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The Perceived Value of Education and the Formation of Educational Aspirations in the Czech Republic: The change between 1989 and 2003

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Structure

- Educational aspirations in stratification research: three main paradigms
- The role of socio-economic transformation in the development of aspirations
- Main results of prior comparative research in educational aspirations in the Czech Republic
- Hypotheses
- Data
- Structural model
- Results
- Conclusions

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Three main paradigms

1. 1950's: Aspirations as a dependent variable

The aim: the study of educational and occupational aspirations may contribute to understanding the reproduction of class inequality

Leonard Riessman (1953) "Levels of Aspiration and Social class"
Joseph Kahl (1953). "Educational and Occupational Aspirations of "Common Man" Boys."
Herbert Hyman (1953). "The Value Systems of Different Classes: A Social Psychological Contribution to the Analysis of Stratification."

Three main paradigms

2. 1960's - 1980's: Aspirations as a key intermediate variable in the status attainment process

The aim: to assess the role of socio-psychological factors in the process of socio-economic attainment social-psychological model, aspirations: the strategic centre of the model (Haller and Portes),

W.H. Sewell, A.O. Haller and A. Portes. 1969. "The Educational and Early Occupational Attainment Process."
A.O Haller and A. Portes. 1973. "Status Attainment Processes." (Sociology of Education)
W.H. Sewell, A.O. Haller and G.W. Ohlendorf. 1970. "The Educational and Early Occupational Status Attainment Process: Replication and Revision.".
R.M Hauser, 1972. "Disaggregating a Social-Psychological Model of Educational Attainment."
Hauser, R.M., S.L. Tsai and W.H. Sewell. 1983. "A Model of Stratification with Response Error in Social and Psychological Variables."

Three main paradigms

3. **1970's ⇒ Aspirations as a dependent variable**

    The aim: To assess the role of structural context in the formation of aspirations: aspirations certainly affect future attainment, but - at the same time - they are shaped by observed structural constraints, so they reflect *more* than just ability and pure motivation

    Kerckoff, A.C. "**The Status Attainment Process: Socialization or Allocation?**" *Social Forces* 1976

    Kerckoff, A. C. **Institutional Arrangements and Stratification Processes in Industrial Societies**, ARS, 1995

    Kerckoff, A. C. **The Realism of Educational Ambitions in England and the United States.** ASR, 1997

    Müller, W. and Y. Shavit. **The Institutional Embeddedness of the Stratification Process: A Comparative Study of Qualifications and Occupations in Thirteen Countries** (in Müller, W. and Y. Shavit „From School to Work", 1998)

    Buchmann, C. and H. Park, **The Institutional Embeddedness and Occupational Expectations: A Comparative Study of 12 Countries.** Paper presented at RC28, LA, 2005

Transformation perspective

The aim: To assess how the change in structural and social **contexts**, as well as in **socio-psychological factors**, impacted the formation of educational aspirations during the post-communist transformation,

namely the role of:
*   changes in the educational system
*   changes in the labour market returns to education
*   the *level* and *nature* of inequality
*   beliefs about inequality, values and norms, perceived role of various factors determining life-success

I.
Main results from our prior comparative research in educational aspirations in the Czech Republic

Analysis of OECD data: determination of educational aspirations in comparative perspective

Matějů, P., P.Soukup, J.Basl, and M.Smith: "Educational Aspirations in Comparative Perspective: The Role of Individual, Contextual and Structural Factors in the Formation of Educational Aspirations in OECD Countries." Paper presented at the conference of the European Consortium for Sociological Research: European Comparative Studies: Quality and Inequality in Education, Prague, September 1-2, 2006

Principal hypothesis

CONTEXT:

Socialism: Czechoslovak system of secondary education was highly stratified and vocational specific. Access to tertiary education was very limited and centrally controlled.

