

Two modern classics in stratification research

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Readings

- Blau & Duncan (1967), “The Process of Stratification”, Ch. 5 from “The American Occupational Structure”.
- Collins (1971) “Functional and Conflict Theories of Educational Stratification”.
- These two pieces have influenced me strongly in my own work.

Different articles

- BD appears to be a methodological piece, but it is methodology at its best, with important theoretical ideas and empirical findings in it.
- I have omitted the piece by Randall Collins from the presentation / discussion and will restrict it to Blau / Duncan.

Contributions by BD

- Introduction of causal (indirect) effects models ('path analysis') in social sciences.
- Seeing society and personal as a system of interrelated processes, that can be precisely quantified.
- (Also:) Setting new standards for large scale sample surveys and quantitative measurement.

Social stratification / social inequality

- All societies are to some extent stratified: material and symbolic rewards are unequally distributed.
- Economists are primarily interested in material outcomes (income, wealth), sociologists (also) in immaterial outcomes, in particular social status: standing of persons in society.
- A nice sociological term for social inequality is *social exclusion*: this term emphasizes the boundaries between groups in society.

Openness of societies

- Sociologists are also interested in the openness of society: to what extent social boundaries can be crossed: (A) between generations [social mobility / social reproduction], (B) during the life-cycle [career mobility / stability], (C) within families [heterogamy / homogamy].
- In a sense, homogamy (who is acceptable as an intimate partner for biological reproduction?) is the strongest sociological perspective on social exclusion – BD have materials on this, but not in Ch 5.

Occupations

- Sociologists see occupational structure as the backbone of the social inequality system.
- Duncan: “Occupation is the best single indicator of social inequality”
 - Taps how people see and accept each other,
 - Merges economic and cultural inequality.

Occupational structure

- Older approaches (Lloyd Warner) tried to measure personal status in a local network [anthropological approach], by using reputation in local networks.
- Duncan started his career [Pfautz & Duncan, 1950] by criticizing Warner's anthropological approach. One criticism was that social status differences also exist outside the local community.
- Occupation was regarded as the primary characteristic by which people who do not know each other, still evaluate each other.

Occupational prestige

- One sociological approach to quantify occupational status was by measuring prestige of occupations: “What do you think that people in general [... *not you* ...] think of [occupation].”.
- Notice the close connection between prestige measurement and the Durkheimian ideas of moral order.
- Occupational prestige hierarchies can be shown to be exceptionally stable between societies, even of different periods (Treiman).

Occupation classes

- Marx had a different idea about what constitutes occupational hierarchies and social boundaries: access to resources (means of production) divides societies into (two) discrete social classes with ever widening distances between them.
- But Marx knew about the importance of middle classes and social mobility.
- Weber wants to have it both ways: there is a socio-economic class system *and* a prestige hierarchy in society: these do not perfectly overlap.

Duncan (1961)

- Duncan (1961) solved the problem how we can measure the social status of *all* occupations in society, even if we have prestige measurement for only some occupations.
- Duncan SEI scale:
 - Regress the prestige of some occupations on average education and average earnings of the people (men) in them.
 - Turn this around: predict occupational status from the average education and average earnings of its incumbents.

(This is one of the first applications of multiple regression techniques in sociology— some 70 years after its invention.)
- This leads to a – still much used -- continuous measure of occupational stratification, which makes multivariate analysis possible.

BD theory

- Ascription versus achievement:
 - Over time ascription decreases, achievement increases.
 - In advanced modern societiesm social background effects in educational and occupational attainment will be small.
- Careers stabilize gradually with age.

Occupations in BD

- Three occupations:
 - Father's occupation when respondent was growing (around 16 years of age)
 - Respondent's first job, at entry into the labor market.
 - Respondent's current occupation (in 1962).
- We obtain a simple but very effective representation of occupational careers.

