

# THE QUALITY OF SCHOOL AGE CHILDREN' REPORTS ON FAMILY SES. SYSTEMATIC REVIEW

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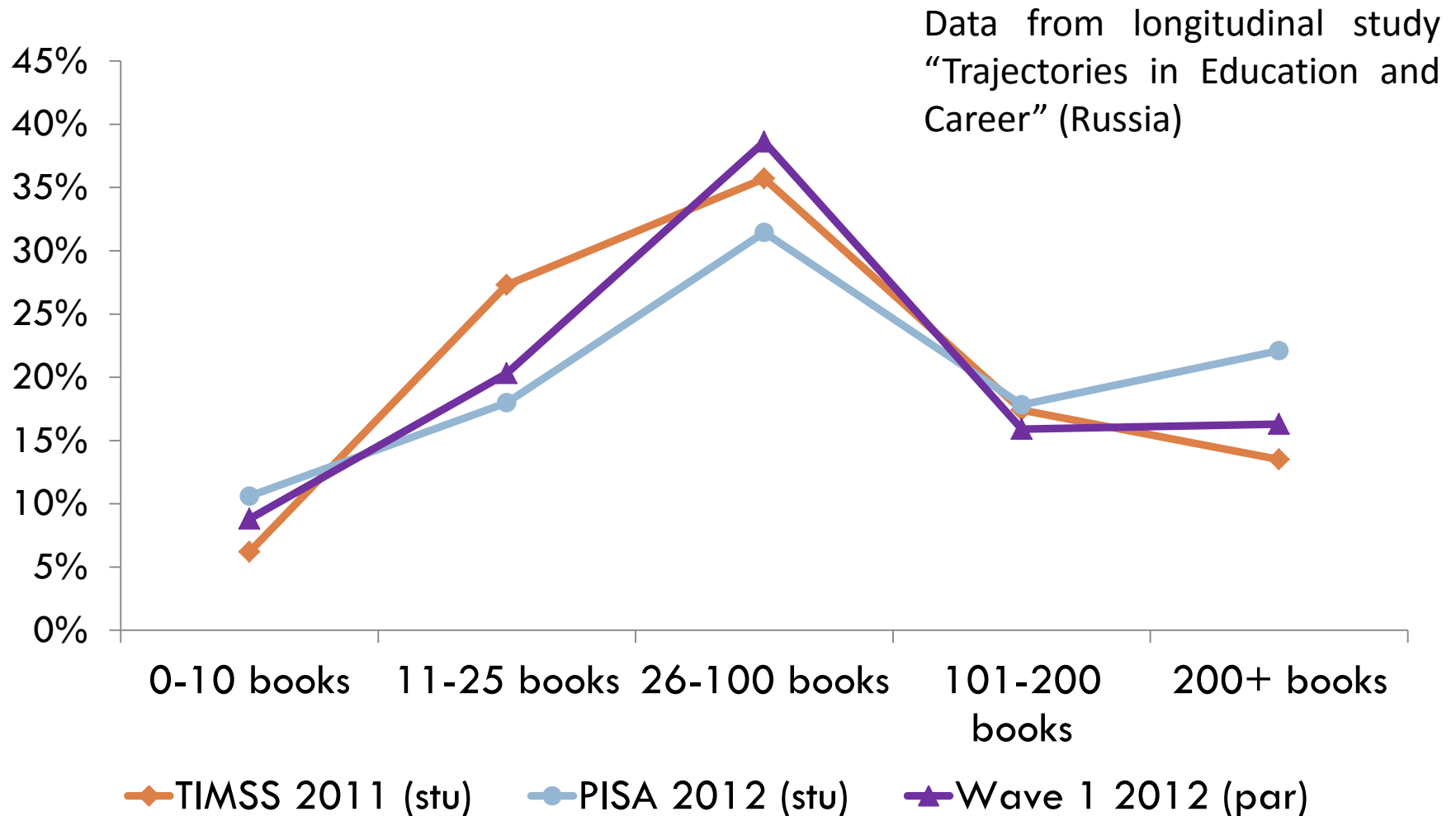
# Background

- SES variables are always required in sociological and educational.
- More and more surveys of school-age children as a focal group of interest.
- “Project 17-17”, USSR, late 60-s. (Астафьев, Шубкин, 1998)
- Coleman’s project in USA. (Coleman, 1966)
- First International Mathematics Study (FIMS) (Husen, 1967)
- PIRLS, TIMSS, PISA and many others. National and international.

