2.542
	19	-2.726	0.338	-3.389, -2.063
	20	-3.607	0.230	-4.059, -3.156
Maternal	1 (ref)	0.000		
Cousin Order	2	-2.541	0.062	-2.662, -2.420
	3	-2.835	0.071	-2.973, -2.697
	4	-2.912	0.085	-3.079, -2.746
	5	-3.107	0.098	-3.299, -2.915
	6	-3.128	0.115	-3.353, -2.902
	7	-3.146	0.134	-3.409, -2.882
	8	-3.032	0.158	-3.342, -2.722
	9	-3.149	0.186	-3.514, -2.784
	10	-3.052	0.168	-3.381, -2.722
Paternal	1 (ref)	0.000		
Cousin Order	2	-0.423	0.063	-0.545, -0.300
	3	-0.057	0.069	-0.193, 0.079
	4	0.102	0.082	-0.058, 0.263
	5	0.137	0.093	-0.046, 0.320
	6	0.327	0.107	0.117, 0.538
	7	0.385	0.124	0.141, 0.629
	8	0.394	0.144	0.113, 0.676
	9	0.647	0.168	0.318, 0.976
	10	0.922	0.153	0.623, 1.222
Birth Order	1 (ref)	0.000		

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Table S11 – *Continued from previous page*

		β	SE	95% CI
	2	-4.656	0.057	-4.766, -4.545
	3	-9.076	0.089	-9.251, -8.902
	4	-11.565	0.162	-11.882, -11.248
	5	-13.246	0.315	-13.863, -12.629
	6	-14.173	0.573	-15.296, -13.050
	7	-16.117	1.016	-18.107, -14.126
	8	-18.731	1.516	-21.702, -15.760
	9	-20.670	2.181	-24.946, -16.394
	10	-18.529	4.474	-27.297, -9.760
Sibling	1	-7.635	0.069	-7.771, -7.500
Group Size	2 (ref)	0.000		
	3	2.564	0.061	2.444, 2.684
	4	2.169	0.121	1.932, 2.406
	5	1.096	0.260	0.586, 1.607
	6	1.432	0.505	0.443, 2.421
	7	-0.127	0.949	-1.987, 1.733
	8	1.023	1.336	-1.595, 3.641
	9	0.713	2.193	-3.584, 5.011
	10	3.181	2.104	-0.944, 7.305
Maternal Age at Birth	$¡$20	-19.183	0.138	-19.452, -18.913
	20-24	-9.535	0.057	-9.648, -9.423
	25-29 (ref)	0.000		
	30-34	5.998	0.053	5.895, 6.101
	35-39	9.984	0.084	9.819, 10.150
	40+	13.185	0.186	12.819, 13.550
Sex	Male (ref)	0.000		
	Female	12.227	0.040	12.149, 12.305
Birth Year	1972	14.182	0.174	13.840, 14.523
	1973	13.765	0.170	13.432, 14.097
	1974	12.839	0.165	12.516, 13.161
	1975	11.922	0.164	11.600, 12.244
	1976	10.939	0.164	10.616, 11.261
	1977	10.154	0.161	9.838, 10.470
	1978	9.437	0.161	9.121, 9.753
	1979	8.677	0.157	8.369, 8.986
	1980	7.436	0.155	7.132, 7.740
	1981	6.629	0.155	6.326, 6.933
	1982	5.618	0.152	5.320, 5.916
	1983	4.805	0.151	4.509, 5.101
	1984	3.900	0.149	3.608, 4.192
	1985	3.075	0.145	2.791, 3.360
	1986	2.515	0.142	2.236, 2.793
	1987	1.729	0.140	1.456, 2.003
	1988	1.141	0.134	0.878, 1.404

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Table S11 – *Continued from previous page*

