

# Online Appendix

## Supplementary material: Not for publication

**Table A1** Correlation between non-cognitive ability at age 18 and measures of non-cognitive ability at age 13

	Cohort:	
	1953	1967-72
<u>Survey questions for pupils in 6<sup>th</sup> grade</u>		
“Do you think you do well in school?” (Self-confidence)		0.092*** (0.013)
”Are you often worried about things happening in school?” (Anxiety)		-0.022* (0.012)
“Do you give up if you get a difficult task in school?” (Persistence)		-0.062*** (0.012)
“Do you like working together with your classmates?” (Cooperativeness)		0.022* (0.012)
”Do you sometimes bring schoolmates home?” (Sociability)		0.048*** (0.012)
”How often do you spend time with schoolmates after school?” (Peer interaction)	0.071*** (0.015)	
”Do you often think about other things when you are in school?” (Concentration)		-0.040*** (0.012)
“Do you get disappointed if you get bad results on a test?” (Expectations)		0.084*** (0.012)
“What occupation do you aim for?” (Aspirations)	0.103*** (0.018)	0.081*** (0.011)
<u>School administrative data in 6<sup>th</sup> grade</u>		
Absenteeism		-0.044*** (0.012)
School grades in non-academic subjects	0.131*** (0.017)	
R <sup>2</sup>	0.068	0.115
Number of observations	3,949	6,632

Notes: All variables are standardized by cohort. All models controls for cognitive ability at age 13. Aspiration is measured as the number of years of schooling that the occupation the pupil aim for corresponds to.

**Table A2.** First stage estimates

<i>Sample:</i>	ETF-sample		Uncle-sample		
	Father's cognitive ability at age 18	Father's non-cognitive ability at age 18	Father's cognitive ability at age 18	Father's non-cognitive ability at age 18	Father's height at age 18
<i>Dependent variable:</i>					
<i>Independent variable:</i>					
Father's cognitive ability at age 13	0.729 (0.018)	.	.	.	.
Father's non-academic school grades at age 13	.	0.073 (0.027)	.	.	.
Father's educational aspirations at age 13	.	0.107 (0.027)	.	.	.
Father's peer interaction at age 13	.	0.041 (0.031)	.	.	.
Uncle's cognitive ability at age 18	.	.	0.460 (0.005)	.	.
Uncle's non-cognitive ability at 18	.	.	.	0.313 (0.005)	.
Uncle's height at age 18	.	.	.	.	0.518 (0.004)
F-test (first stage)	1713.89	9.45	10251.65	3709.68	14445.85
n	1,889	1,889	50,172	50,172	52,973

Notes: The ability measures have been standardized. Standard errors adjusted for clustering on the father are in parentheses.

**Table A3.** OLS and IV-estimates of intergenerational correlation in abilities – different ability measures

<i>Son's ability:</i>	Cognitive ability	Logical ability	Verbal ability	Spatial ability	Technical ability
OLS					
Father's ability	0.350*** (0.004)	0.292*** (0.004)	0.306*** (0.004)	0.205*** (0.004)	0.281*** (0.004)
IV					
Father's ability	0.479*** (0.009)	0.417*** (0.009)	0.490*** (0.011)	0.467*** (0.017)	0.483*** (0.012)
<i>Statistic:</i>					
Reliability ratio	0.731 (0.016)	0.700 (0.018)	0.624 (0.016)	0.439 (0.018)	0.582 (0.017)
<i>Son's ability:</i>	Non-cognitive ability	Social maturity	Intensity	Psychological energy	Emotional stability
OLS					
Father's ability	0.210*** (0.005)	0.156*** (0.005)	0.155*** (0.005)	0.159*** (0.005)	0.136*** (0.005)
IV					
Father's ability	0.422*** (0.015)	0.424*** (0.020)	0.345*** (0.019)	0.414*** (0.021)	0.387*** (0.021)
<i>Statistic:</i>					
Reliability ratio	0.498 (0.021)	0.368 (0.021)	0.449 (0.029)	0.384 (0.023)	0.351 (0.023)
n	50,171	50,171	50,171	50,171	50,171

Notes: All estimates come from separate regressions. The ability measures have been standardized. Standard errors adjusted for clustering on the father are in parentheses. In the IV-specification, the father's ability has been instrumented with the uncle's ability. The reliability ratios have been calculated by dividing the OLS-estimates by the IV-estimates, and the standard errors have been computed by means of the delta method.

**Table A4.** Sibling and own correlations

<i>Dependent variable:</i>	Brother's cognitive ability at age 13	Sister's cognitive ability at age 13	Boy's own GPA at age 16	Girl's own GPA at age 16	Brother's GPA at age 16	Sister's GPA at age 16
<i>Independent variable:</i>						
Brother's cognitive ability at age 18	0.418 (0.011)	0.381 (0.011)	.	.	0.363 (0.011)	0.333 (0.011)
Own cognitive ability at age 13	.	.	0.581 (0.009)	0.572 (0.009)	.	.
<i>Statistic:</i>						
Relative correlation	0.910 (0.034)		0.986 (0.022)		0.917 (0.039)	
n	7,833	7,604	7,833	7,604	7,833	7,604

Notes: All estimates come from separate regressions. The ability measures have been standardized. The standard error for the relative sibling correlation has been calculated by using the Delta method.