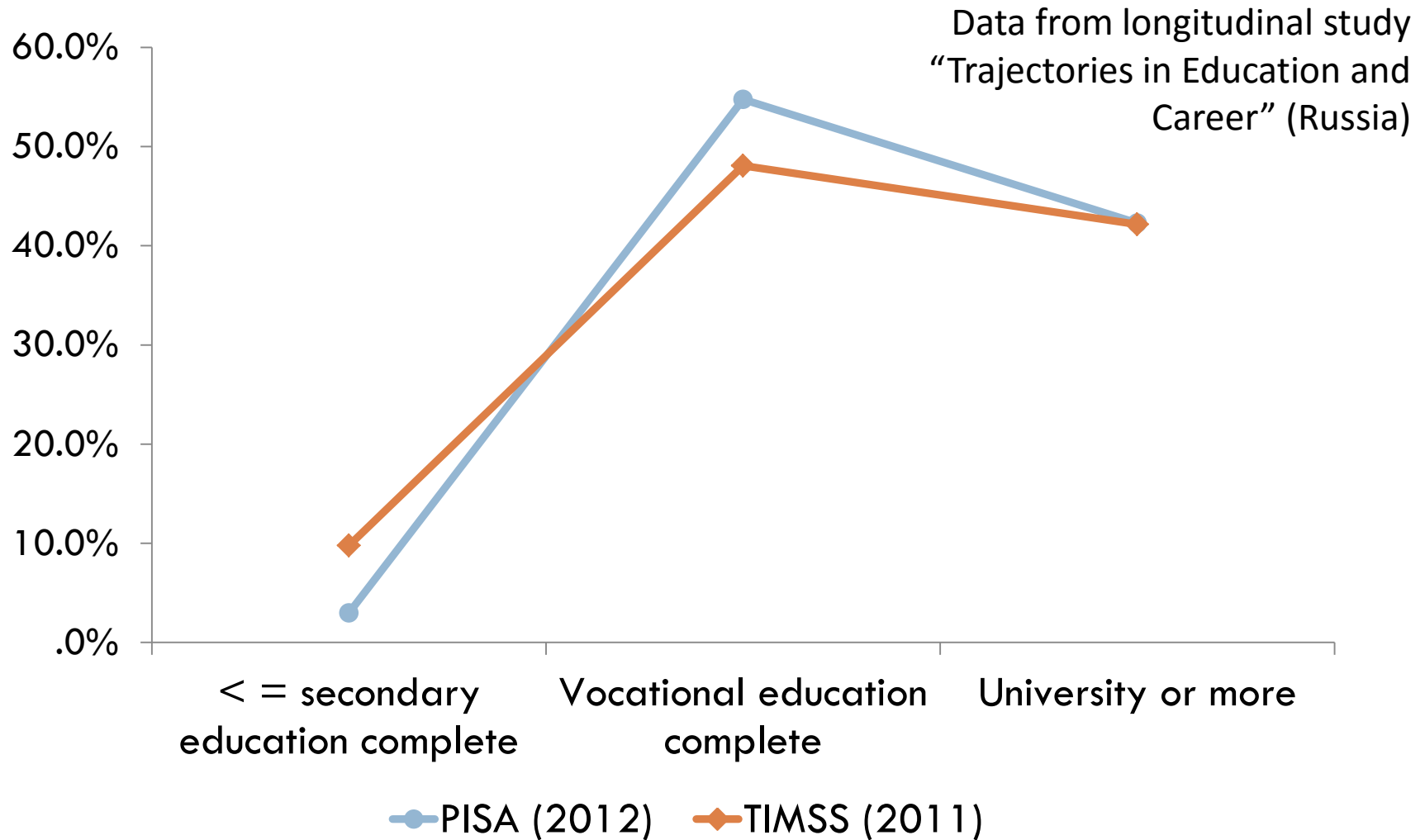
# Background

- Researchers rely on the students responses on factual questions (parents' education, occupation, articles in home and other family SES related questions).
- Whether students are competent enough to provide accurate answers?