Current situation: high stratification and vocational specificity of secondary education has remained; accessibility of tertiary education ranks among the lowest, and selectivity among the highest, among OECD countries

Main hypothesis ⇒ Czech educational system generates significantly stronger determination of educational aspirations by social origin, ability and gender than is the case in other OECD countries

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Hypothesized relationships between characteristics
of the educational system and educational aspirations

Openness of tertiary education system

Determination of educational
aspirations at inidivudal and
school level

Secondary education system stratification
and vocational specificity
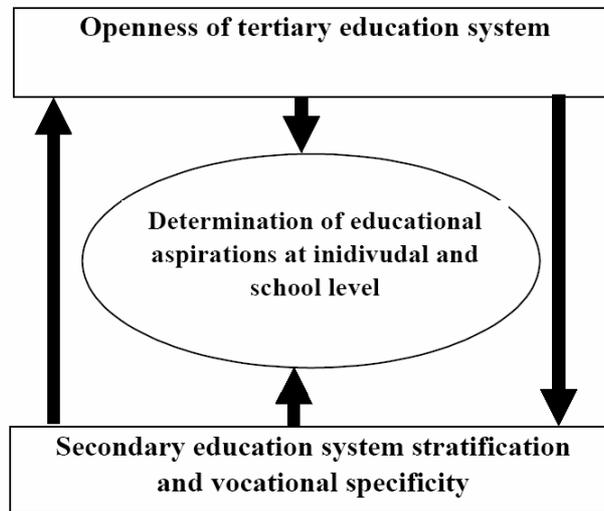
9

OECD-PISA countries in a two-dimensional space defined by the
openness of the secondary education system (SCND) and the
openness of the tertiary education system (TERT)

RSQ=0.393
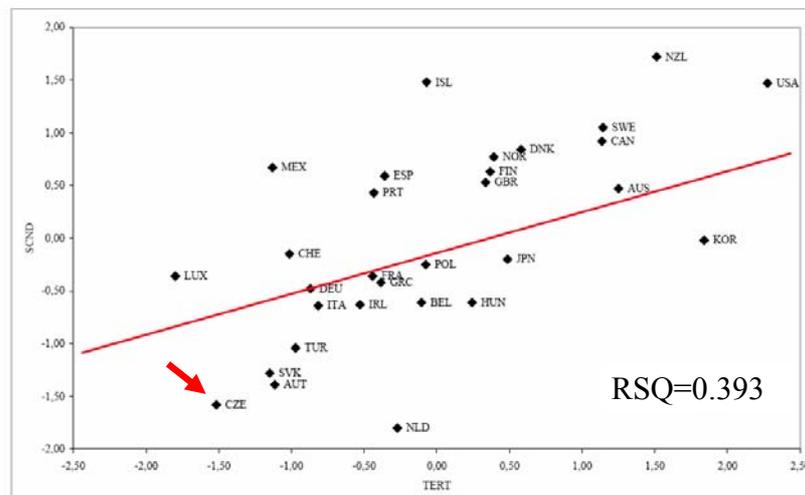
Overall determination of educational aspirations

Standardized coefficient of determination (Nagelkerke R^2) from logistic regression of educational aspirations on ability (ABIL), gender and socio-economic background (HISEI)
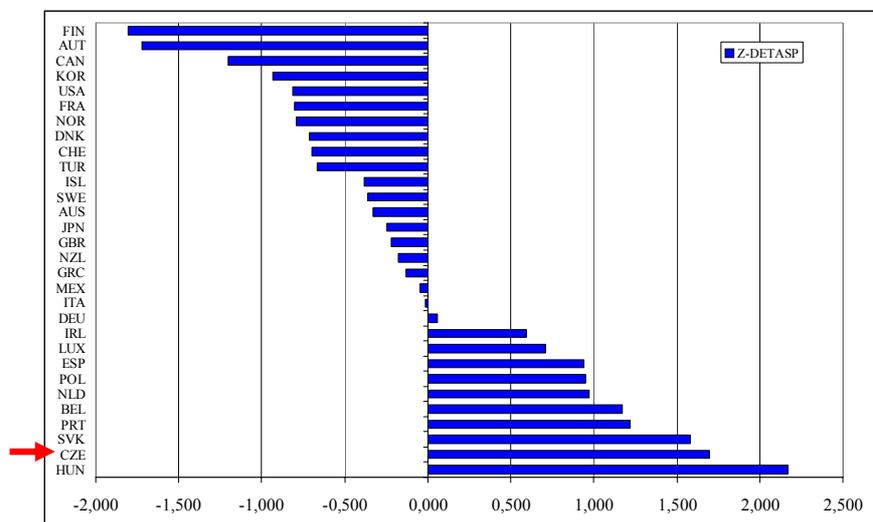
II.
Change in the determination of educational aspirations in the Czech Republic 1989 – 2003