Occupational mobility



Occupation in first job

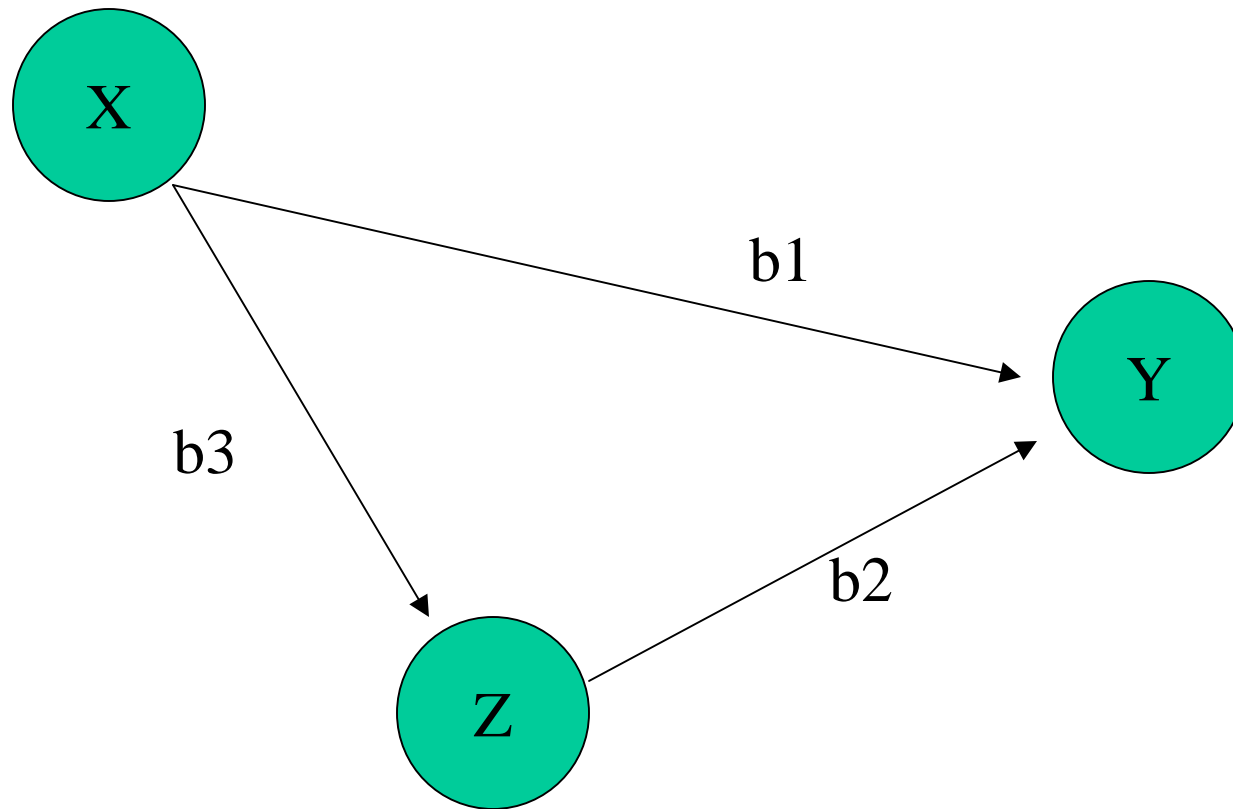
- First jobs determine strongly further occupational career outcomes; however there is also considerable career mobility.
- Arguably, first jobs are the point in which social background (father) and educational attainment have their strongest influence.
Do they?

Simple correlations USA 1962

B&D Table1: Simple Correlations for Five Status Variable

| | FaEd | FaOc | Ed | 1stOc | Occ |
|-------|-------|-------|-------|-------|-------|
| FaEd | 1.000 | | | | |
| FaOc | 0.516 | 1.000 | | | |
| Ed | 0.453 | 0.438 | 1.000 | | |
| 1stOc | 0.332 | 0.417 | 0.538 | 1.000 | |
| Occ | 0.322 | 0.405 | 0.596 | 0.541 | 1.000 |

Elementary causal model



Causal terminology

- X is a confounding variable in the $Z \rightarrow Y$ causation.
- Z is an intervening variable (mediator) in the $X \rightarrow Y$ causation.
- X influences Y via a direct and an indirect effect.
- All causal models are a variation of the elementary causal model.

