



Organized leisure activities in early childhood and social inequalities in cognitive and non-cognitive skills

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Background:

- Organized leisure activities have several benefits for children's skill development (Covay & Carbonaro 2010, Cabane, Hille and Lechner 2016)
- However, too much structured leisure time activities may lead to stress and lower creativity of children (Lareau 2002)
- Children of higher social classes are more often enrolled in organized leisure activities (Schober & Spieß, 2013)
- Hence, organized leisure may represent educational reproduction mechanisms
- Most research focused on adolescence, yet "investment" in early childhood may be particularly beneficial (Cunha et al., 2006)
- Little research is based on German data

Research questions:

- To which extent is enrollment into organized leisure during childhood related to children's cognitive and non-cognitive skills?
- To which extent does enrollment into organized leisure mediate the relation between parental socioeconomic status (SES) and children's cognitive and non-cognitive skills?

Theoretical model:

Lareau's (2002, 2011) argument



Hypotheses:

- H1** Enrollment into organized leisure is related to higher **cognitive skills**.
- H2** Enrollment into organized leisure is related to higher **non-cognitive skills**.
- H3** Enrollment into organized leisure partially mediates the association between parental socioeconomic status (SES) and children's **cognitive skills**.
- H4** Enrollment into organized leisure partially mediates the association between parental socioeconomic status (SES) and children's **non-cognitive skills**.

Data and Operationalization:

- German National Educational Panel Study (NEPS)
- Starting cohort 2 "Kindergarten"
- Two measurement time points: age 5 & 7
- 342 parents and their children in preschool (with multiple imputation)

	Scale	Collection rhythm			
		20-	11	12	13 14
Parental SES					
Education level (CASMIN)	1/3		w1		
Organized leisure activities					
Sport	0/1		w2		w4
Music lesson	0/1		w2		w4
Other activities	0/1		w2		w4
Cognitive skills					
Math ability (WLE, z-std)	-3/4		w2		w4
Non-cognitive skills					
Social skills (educator rated, z-std)	-2/1		w2		w4

Results of Lagged Dependent Variable (DV) regression:

$$y_{it} = b_0 + b_1 y_{(t-1)} + b_2 x_t + e_t$$

DV Math score

DV Social skills

Table 1 LDV regression of math and social skills on organized leisure activities

	M1	M2 + OAs	M3	M4 + OAs
DV (w2)	0.483*** (0.049)	0.461*** (0.048)	0.266*** (0.051)	0.262*** (0.051)
Low Education	-0.188 (0.176)	-0.091 (0.180)	-0.590** (0.193)	-0.609** (0.194)
High Education	0.245* (0.109)	0.174 (0.110)	-0.026 (0.112)	-0.057 (0.118)
Sport (w2)		0.184 (0.120)		-0.285 (0.144)
Music (w2)		0.278** (0.097)		0.186 (0.107)
Other (w2)		0.039 (0.101)		0.094 (0.113)
Controls ^a :	Yes	Yes	Yes	Yes
N	342	342	342	342

Standard errors in parentheses

^a HH income, unemployment, single parenthood, no. siblings, West Germany

child gender, child age, stimulating activities (preschool), stimulating activities (home), cognitive abilities

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Summary:

- Music participation (w2) explains part of the relation between parental education and math scores (w4)
- Non of the organized leisure activities (w2) is positively related to social skills (w4)
- Hence, music participation, but not organized leisure activities in general, explains the relation between parental SES and cognitive skills

Limitations:

- Small sample
- Exact type of organized leisure unclear (e.g., type of sport)
- Only subjective measures of concentration & social skills

Collaboration interests:

- Research on social inequalities in preschoolers cognitive and non-cognitive skills
- Research on the role of (parental) social networks and child development
- Research on "academic resilience" – children who thrive in education despite their disadvantaged background
- Development of an interdisciplinary theoretical model explaining social inequalities in education

My expertise and experience:

- Quantitative data analysis of large (longitudinal) secondary data
- Wide knowledge on theoretical approaches (from different disciplines) explaining social inequalities in education
- Working in interdisciplinary teams

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