The composition of family background:

The influence of the economic and cultural resources of both parents on the offspring's educational attainment

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Introduction

- ► There is a long tradition in which one looks at the influence of family's socioeconomic status or class on the offspring's education or other characteristics.

- ► The typical variables are parental occupational status or class and parental education.

- ► So which parent matters?
    - ► the father and/or the mother,
    - ► the parent with the highest and/or lowest education or occupation,
    - ► the parent with the same-sex and/or different sex as the respondent, or
    - ► any combination of these?

- ► Have the relative strengths of these contributions changed over time?

What resource? occupational status or class

- ▶ Occupational status (class) can be seen as just a way of assigning values to (grouping) occupations
- ▶ What is it about the occupations of parents that influences the education of the children?
    - ▶ Occupations lead to income
    - ▶ Stress from working conditions, job security

What resource? education

- ▶ What is it about parental educations that influences the education of the children?
    - ▶ knowledge that can help with making the 'right' decisions or supplement the teacher (e.g. with homework)
    - ▶ Proxy for cultural capital

Prediction 1: The effect of parental occupation declined faster than the effect of parental education

- ▶ I expect the effect of parental occupation to decline because:
    - ▶ Subsidies and grants have increased making education cheaper
    - ▶ Expansion of the welfare state is likely to have decreased the worst effects of stressful occupations
- ▶ I do not expect a similar decline in the effect of parental education mainly because it is a much harder problem.

Which parent? sex of the parent

▶ The simplest form is the "conventional view", according to which it is the father that matters.

▶ This does not fit well with the mechanisms discussed for parental occupation or education:

   ▶ If occupation works because of the material resources earned with an occupation, than I would expect the sum of those resource to matter

   ▶ If occupation works because the (lack of) stress from an occupation, than I would expect again that the sum to matter

   ▶ If parental education works through the ability to help children do well at school, than I would expect the mother to matter more

   ▶ If parental education works through cultural capital, than I again expect the mother to matter more

Prediction 2: The occupation of both parents matter, and their effects are equal

- ▶ The idea is that it is the resources that are brought in the family that matters, not who is bringing them in the family.
- ▶ The latter part of this prediction may be a bit optimistic, traditional roles may still play a role:
  - ▶ In the Netherlands the sex of the parent is a pretty good proxy for part-time work. In that case we would expect that the occupation of the mother contributes less than the occupation of the father.

Prediction 3: Mother's education matters more than father's education, especially when mother is homemaker

- ▶ The idea is that traditional role patterns are still very much present when it comes to interacting with the children and the children's schooling.
- ▶ And that the traditional role patterns are stronger in families where the mother is the homemaker.

Which parent? the dominant parent

- ▶ The idea is that the parent with the highest occupation or education are dominant.
- ▶ A strong version of this says that it is only the dominant parent that matters.
- ▶ Choosing one 'representative' parent for occupational status still does not fit well with the mechanisms.
- ▶ A weaker version in which the dominant parent has a larger effect than the non-dominant parent fits better with these mechanisms.

Which parent? sex role model

- ▶ The idea is that boys look at their fathers for guidance and daughters to their mothers.
- ▶ Mainly works through the interaction of parents with their children and not through the resources present in the family.
- ▶ So this is more relevant for parental education than occupation

Further predictions

Prediction 4 The effect of the parent with the highest occupation or education is stronger than the effect of the parent with the lowest occupation or education.

Prediction 5 The effect of the education of the parent with the same sex as the child is stronger than the education of the other parent.

Data

- ▶ International Stratification and Mobility File (ISMF) on the Netherlands.
- ▶ 11 surveys held between 1992 and 2006 with information on cohorts that where 12 in 1939-1991.
- ▶ 11,500 respondents aged between 24 and 65 have complete information on child's, father's and mother's education and father's and mother's occupation.
- ▶ Number of cases are unequally distributed over cohorts.

- ▶ One of the question is whether the relative strengths of the influence of the different parental characteristics changed over time.
- ▶ It is useful to imagine what the world would look like if these relative strengths did *not* change. This would be the null hypothesis.
- ▶ The effect of parental education and occupation could still go down, but if the effect of parental education was initially 75% of parental occupation, than that has to remain true for all subsequent years.
- ▶ The way to do that is to impose a proportionality constraint: The effect of the parental characteristics can change over time, but they have to change by the same proportion.
- ▶ This is a non-linear constraint, so needs a bit of extra work `propcnsreg`

Family background

$$ed = coh + fem + coh * fem + (coh + fem + coh * fem) * par\_ses$$

$$
\begin{aligned}
par\_ses = \ & fed + med + \\
& fed * hi\_fed + med * hi\_med + \\
& fed * male + med * female \\
& med * homemaker + \\
& foc + moc + \\
& foc * hi\_foc + moc * hi\_moc \\
& foc * male + moc * female + homemaker * female + \\
& homemaker + homemaker * foc
\end{aligned}
$$

$$par\_ses = \ fed + med +$$

The proportionality constraint

The hypothesis that the relative contributions of each background variable has not changed over time cannot be rejected: $\chi^2(47) = 50.16$, p = 0.349

Constraints on the effects of the parents (Wald tests)

Null hypothesis	occupation			education		
	χ^2	df	p	χ^2	df	p
mother = 0	25.67	1	0.000	32.83	1	0.000
father = mother	1.64	1	0.201	0.44	1	0.507
highest = same = lowest	0.12	2	0.941	16.50	2	0.000
same sex = different sex	4.33	2	0.115	0.07	1	0.793
compensation homemaker = 0	6.65	1	0.010	4.91	1	0.027

The effects of parental occupation

	effect	se
father	3.331	0.24
mother	3.331	0.24
highest		
lowest		
same sex		
homemaker	-0.61	0.21
home × female		
home × father	1.905	0.42

The effects of parental education

	effect	se
father	2.396	0.19
mother	2.396	0.19
highest	1.207	0.22
lowest	-1.109	0.40
same sex		
home × mother	0.918	0.44

Changes in the effects of parental occupation

	effect	se
year$_{1939-1970}$	-0.121	0.01
year$_{1970-1991}$	0.002	0.03
female		
year$_{1939-1970}$ × female		
year$_{1970-1991}$ × female		
constant	1	

Conclusions

Prediction 1 The effect of parental occupation declined faster than the effect of parental education Rejected

Prediction 2 The occupation of both parents matter, and their effects are equal Supported

Prediction 3 Mother's education matters more than father's education, especially when mother is homemaker Partially supported

Prediction 4 The effect of the parent with the highest occupation or education is stronger than the effect of the parent with the lowest occupation or education. Partially supported

Prediction 5 The effect of the education of the parent with the same sex as the child is stronger than the education of the other parent. Rejected