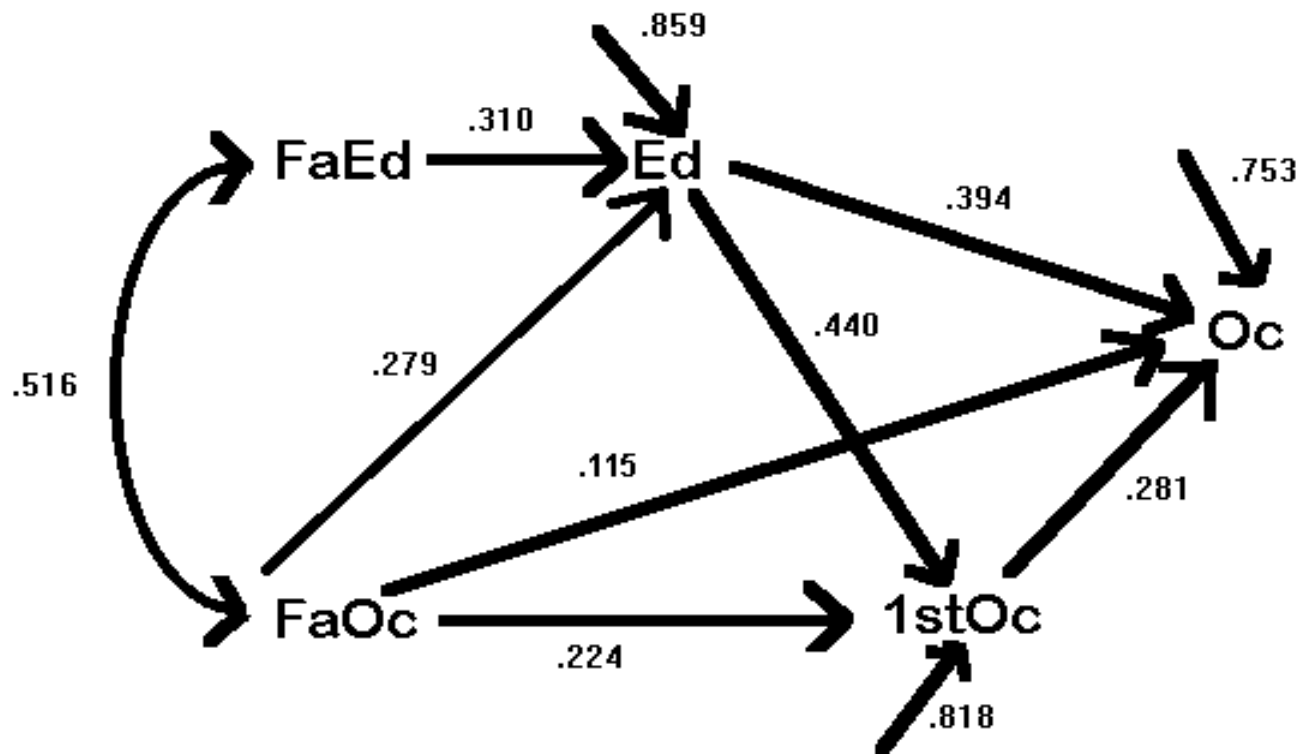
Path analysis

- $Z = b_1 * X + b_2 * Y$
- $Y = b_3 * X$
- Path analysis shows:
 - $\text{corr}(YX) = b_3$
 - $\text{corr}(XZ) = b_1 + b_2 * b_3$
 - $\text{corr}(YZ) = b_2 + b_3 * b_1$
- Total correlation = direct effect + indirect effect + confounding effect

FOCC \rightarrow OCC1 \rightarrow OCC

- FOCC \rightarrow OCC1 = 0.332
- FOCC \rightarrow OCC = 0.252
- OCC1 \rightarrow OCC = 0.461
- Indirect effect = $0.332 * 0.461 = 0.153 = 38\%$
- Father's influence on current occupation for the most part occurs after entry into the labor market!

BD Status attainment model (1967)