		β	SE	95% CI
	1989	0.609	0.137	0.340, 0.878
	1990 (ref)	0.000		
	1991	-0.393	0.135	-0.657, -0.128
	1992	-1.096	0.131	-1.353, -0.840
	1993	-1.643	0.135	-1.907, -1.379
	1994	-2.151	0.137	-2.420, -1.881
	1995	-2.673	0.142	-2.950, -2.396
	1996	-3.421	0.145	-3.705, -3.137
	1997	-4.144	0.148	-4.433, -3.855
	1998	-4.755	0.148	-5.044, -4.466
	1999	-5.208	0.148	-5.498, -4.917
	2000	-5.458	0.147	-5.747, -5.169
	2001	-5.476	0.147	-5.764, -5.188
	2002	-6.124	0.146	-6.410, -5.839
	2003	-6.416	0.146	-6.701, -6.130
Parental Education	Predicted GPA values	0.075	0.001	0.074, 0.077
Father Log Income		10.924	0.074	10.779, 11.069
Mother Log Income		8.636	0.087	8.465, 8.807
Maternal Grandparents Education	Predicted GPA values	0.010	0.001	0.008, 0.011
Maternal Grandfather Log Income		-1.771	0.033	-1.836, -1.705
Maternal Grandmother Log Income		3.469	0.066	3.339, 3.598
Paternal Grandparents Education	Predicted GPA values	0.037	0.001	0.036, 0.039
Paternal Grandfather Log Income		-1.504	0.031	-1.565, -1.443
Paternal Grandmother Log Income		1.886	0.064	1.761, 2.012
N			1,647,310	

Table S12: The relationship between GPA percentile rank and paternal cousin group size, cohorts born 1972–2003 in Sweden. Estimates based on maternal cousin fixed effects model (Model 10).

Variable	Category	β	SE	95% CI
Paternal	0 (ref)	0.000		
Cousin Group Size	1	-0.745	0.185	-1.107, -0.382
	2	0.142	0.145	-0.143, 0.427
	3	-0.427	0.161	-0.742, -0.112
	4	-0.837	0.172	-1.174, -0.501
	5	-0.856	0.186	-1.220, -0.492
	6	-1.199	0.208	-1.606, -0.791
	7	-1.678	0.232	-2.133, -1.222
	8	-1.793	0.263	-2.307, -1.278
	9	-1.698	0.296	-2.277, -1.118
	10	-2.766	0.235	-3.226, -2.305
Maternal	1 (ref)	0.000		
Cousin Order	2	-1.042	0.075	-1.190, -0.895
	3	-1.310	0.097	-1.499, -1.120
	4	-1.753	0.124	-1.997, -1.509
	5	-2.173	0.149	-2.465, -1.881
	6	-2.586	0.175	-2.928, -2.244
	7	-2.993	0.201	-3.388, -2.599
	8	-3.239	0.230	-3.689, -2.789
	9	-3.974	0.259	-4.481, -3.466
	10	-4.970	0.281	-5.521, -4.419
Paternal	1 (ref)	0.000		
Cousin Order	2	-0.033	0.072	-0.175, 0.108
	3	0.258	0.090	0.081, 0.435
	4	0.259	0.113	0.038, 0.480
	5	0.433	0.132	0.175, 0.691
	6	0.839	0.153	0.540, 1.138
	7	0.877	0.175	0.534, 1.220
	8	1.202	0.199	0.812, 1.592
	9	1.406	0.227	0.962, 1.850
	10	1.652	0.236	1.191, 2.114
Birth Order	1 (ref)	0.000		
	2	-3.550	0.062	-3.671, -3.429
	3	-5.615	0.101	-5.813, -5.417
	4	-6.656	0.173	-6.995, -6.317
	5	-7.514	0.315	-8.131, -6.896
	6	-7.772	0.541	-8.833, -6.712
	7	-8.793	0.932	-10.619, -6.967
	8	-9.750	1.377	-12.450, -7.050
	9	-9.596	1.983	-13.482, -5.709
	10	-4.950	2.900	-10.635, 0.734
Sex	Male (ref)	0.000		

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Table S12 – *Continued from previous page*

