Readme file
Born to Lead? The Effects of Birth Order on Non-Cognitive Abilities
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The analyses are based on different data sources. The enlistment data is collected from the Swedish Military Archives and the Swedish Defense Recruitment Agency. Information on birth order, occupational sorting and background characteristics comes from Statistics Sweden. The data on pupil effort and parental investments comes from the Evaluation through follow-up (ETF) survey at the University of Gothenburg. Individuals in different data sources are linked by Statistics Sweden through a personal identification number.

The population consists of children to mothers born in Sweden 1918-1964. The draft data is restricted to men born 1952-82, the information on occupational sorting is available for individuals covered by the wage data, while the ETF-survey covers individuals born 1967, 1972, 1977, 1982, 1987 or 1992.

The analyses are done with Stata 14.1(release date October 2015).

Data access
In order to get access to data researchers must submit a data request (1) to the Swedish Military Archive (https://riksarkivet.se/military-archives) to obtain information on the psychological and cognitive evaluations in the enlistment data; (2) to Statistics Sweden (http://www.scb.se/) to obtain on information on birth order and links to family members from the Swedish population register, information on occupations from the wage structure statistics, and information on background characteristics (eg. educations level) from the LISA-database; (3) to the Department of Education and Special Education at University of Gothenburg (http://ips.gu.se/forskning/forskningsprojekt/ugu) to obtain information on pupil effort and parental investments from the Evaluation through follow-up (ETF) survey.

The data request must be based on a research proposal describing the project (research questions, methods, data, how data will be protected) and each agency makes an assessment of whether the data request is in accordance with the Swedish Secrecy Act before giving access to data. Getting access to the data may also require approval from an Ethics Vetting Board who makes an assessment of whether the project is in line with the Ethical Review Act.

Data from the Swedish Military Archive and the Department of Education and Special Education at University of Gothenburg will then be sent directly to Statistics Sweden who links the data sources and anonymize the personal identifier. Statistics Sweden will then provide access to the data.

Researchers can also apply for access to the final datasets directly from the Institute for Evaluation of Labour Market and Education Policy (IFAU) for replication purposes only. IFAU is not entitled to distribute the full data. The practical arrangement for accessing the final datasets depends on the location of the researcher and will be handled on a case-by-case basis.

Programs

The code necessary to merge the different data sources; to define variables, to create the analysis datasets, and to create all the result tables are available in the annotated Stata do-file *birth_order_1.do* (writted for Stata 14.1). The code for generating occupational variables is available in the Stata do-file *birth_order_occ_1.do* (writted for Stata 14.1).

The analyses are based on three separate analysis datasets: *birth_order_skills_1.dta* is used when the outcome is ability at enlistment; *birth_order_1.dta* is used when the outcome is occupation; *birth_order_etf_1.dta* is used the outcome comes from the ETF-survey.

Variables in birth_order_skills_1.dta

idnr	identity number
yob	year of birth
mob	month of birth
db	date of birth
woman	woman
midnr	mother identity number
myob	mother year of birth
mochild	mother order of child
mochildad	mother order of child, excluding dead and adopted siblings
mochildw	mother order of child, girls
mochildm	mother order of child, boys
mnchild	mother number of children
mbage	mother's age at birth
mfbage	mother's age at first birth
medu	mother's years of schooling
medl	mother's highest educational level
mplnearn	mother's log-earnings, pctl
fidnr	father identity number
fyob	father year of birth
fedu	father's years of schooling
fedl	father's highest educational level
fplnearn	father's log-earnings, pctl
syob1	year of birth, sibling 1
syob2	year of birth, sibling 2
syob3	year of birth, sibling 3
syob4	year of birth, sibling 4
syob5	year of birth, sibling 5
swoman1	woman, sibling 1
swoman2	woman, sibling 2
swoman3	woman, sibling 3
swoman4	woman, sibling 4
swoman5	woman, sibling 5
bo_2	second child
bo_3	third child
bo_4	fourth child
bo_5	fifth child
boad_2	second child, excluding adopted and dead siblings
boad_3	third child, excluding adopted and dead siblings
boad_4	fourth child, excluding adopted and dead siblings
boad_5	fifth child, excluding adopted and dead siblings
ss_bo_2	second child, same sex
ss_bo_3	third child, same sex
ss_bo_4	fourth child, same sex

ss_bo_5	fifth child, same sex
fcomp	family composition
test	type of test
sc	total cognitive skills, std
sclog	logical cognitive skills, std
scverb	verbal cognitive skills, std
scspat	spatial cognitive skills, std
sctech	technical cognitive skills, std
snc	total non-cognitive skills, std
empl	employed
selfemp	self employed
wweight	weight, wages
noweight	weight, occupations
wage	wage, mid-age
lnwage	log-wage, mid-age
ceopp	manager in private firms or public organizations
ceopb	managers, broad definition
jcreate	creative occupations
sv1A1	cognitive abilities, std
sv2B1	social skills, std
sv1C2b	leadership, std
sbf_c	conscientiousness, std
sbf_a	agreeableness, std
sbf_es	emotional stability, std
sbf_ex	extraversion, std
sbf_o	openness to experience, std
noweighta	weight, occupations, alternative
ceoppa	manager in private firms or public organizations, alternative
ceopba	managers, broad definition, alternative
jcreatea	creative occupations, alternative

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syob4	year of birth, sibling 4
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ceoppa	manager in private firms or public organizations, alternative
ceopba	managers, broad definition, alternative
jcreatea	creative occupations, alternative

Variables in birth_order_etf_1.dta

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yob	year of birth
mob	month of birth
woman	woman

midnr	mother identity number
myob	mother year of birth
mnchild	mother number of children
mochild	mother order of child
medl	mother's highest educational level
mfbage	mother's age at first birth
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ss_bo_3	third child, same sex
ss_bo_4	fourth child, same sex
ss_bo_5	fifth child, same sex
fcomp	family composition, etf year of birth
cohort	etf cohort
weight	weight, original
homew	home work, grade 6 or 9, hours
sprbook6	read books, grade 6, std
tvcomph	watch tv or play computer, grade 6 or 9, hours
mfhomet	parents help with homework, grade 3, 6 or 9, incidence
spmftalk	parents talk about school work, grade 3 or 6, std
spmfasp6	parents' expectations, grade 6, std