Analysis of data from two longitudinal projects:
Family 1989 and PISA-L

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Hypotheses

CONTEXT:

The economic value of education has grown (economic returns to education almost doubled between 1989 and 2003) and the role of education in life-success significantly strengthened. Achieving higher education is becoming a more universal "strategy" for life-success

H1 ⇒ Changes in the economic returns to education and in the role of education in life-success after 1989 led to a significant growth of educational aspirations between 1989 and 2003

Hypotheses

CONTEXT:

Educational aspirations have been growing;
System of secondary education remains highly stratified and selective;
System of tertiary education remains closed and highly selective;
Competition at the entry to tertiary level is extremely strong;
In order to increase a chance of admitting to college or university, parents strive to place their children to elite secondary schools.

H2 ⇒ Direct effect of social origin on aspirations has diminished

H3 ⇒ The effect of ability on aspirations has grown

H4 ⇒ The effect of parental SES on the perceived value of education among parents and children has weakened

H5 ⇒ The total effect of social origin on educational aspirations has not changed, i.e. has remained very strong

Data

Data from a longitudinal survey Family 1989

– First survey carried out in January 1989 on a total sample of 3,719 students in their 8th year of education.

– The questionnaire contained questions concerning educational aspirations and plans, occupational aspirations, beliefs about life-success, cultural activities and leisure time, material life conditions etc.

– Students were asked to complete the Czech version of Cattell's *"High School Personality Questionnaire."*

– The survey of students was followed by a survey of their parents (73% response rate). Parents were asked about their education, occupation, income, cultural participation, social contacts, beliefs about life-success, educational expectations form their children, etc.

– The merged student-parents data file contains 2,709 cases.

Data

Data from a longitudinal survey PISA-L

– Special PISA-L questionnaires for students and their parents.

– Similar to the 1989 survey, the questionnaire contained questions concerning educational aspirations and plans, occupational aspirations, beliefs about life-success, cultural activities and leisure time, material life conditions etc.

– Also, parents were asked questions allowing a comparison with the 1989 survey (education, occupation, income, cultural participation, social contacts, beliefs about life-success, educational expectations from their children, etc.)

– The merged student-parents data file contains 2,479 cases.

Variables

- **EDUASP**: educational aspirations (standardized scale created from variables: college aspirations, expectation to attain the education aspired for)
- **D-EDU**: student's perceived role of education in life-success (how important for success in life is to achieve higher education - ordinal variable)
- **R-EDU**: parents' perceived role of education in life-success (how important for child's success in life is to achieve higher education - ordinal variable)
- **EDU-H**: The highest attained education by either parent
- **ISEI-H**: The highest socio-economic status of either parent
- **FAMINC**: Total family income
- **ABIL**: in 1989 IQ (Cattel HSPQ), in 2003 average from plausible values of READ, MATH, SCIE, PROB)