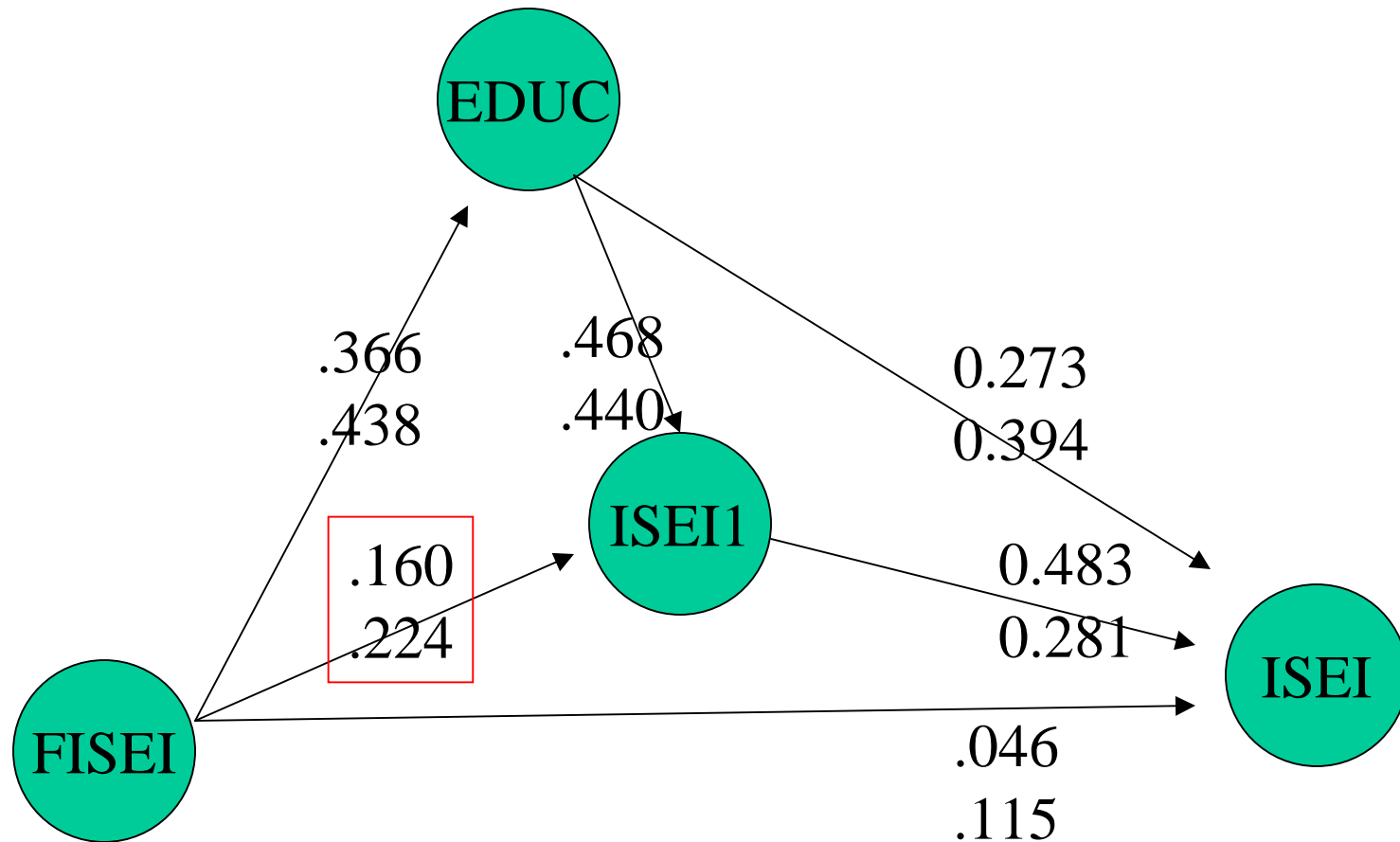
Some conclusions

- Father's education and occupations are equally influential in education attainment, but in occupational attainment father's occupation prevails.
- In fact, father's education has NO direct influence on occupational attainment.
- The influence of father's occupation on first job is stronger than on current job; however there is also some direct (!) influence on current job.
- The influence of education on current job is stronger than on first job: education is quite effective after labor market entry.
- There is considerable mobility between first and current job.
- More than half of intergenerational occupational reproduction occurs via educational attainment.