		β	SE	95% CI
	Female	12.024	0.044	11.937, 12.111
Sibling	1	-3.412	0.109	-3.625, -3.198
Group Size	2 (ref)	0.000		
	3	0.665	0.113	0.443, 0.887
	4	0.087	0.208	-0.320, 0.494
	5	-0.586	0.420	-1.410, 0.238
	6	-0.471	0.770	-1.980, 1.038
	7	0.184	1.305	-2.374, 2.742
	8	1.847	2.320	-2.701, 6.394
	9	-3.886	2.884	-9.539, 1.767
	10	-3.873	2.777	-9.316, 1.570
Birth Year	1972	-4.226	0.270	-4.754, -3.697
	1973	-3.821	0.258	-4.326, -3.315
	1974	-3.855	0.243	-4.331, -3.379
	1975	-3.569	0.234	-4.027, -3.110
	1976	-3.497	0.225	-3.939, -3.056
	1977	-3.105	0.216	-3.529, -2.681
	1978	-2.781	0.211	-3.194, -2.368
	1979	-2.564	0.201	-2.959, -2.169
	1980	-2.619	0.194	-3.000, -2.239
	1981	-2.331	0.189	-2.701, -1.961
	1982	-2.321	0.181	-2.675, -1.967
	1983	-1.858	0.175	-2.200, -1.515
	1984	-1.792	0.169	-2.122, -1.462
	1985	-1.469	0.160	-1.783, -1.154
	1986	-1.062	0.155	-1.365, -0.759
	1987	-0.865	0.149	-1.157, -0.573
	1988	-0.638	0.140	-0.912, -0.363
	1989	-0.366	0.144	-0.649, -0.083
	1990 (ref)	0.000		
	1991	0.093	0.143	-0.187, 0.373
	1992	0.057	0.138	-0.214, 0.327
	1993	0.305	0.147	0.018, 0.592
	1994	0.381	0.153	0.081, 0.682
	1995	0.439	0.162	0.121, 0.757
	1996	0.424	0.170	0.090, 0.757
	1997	0.200	0.178	-0.149, 0.549
	1998	0.415	0.184	0.055, 0.776
	1999	0.604	0.191	0.230, 0.978
	2000	0.928	0.199	0.538, 1.317
	2001	1.429	0.208	1.022, 1.836
	2002	1.104	0.220	0.673, 1.535
	2003	1.325	0.229	0.875, 1.774
Parental Education	Predicted GPA values	0.047	0.001	0.044, 0.049

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Table S12 – *Continued from previous page*

		β	SE	95% CI
Father Log Income		8.187	0.124	7.944, 8.430
Mother Log Income		3.637	0.182	3.281, 3.994
Paternal Grandparents Education	Predicted GPA values	0.021	0.001	0.018, 0.024
Paternal Grandfather Log Income		-0.994	0.053	-1.098, -0.889
Paternal Grandmother Log Income		1.239	0.110	1.023, 1.455
N			1,555,714	

Table S13: The relationship between GPA percentile rank and maternal cousin group size, cohorts born 1972–2003 in Sweden. Estimates based on paternal cousin fixed effects model (Model 11).

Variable	Category	β	SE	95% CI
Maternal	0 (ref)	0.000		
Cousin Group Size	1	-1.607	0.179	-1.957, -1.257
	2	-0.118	0.142	-0.397, 0.160
	3	-0.886	0.159	-1.198, -0.574
	4	-1.256	0.170	-1.589, -0.923
	5	-1.779	0.186	-2.143, -1.415
	6	-2.069	0.206	-2.473, -1.664
	7	-2.556	0.237	-3.021, -2.091
	8	-2.619	0.270	-3.148, -2.091
	9	-3.562	0.302	-4.154, -2.970
	10	-4.012	0.235	-4.472, -3.552
Maternal	1 (ref)	0.000		
Cousin Order	2	-0.620	0.072	-0.760, -0.479
	3	-0.404	0.091	-0.583, -0.225
	4	-0.183	0.115	-0.408, 0.043
	5	-0.051	0.135	-0.316, 0.215
	6	0.340	0.158	0.030, 0.649
	7	0.540	0.182	0.183, 0.898
	8	0.558	0.210	0.148, 0.969
	9	0.850	0.238	0.383, 1.317
	10	1.166	0.245	0.686, 1.646
Paternal	1 (ref)	0.000		
Cousin Order	2	-0.017	0.078	-0.170, 0.137
	3	0.097	0.096	-0.092, 0.285
	4	-0.227	0.121	-0.463, 0.010
	5	-0.462	0.144	-0.744, -0.180
	6	-0.548	0.168	-0.877, -0.220
	7	-0.839	0.192	-1.216, -0.462
	8	-1.179	0.217	-1.605, -0.753
	9	-1.203	0.245	-1.684, -0.723
	10	-1.860	0.268	-2.386, -1.334
Birth Order	1 (ref)	0.000		
	2	-3.752	0.063	-3.875, -3.628
	3	-6.013	0.103	-6.215, -5.811
	4	-7.135	0.174	-7.475, -6.794
	5	-8.230	0.312	-8.843, -7.618
	6	-7.739	0.534	-8.785, -6.693
	7	-9.120	0.914	-10.910, -7.329
	8	-12.173	1.382	-14.881, -9.465
	9	-10.841	1.937	-14.637, -7.045
	10	-7.295	2.737	-12.659, -1.931
Sex	Male (ref)	0.000		