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Change in perceived role of education in life-success between 1989 – 2003: parents

	not important at all	not very important	quite important	very important
father 1989	4	15	39	41
mother 1989	6	18	38	38
father 2003	2	7	37	54
mother 2003	1	8	39	53
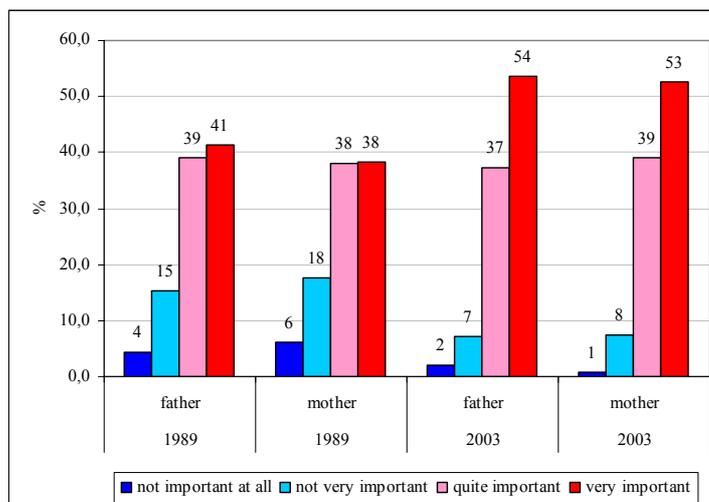
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Change in the perceived role of education in life-success between 1989 – 2003: children

Legend: not important at all | not very important | quite important | very important

Data values by group:
- boys 1989: 44, 12, 24, 20
- girls 1989: 44, 12, 23, 21
- boys 2003: 1, 5, 29, 66
- girls 2003: 0, 5, 27, 68
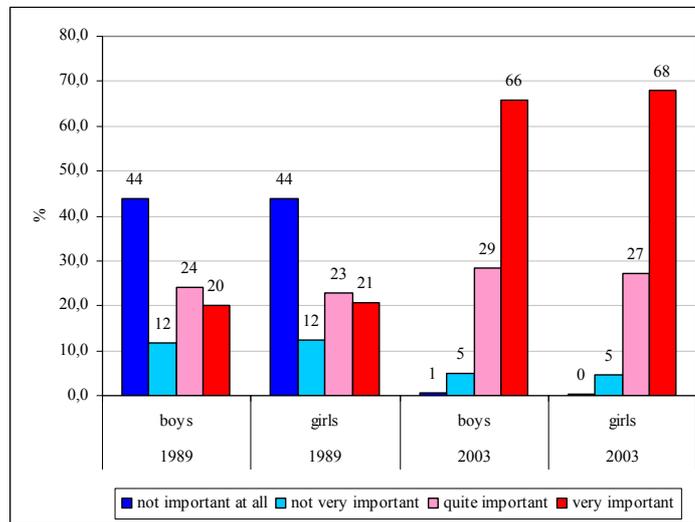
Change in college aspirations among pupils 1989 - 2003