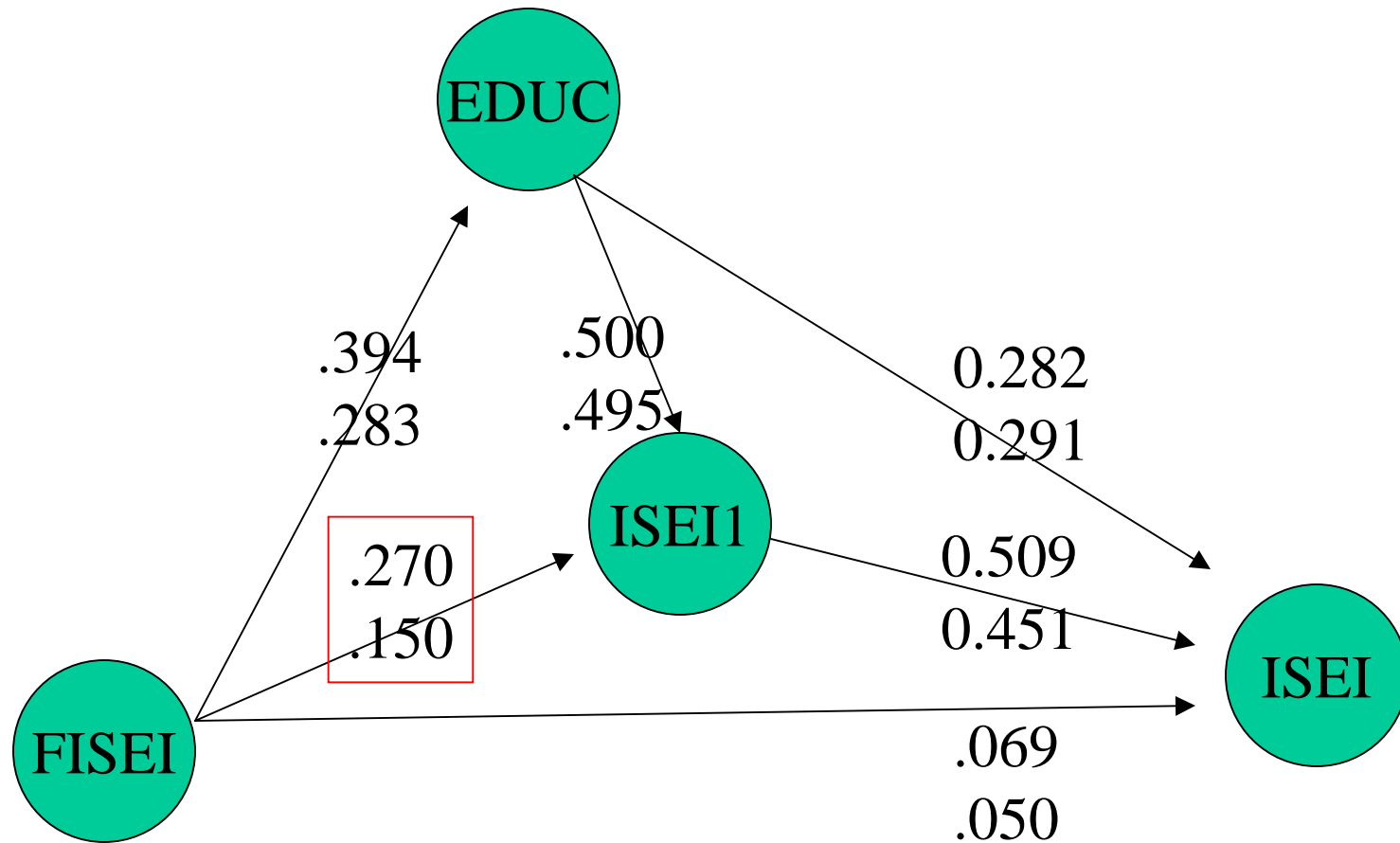
Netherlands 1982-2008

| Correlations | | | | | |
|------------------------|--------|-------|--------|-------|-------|
| | | fisei | educyr | isei1 | isei |
| Pearson Correlation | fisei | 1.000 | .366 | .332 | .306 |
| | educyr | .366 | 1.000 | .526 | .541 |
| | isei1 | .332 | .526 | 1.000 | .641 |
| | isei | .306 | .541 | .641 | 1.000 |

Netherlands 1982-2008 (top) vs. USA 1962 (bottom)



Netherlands cohorts 1950 (top) vs 2000 (bottom)



Conclusions

- More intergenerational mobility in NL than in the USA.
- This has increased over cohorts.
- Less career mobility in NL than in US, entry job is more decisive.
- Very little historical change in career mobility.

THESES 1A - methodological

- The aim of scientific research is causal explanation: we want to know how the world works and examining causes and effects is the way to find out.
- Quantitative models offer precise and informative way to test our causal theories.
- Most social science must use observational (=non-experimental) research designs; hence we need to be specific about control variables and measure / model them.

THESIS 1B - substantive

- In modern societies, careers patterns of men and women will converge; mothers and fathers are equally influential in offspring's career.
- Therefore it does not really matter that BD did not include women / mothers in their research.

How did B&D influence HG?

- Studies of trends in status attainment and social mobility in the Netherlands.
- Comparative studies of status attainment and social mobility in many countries.
- I created the International Socio-Economic Index [ISEI] of occupational status using the B&D model.
- See: www.harryganzeboom.nl
- In particular: > Downloadable papers.