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Table S13 – *Continued from previous page*

		β	SE	95% CI
	Female	12.013	0.044	11.926, 12.099
Sibling	1	-4.687	0.108	-4.899, -4.475
Group Size	2 (ref)	0.000		
	3	0.590	0.111	0.373, 0.808
	4	-0.234	0.203	-0.631, 0.164
	5	-0.694	0.413	-1.505, 0.116
	6	-1.229	0.770	-2.739, 0.281
	7	-2.121	1.318	-4.705, 0.463
	8	1.189	1.824	-2.387, 4.764
	9	0.868	2.521	-4.072, 5.808
	10	2.943	2.496	-1.948, 7.834
Birth Year	1972	-3.072	0.254	-3.570, -2.575
	1973	-2.839	0.243	-3.314, -2.363
	1974	-2.625	0.230	-3.076, -2.174
	1975	-2.580	0.222	-3.016, -2.145
	1976	-2.731	0.215	-3.152, -2.309
	1977	-2.429	0.207	-2.835, -2.023
	1978	-2.081	0.203	-2.478, -1.684
	1979	-1.930	0.194	-2.309, -1.550
	1980	-2.090	0.188	-2.458, -1.723
	1981	-1.928	0.184	-2.288, -1.568
	1982	-1.766	0.177	-2.113, -1.418
	1983	-1.469	0.172	-1.806, -1.132
	1984	-1.505	0.166	-1.831, -1.179
	1985	-1.143	0.160	-1.456, -0.830
	1986	-0.911	0.154	-1.212, -0.609
	1987	-0.819	0.148	-1.109, -0.529
	1988	-0.532	0.140	-0.806, -0.258
	1989	-0.273	0.144	-0.555, 0.010
	1990 (ref)	0.000		
	1991	0.092	0.143	-0.188, 0.372
	1992	0.042	0.138	-0.227, 0.312
	1993	0.334	0.146	0.048, 0.620
	1994	0.266	0.153	-0.033, 0.564
	1995	0.385	0.160	0.071, 0.699
	1996	0.318	0.168	-0.012, 0.648
	1997	0.092	0.176	-0.254, 0.438
	1998	0.088	0.180	-0.265, 0.441
	1999	0.267	0.187	-0.099, 0.633
	2000	0.490	0.193	0.111, 0.868
	2001	1.055	0.204	0.656, 1.454
	2002	0.889	0.214	0.469, 1.309
	2003	0.857	0.222	0.423, 1.292
Parental Education	Predicted GPA values	0.029	0.001	0.027, 0.032

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Table S13 – *Continued from previous page*

		β	SE	95% CI
Father Log Income		8.082	0.156	7.777, 8.387
Mother Log Income		7.067	0.152	6.770, 7.365
Maternal Grandparents Education	Predicted GPA values	0.007	0.002	0.004, 0.010
Maternal Grandfather Log Income		-1.390	0.057	-1.502, -1.278
Maternal Grandmother Log Income		2.352	0.113	2.130, 2.573
N			1,592,165	

Table S14: The relationship between GPA percentile rank and and interaction between sibling group size and paternal cousin group size, cohorts born 1972–2003 in Sweden. Estimates based on maternal cousin fixed effects model (Model 12).