# Books in the home TIMSS and PISA – same students. Wave 1 - parents



# Mothers education TIMSS and PISA. Same students. One year gap



# Research Question

- Which SES measures appear to have higher consistency in the responses of children and parents?
- To what extent different SES measures are prone to be missed?
- Are there any respondents' characteristics that are related with the response quality?

# SES measures

- Big three:
  - Parents' education
  - Parents' occupation
  - Income
- Cultural capital
  - Parents' education
  - Cultural practices
  - Books at home
- Family structure
- Indirect measures of wealth
  - Home possessions

# Methodology

- Systematic review (Petticrew & Roberts, 2006) of the studies devoted to investigation of the quality of children responses on family SES variables.
- Papers selection criteria:
  - ▣ Research about the quality of the school age children answers on the family SES questions;
  - ▣ Methodological focus;
  - ▣ We mostly focused on the papers published since 1990, as in 1989 similar review had been done (Looker, 1989);
  - ▣ English or Russian language.
- Approaches to look for relevant papers:
  - ▣ Snowball method.
  - ▣ Search in the citation and periodical databases (SCOPUS, WoS, JSTOR, EBSCO, Science Direct and others).



# Methodology

- 16 papers were included in our final list.
  - ▣ 14 on research question 1 about consistency.
  - ▣ 11 on research question 2 on missing data issue.
  - ▣ 8 on research question 3 about students' characteristics and response quality.
  
- SES measures
  - ▣ 14 - Parents' education
  - ▣ 13 - Parents' occupation
  - ▣ 4 – Form of parents' occupation
  - ▣ 3 - Family structure

# Methodology

- Most samples are high school students
- From articles we took:
  - ▣ Correlation coefficients between children and parents answers
  - ▣ Percent of agreement
  - ▣ Cohen's Kappa (inter-rater agreement)
- We averaged these coefficients

# Results. Consistency

Occupation	Correlation		% of agreement		Cohen's Kappa	
	Mother	Father	Mother	Father	Mother	Father
Mean / median	0.7	0.7	69 / 74%	70%	0.7	0.7
Range	0.4 - 0.9	0.5 - 0.9	20 - 94%	43 - 93%	0.6 - 0.8	0.4 - 0.9

Education	Correlation		% of agreement		Cohen's Kappa	
	Mother	Father	Mother	Father	Mother	Father
Mean / median	0.6	0.6	65 / 69%	64%	0.5	0.5
Range	0.6 - 0.9	0.4 - 0.9	39 - 86%	21 - 88%	0.3 - 0.7	0.3 - 0.8

# Results. Missing data

	Occupation		Education	
	Mother	Father	Mother	Father
Mean / median	12% / 9%	7% / 5%	7% / 5 %	8% / 3%
Range	0.6 - 46%	1 – 34%	0.7 - 15%	0.2 - 39%

- Results differ from paper to paper more than for consistency.
- “Do not know” option usually is also available in “parents’ education” question and a substantial share of student ticks it.

# Results. Students characteristics

## Parents-children consistency:

- Age
- Achievements
- Family structure
- Family SES (according to parents' responses)

## Missing answers:

- Age
- Family structure

# Conclusions

- The percentage of agreement between parents and children rarely exceeds 80% for occupation and 70% for education.
- In average is 65-70% of coincidence.
- Correlation is about 0.7 for occupation and 0.6 for education.
- Results for “parents’ occupation” questions is a little bit better than for “parents’ education” questions.
- In general school age children tend to misreport one category up or down in all SES proxies. So merging categories may increase consistency.
- Lack of research on books at home, home possessions and other SES indicators.



- Thank you!

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# Mothers education TIMSS and PISA.

## One year gap

TIMSS	PISA			Total
	< = secondary education	Vocational education	University or more	
< = secondary education	53	256	27	336
Vocational education	27	1398	279	1704
University or more	8	182	1544	1734
Total	88	1836	1850	3774

78.4% agreement

12% in TIMSS “Do not know”. Where are they in PISA?