Data values:
- boys 1989: 18,3
- girls 1989: 15,1
- total 1989: 16,7
- boys 2003: 45,6
- girls 2003: 53,6
- total 2003: 49,6
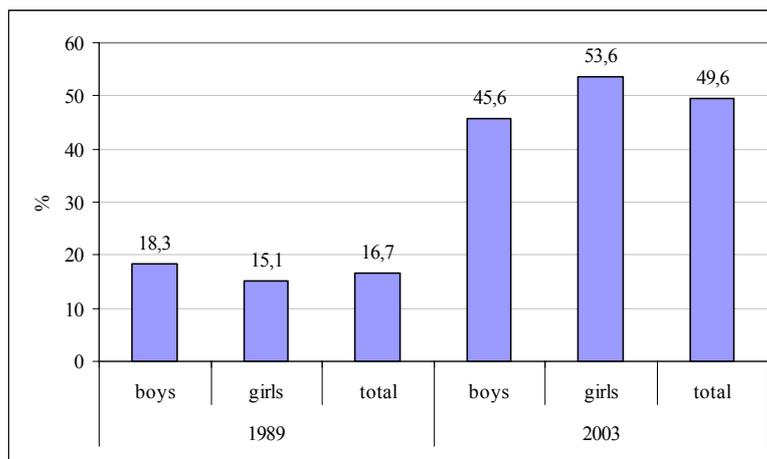
Theoretical causal model
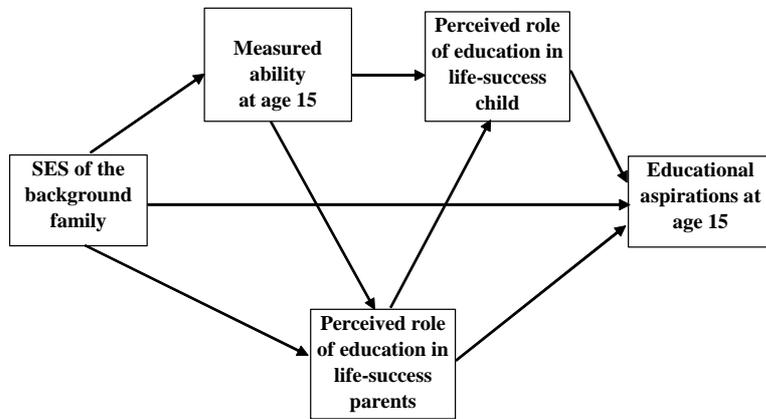
Hypothesis about the change
in the determination of educational
aspirations between 1989 and 2003
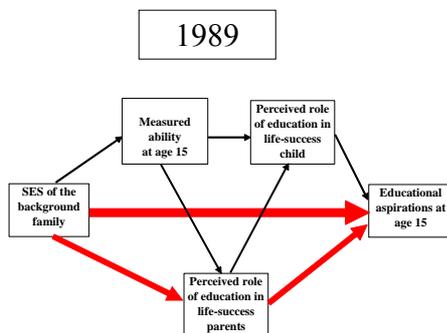
1989

Hypothesis about the change
in the determination of educational
aspirations between 1989 and 2003
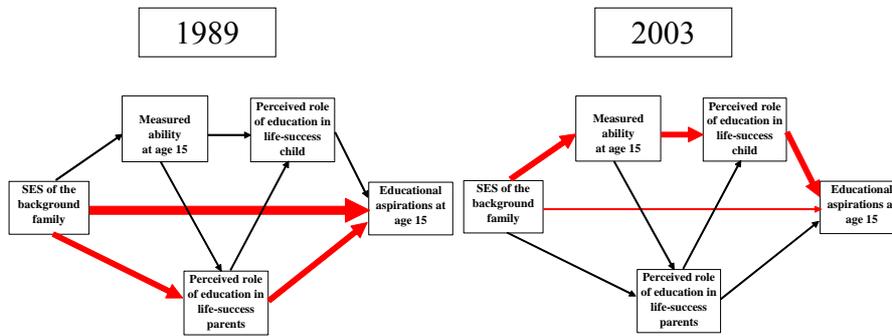
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Structural model
parameters
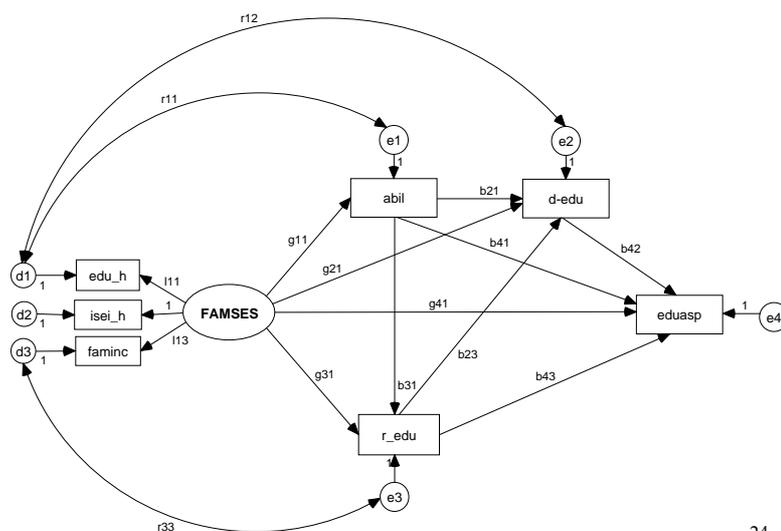
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Structural model
standardized coefficients 1989