Variable	Category	β	SE	95% CI
Maternal	1 (ref)	0.000		
Cousin Order	2	-1.049	0.075	-1.196, -0.901
	3	-1.320	0.097	-1.509, -1.130
	4	-1.763	0.124	-2.007, -1.519
	5	-2.180	0.149	-2.472, -1.888
	6	-2.596	0.175	-2.939, -2.254
	7	-2.998	0.201	-3.393, -2.603
	8	-3.241	0.230	-3.691, -2.792
	9	-3.969	0.259	-4.476, -3.461
	10	-4.958	0.281	-5.509, -4.407
Paternal	1 (ref)	0.000		
Cousin Order	2	-0.032	0.072	-0.173, 0.110
	3	0.245	0.090	0.070, 0.421
	4	0.196	0.111	-0.022, 0.415
	5	0.321	0.130	0.067, 0.576
	6	0.696	0.150	0.402, 0.990
	7	0.629	0.171	0.294, 0.963
	8	0.781	0.192	0.405, 1.158
	9	0.816	0.216	0.392, 1.239
	10	0.645	0.212	0.231, 1.060
Sibling Group Size x	1, 0	-2.314	0.274	-2.851, -1.776
Paternal	1, 1	-3.695	0.312	-4.307, -3.082
Cousin Group Size	1, 2	-3.447	0.251	-3.939, -2.956
Interaction	1, 3	-3.873	0.270	-4.402, -3.344
	1, 4	-4.115	0.278	-4.660, -3.570
	1, 5	-5.148	0.218	-5.575, -4.722
	2, 0 (ref)	0.000		
	2, 1	-0.785	0.261	-1.296, -0.273
	2, 2	0.248	0.199	-0.142, 0.637
	2, 3	-0.366	0.222	-0.801, 0.070
	2, 4	-0.747	0.238	-1.213, -0.280
	2, 5	-1.409	0.202	-1.805, -1.012
	3, 0	0.125	0.268	-0.400, 0.651
	3, 1	-0.134	0.392	-0.902, 0.634
	3, 2	0.919	0.254	0.420, 1.417
	3, 3	0.207	0.285	-0.351, 0.765
	3, 4	-0.346	0.311	-0.956, 0.263
	3, 5	-0.414	0.229	-0.862, 0.034
	4, 0	-0.944	0.529	-1.982, 0.093
	4, 1	-2.383	0.794	-3.939, -0.827
	4, 2	-0.439	0.498	-1.415, 0.536
	4, 3	0.020	0.570	-1.098, 1.138

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Table S14 – *Continued from previous page*

		β	SE	95% CI
	4, 4	-0.269	0.599	-1.443, 0.905
	4, 5	-0.730	0.339	-1.395, -0.066
	5, 0	-1.806	0.974	-3.714, 0.102
	5, 1	-2.212	1.428	-5.012, 0.587
	5, 2	-0.719	0.969	-2.619, 1.181
	5, 3	-0.967	1.002	-2.930, 0.997
	5, 4	-1.652	1.052	-3.713, 0.410
	5, 5	-1.400	0.536	-2.451, -0.350
Birth Order	1 (ref)	0.000		
	2	-3.511	0.061	-3.631, -3.391
	3	-5.500	0.100	-5.696, -5.304
	4	-6.427	0.171	-6.763, -6.091
	5	-7.151	0.313	-7.764, -6.538
	6	-7.261	0.545	-8.330, -6.193
	7	-8.135	0.928	-9.954, -6.316
	8	-9.121	1.385	-11.835, -6.406
	9	-9.588	2.000	-13.507, -5.669
	10	-4.983	2.957	-10.779, 0.812
Sex	Male (ref)	0.000		
	Female	12.024	0.044	11.937, 12.111
Birth Year	1972	-4.368	0.269	-4.895, -3.840
	1973	-3.950	0.257	-4.454, -3.446
	1974	-3.975	0.243	-4.450, -3.499
	1975	-3.685	0.234	-4.143, -3.227
	1976	-3.606	0.225	-4.046, -3.165
	1977	-3.208	0.216	-3.631, -2.785
	1978	-2.874	0.210	-3.286, -2.462
	1979	-2.650	0.201	-3.045, -2.256
	1980	-2.697	0.194	-3.077, -2.318
	1981	-2.401	0.189	-2.771, -2.032
	1982	-2.387	0.181	-2.741, -2.033
	1983	-1.916	0.175	-2.259, -1.574
	1984	-1.840	0.168	-2.170, -1.510
	1985	-1.509	0.160	-1.823, -1.194
	1986	-1.094	0.154	-1.397, -0.791
	1987	-0.892	0.149	-1.184, -0.600
	1988	-0.654	0.140	-0.928, -0.379
	1989	-0.376	0.144	-0.659, -0.094
	1990 (ref)	0.000		
	1991	0.099	0.143	-0.182, 0.379
	1992	0.069	0.138	-0.201, 0.340
	1993	0.324	0.147	0.037, 0.612
	1994	0.405	0.153	0.104, 0.705
	1995	0.468	0.162	0.150, 0.786

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Table S14 – *Continued from previous page*

		β	SE	95% CI
	1996	0.455	0.170	0.122, 0.789
	1997	0.235	0.178	-0.114, 0.584
	1998	0.456	0.184	0.096, 0.817
	1999	0.645	0.191	0.272, 1.019
	2000	0.972	0.199	0.583, 1.361
	2001	1.478	0.208	1.071, 1.885
	2002	1.151	0.220	0.720, 1.581
	2003	1.374	0.229	0.925, 1.824
Parental Education	Predicted GPA values	0.046	0.001	0.044, 0.049
Father Log Income		8.205	0.124	7.962, 8.448
Mother Log Income		3.629	0.182	3.273, 3.986
Paternal Grandparents Education	Predicted GPA values	0.020	0.001	0.018, 0.023
Paternal Grandfather Log Income		-0.991	0.053	-1.096, -0.887
Paternal Grandmother Log Income		1.256	0.110	1.040, 1.472
N			1,555,714	

Table S15: The relationship between GPA percentile rank and an interaction between birth order and maternal cousin order, cohorts born 1972–2003 in Sweden. Estimates based on paternal cousin fixed effects model (Model 13).

Variable	Category	β	SE	95% CI
Maternal	1 (ref)	0.000		
Cousin Order	2	-0.574	0.072	-0.714, -0.433
	3	-0.362	0.091	-0.539, -0.184
	4	-0.204	0.114	-0.428, 0.019
	5	-0.102	0.134	-0.364, 0.160
	6	0.226	0.156	-0.079, 0.532
	7	0.304	0.179	-0.047, 0.654
	8	0.142	0.204	-0.257, 0.541
	9	0.224	0.230	-0.227, 0.674
	10	0.051	0.225	-0.391, 0.492
Paternal	1 (ref)	0.000		
Cousin Order	2	-0.031	0.078	-0.184, 0.123
	3	0.079	0.096	-0.110, 0.267
	4	-0.244	0.121	-0.481, -0.008
	5	-0.477	0.144	-0.759, -0.195
	6	-0.562	0.168	-0.891, -0.234
	7	-0.847	0.192	-1.224, -0.470
	8	-1.184	0.217	-1.610, -0.758
	9	-1.203	0.245	-1.684, -0.722
	10	-1.845	0.268	-2.372, -1.319
Sibling Group Size x	1, 0	-2.325	0.290	-2.894, -1.756
Maternal	1, 1	-5.653	0.294	-6.229, -5.076
Cousin Group Size	1, 2	-4.924	0.255	-5.424, -4.425
Interaction	1, 3	-5.373	0.273	-5.907, -4.838
	1, 4	-5.937	0.281	-6.488, -5.387
	1, 5	-7.892	0.217	-8.317, -7.466
	2, 0 (ref)	0.000		
	2, 1	-1.647	0.250	-2.138, -1.156
	2, 2	0.205	0.191	-0.170, 0.580
	2, 3	-0.949	0.219	-1.379, -0.520
	2, 4	-1.250	0.235	-1.711, -0.788
	2, 5	-2.366	0.200	-2.757, -1.974
	3, 0	-0.389	0.260	-0.899, 0.120
	3, 1	-1.537	0.376	-2.274, -0.800
	3, 2	0.107	0.248	-0.378, 0.593
	3, 3	-0.032	0.280	-0.581, 0.517
	3, 4	-0.140	0.305	-0.737, 0.457
	3, 5	-1.134	0.224	-1.572, -0.696
	4, 0	-0.763	0.492	-1.726, 0.200
	4, 1	-2.727	0.790	-4.275, -1.180
	4, 2	-0.832	0.481	-1.775, 0.112
	4, 3	-1.169	0.547	-2.241, -0.097

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Table S15 – *Continued from previous page*