Chi-square = 5,384 (5 df), p=,371
GFI=,999

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Structural model
standardized coefficients 2003

Chi-square = 14,591 (5 df), p=,012
GFI=,998

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Structural model
decomposition of total effects

Part of the model and composition of the respective effect	Standardized coefficient		Proportion from the total effect of FAMSES on EDUASP	
	1989	2003	1989	2003
M1 (g_{41}) direct effect of FAMSES	0.421	0.185	72.3%	44.9%
M2 $(g_{31}*b_{43})+(g_{31}*b_{23}*b_{42})$ effect of FAMSES trough the perceived importance of education among parents	0.034	0.009	5.8 %	2.3%
M3 $(g_{11}*b_{41})+(g_{11}*b_{21}*b_{42})+(g_{11}*b_{31}*b_{43})+(g_{11}*b_{31}*b_{23}*b_{43})$ effect of FAMSES trough ABILITY and the perceived importance of education among children	0.115	0.213	19.7%	51.8%
Total effect	**0.582**	**0.413**	**100.0 %**	**100. 0%**

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Conclusions

Social context

- Večerník: the economic value of education has grown (economic returns to education almost doubled between 1989 and 2003)

- Family 1989 and PISA-L 2003: The value of education has 'universalized': the role of higher education as a strategy of life-success has significantly strengthened.

➔ **Educational aspirations have grown** (proportion of nine-graders aspiring for college/university education more than doubled between 1989 and 2003)

Conclusions

Structural context

Matějů, Smith, Soukup and Basl:

- The Czech system of secondary education ranks among the most stratified, vocational specific and selective systems among OECD countries.

- Highly stratified secondary schools and selective tertiary education cause extremely tough competition at the entry to preferred secondary schools (namely those that prepare pupils for entry to tertiary education) as well as at to university admissions.

- Educational aspirations are formed in an extremely competitive environment, therefore they are very strongly (more than in other countries) determined by social origin, ability and gender.

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Conclusions

Principal consequences for the determination of educational aspirations

- The **direct** effect of SES of the background family on educational aspirations has diminished
  - A comparison of the two models indicates that the direct effect has diminished by more than half

- Why a decline in direct effects?
  - Under communism, higher education was largely a **means of the reproduction of the cultural elite** (due to its low economic returns at the time), rather than a strategy of life-success
  - In the 1990s, as education becomes an important **strategy of life-success**, its value becomes 'universalized,' meaning that the impact of SES becomes mediated by how pupils and parents value education

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Conclusions

Principal consequences for the determination of educational aspirations

The **indirect** effect of SES on aspirations through ability and the perceived role of education by children has increased

- **SES ➔ ABILITY** has increased somewhat (problem of measurement), while:
  ABILITY ➔ ASPIRATIONS has increased quite sharply
- The impact of children's perceived importance of education on aspirations has increased, though the determinants of such perceptions need to be better illuminated
- Why an increase in indirect effects?
  - With rapid economic and labor market changes during the transition period, **pupils begin to value education as a necessary condition for life-success**
  - This means that **pupils with higher ability (largely from families with higher SES) aspire to, and often achieve, higher education, which becomes a new avenue for the social reproduction of the elite**.

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Conclusions

Principal consequences for the determination of educational aspirations

- The **total** effect of SES on aspirations has diminished, though only slightly

  - This is to be expected given the very large expansion of aspirations in the 1990s (roughly tripled in size among all pupils), leading to a diffusion of aspirations by pupils from the new middle class

  - Nonetheless, the determination of aspirations by HISEI, gender and ability remains one of the highest in the OECD (second only to Hungary).

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Thank you

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Possible explanation for weak relationship between parents' and
children's beliefs about life success