		β	SE	95% CI
	4, 4	-2.288	0.602	-3.468, -1.109
	4, 5	-1.873	0.336	-2.531, -1.215
	5, 0	-2.256	0.882	-3.984, -0.528
	5, 1	-1.015	1.419	-3.796, 1.766
	5, 2	-0.580	0.946	-2.435, 1.275
	5, 3	-2.135	0.963	-4.023, -0.246
	5, 4	-2.090	1.058	-4.163, -0.017
	5, 5	-2.853	0.525	-3.882, -1.824
Birth Order	1 (ref)	0.000		
	2	-3.740	0.063	-3.863, -3.617
	3	-5.931	0.102	-6.131, -5.731
	4	-6.918	0.172	-7.255, -6.580
	5	-7.855	0.311	-8.464, -7.246
	6	-7.265	0.535	-8.313, -6.216
	7	-8.403	0.911	-10.188, -6.618
	8	-10.910	1.369	-13.594, -8.226
	9	-9.380	1.902	-13.109, -5.651
	10	-5.335	2.680	-10.587, -0.082
Sex	Male (ref)	0.000		
	Female	12.010	0.044	11.924, 12.097
Birth Year	1972	-3.218	0.253	-3.714, -2.721
	1973	-2.963	0.242	-3.438, -2.489
	1974	-2.746	0.230	-3.196, -2.296
	1975	-2.689	0.222	-3.124, -2.254
	1976	-2.834	0.215	-3.255, -2.413
	1977	-2.521	0.207	-2.926, -2.116
	1978	-2.165	0.202	-2.562, -1.769
	1979	-2.003	0.194	-2.382, -1.624
	1980	-2.164	0.187	-2.531, -1.797
	1981	-1.993	0.184	-2.353, -1.633
	1982	-1.821	0.177	-2.169, -1.474
	1983	-1.517	0.172	-1.853, -1.180
	1984	-1.546	0.166	-1.872, -1.221
	1985	-1.179	0.160	-1.492, -0.866
	1986	-0.938	0.154	-1.239, -0.636
	1987	-0.841	0.148	-1.131, -0.551
	1988	-0.545	0.140	-0.819, -0.271
	1989	-0.282	0.144	-0.565, 0.001
	1990 (ref)	0.000		
	1991	0.097	0.143	-0.183, 0.377
	1992	0.051	0.138	-0.219, 0.320
	1993	0.347	0.146	0.062, 0.633
	1994	0.289	0.152	-0.010, 0.588
	1995	0.412	0.160	0.098, 0.727

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Table S15 – *Continued from previous page*

		β	SE	95% CI
	1996	0.346	0.168	0.016, 0.676
	1997	0.123	0.176	-0.222, 0.469
	1998	0.127	0.180	-0.225, 0.480
	1999	0.304	0.187	-0.062, 0.670
	2000	0.531	0.193	0.153, 0.909
	2001	1.099	0.203	0.700, 1.497
	2002	0.933	0.214	0.513, 1.353
	2003	0.901	0.222	0.466, 1.335
Parental Education	Predicted GPA values	0.029	0.001	0.027, 0.032
Father Log Income		8.098	0.156	7.793, 8.403
Mother Log Income		7.073	0.152	6.776, 7.370
Paternal Grandparents Education	Predicted GPA values	0.007	0.002	0.004, 0.010
Paternal Grandfather Log Income		-1.380	0.057	-1.492, -1.268
Paternal Grandmother Log Income		2.366	0.113	2.145, 2.588
N			1,592,165	

TABLE S16. Instrumental variable estimation for the effect of maternal cousin group size and paternal cousin group size on GPA percentile rank, Swedish men born 1972-1981. Estimates based on two-stage least squares models (Models 14 and 15).

Cousin Group		β	S.E.	95% CI	N
Maternal	First-stage	3.16	0.09	2.97, 3.34	273,344
	Second-stage	-0.25	0.12	-0.49, -0.00	273,344
Paternal	First-stage	3.23	0.11	3.01, 3.45	272,599
	Second-stage	-0.11	0.12	-0.35, 0.13	272,599

TABLE S17. Instrumental variable estimation for the effect of maternal cousin group size and paternal cousin group size on GPA percentile rank, Swedish women born 1972-1981. Estimates based on two-stage least squares models (Models 14 and 15).

Cousin Group		β	S.E.	95% CI	N
Maternal	First-stage	3.18	0.10	2.99, 3.38	259,357
	Second-stage	-0.30	0.12	-0.54, -0.06	259,357
Paternal	First-stage	3.46	0.12	3.22, 3.70	259,814
	Second-stage	-0.02	0.12	-0.24, 0.21	259,814

TABLE S18. Alternative estimate for slope of cousin order effect on GPA percentile rank, based upon measure for cousin order where adjacent siblings share cousin order rank. Results from Models 3–6, Swedish men and women born 1972–2003.

Model	Variable	b	se	p	95% CI	N
3	Maternal cousin order	-0.32	0.02	0.000	-0.36, -0.27	1,555,714
4	Paternal cousin order	-0.18	0.02	0.000	-0.22, -0.14	1,592,165
5	Maternal cousin order	-0.39	0.09	0.000	-0.56, -0.22	227,764
6	Paternal cousin order	-0.18	0.09	0.059	-0.36, 0.01	227,239