

# Sibling effects on transition to higher secondary school

Elena Wittmann

LifBi | Leibniz Institute for Educational Trajectories

## Background

- Social background influences the transition to secondary school (e.g. Autorengruppe Bildungsbericht 2020)
- Due to its special structure, sibling relationship forms a learning context for children and adolescents that has its own unique qualities.

## Theory

Bourdieu regards the family as a starting point from which the positioning chances take their beginning and shape the further course considerably (1973). It is not only economic capital that makes up a person's position in society, but also his cultural capital (e.g. skills) and habitus, which generates perceptions, aspirations, and practices.

Besides parents, siblings can also act as mediators of cultural capital and can alter student's aspirations and orientation toward

school (educational habitus). Older siblings have already acquired skills and knowledge at school, which could be passed on from older to younger siblings through interaction (Helbig 2013; Grgic & Bayer 2015).

Furthermore, since the older sibling has already experienced the transition to higher secondary school, relevant information could be passed on from the older sibling to the parents, thus leading to higher aspirations for the younger sibling (Helbig 2013; Grgic & Bayer 2015).

## Research Question and Hypotheses

**RQ: Is there a positive effect of an older sibling on the transition to Gymnasium?**

*H1: The educational success of the older sibling increases the probability of the younger sibling's transition to Gymnasium*

- H1a: The educational success of the older sibling positively alters the educational habitus of the younger sibling*
- H1b: The educational success of the older sibling increases parents' aspirations for the younger sibling*
- H2: The positive influence remains for parents with low educational background*

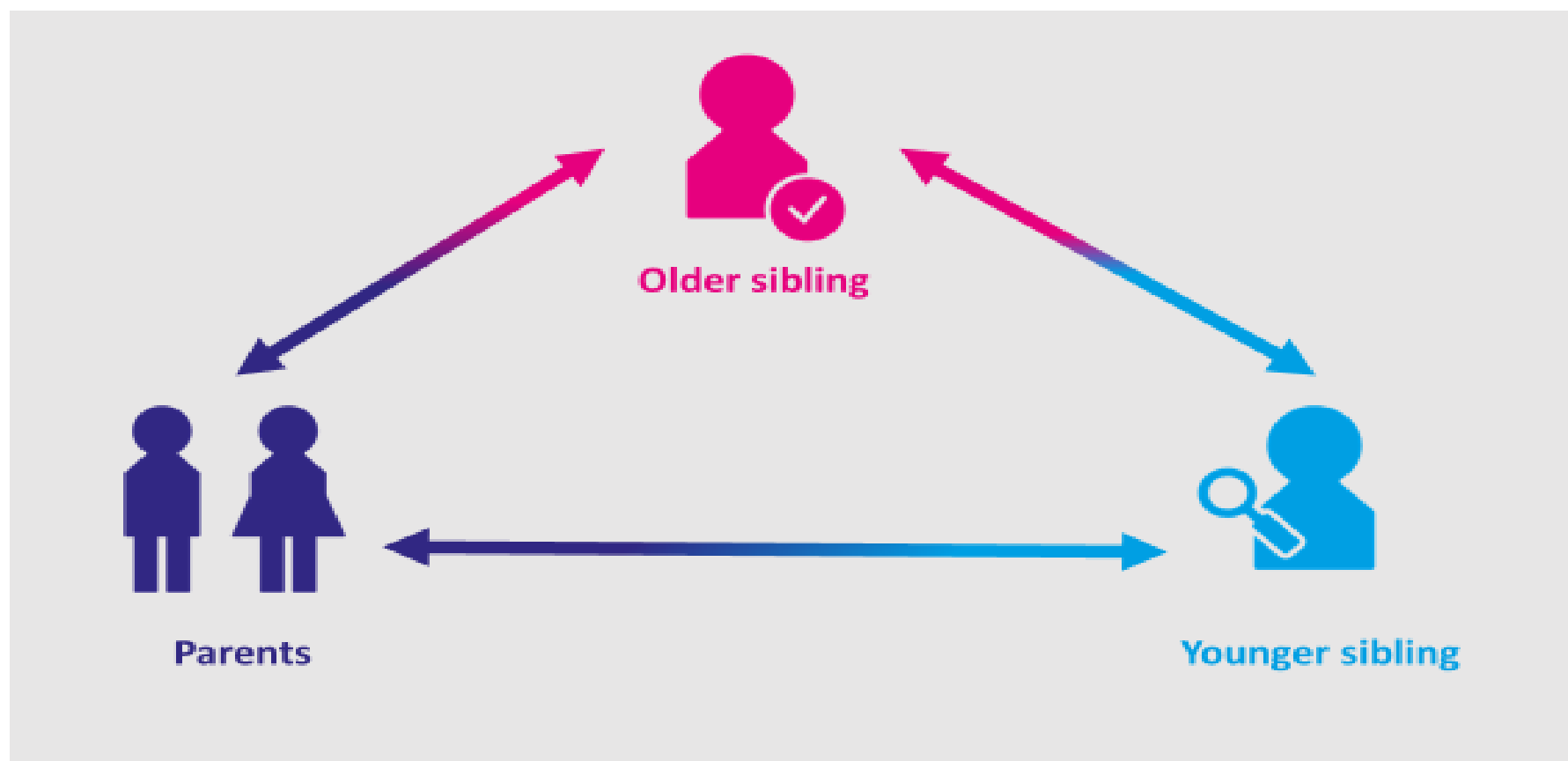


Figure 1:  
Changes in the experience and behavior of a family member cause changes in the entire family system

## Data

- NEPS Starting Cohort 2 "Kindergarten" (NEPS SC2, doi:10.5157/NEPS:SC2:8.0.1) (Blossfeld, Roßbach & von Maurice 2011)
- Children with siblings ( $N = 3.281$ )
- 52 % female

## Instruments

- Number of siblings:** 1 (0), 2 (1), 3 or more (2)
- Educational success:** Gymnasium/Abitur (1) vs. Other (0)
- Migration background:** at least one born abroad (1) vs. Not (0)
- Educational background:** at least Abitur (1) vs. Not (0)
- Idealistic aspiration:** Abitur (1) vs. Other (0)

- Higher sec. school:** Gymnasium (1) vs. Other (0)
- Educational habitus:**
- Joy of learning:** 3 Items ( $\alpha = .90$ )
- Willingness to make an effort:** 3 Items ( $\alpha = .60$ )
- Idealistic aspiration:** Abitur (1) vs. Other (0)

## Results

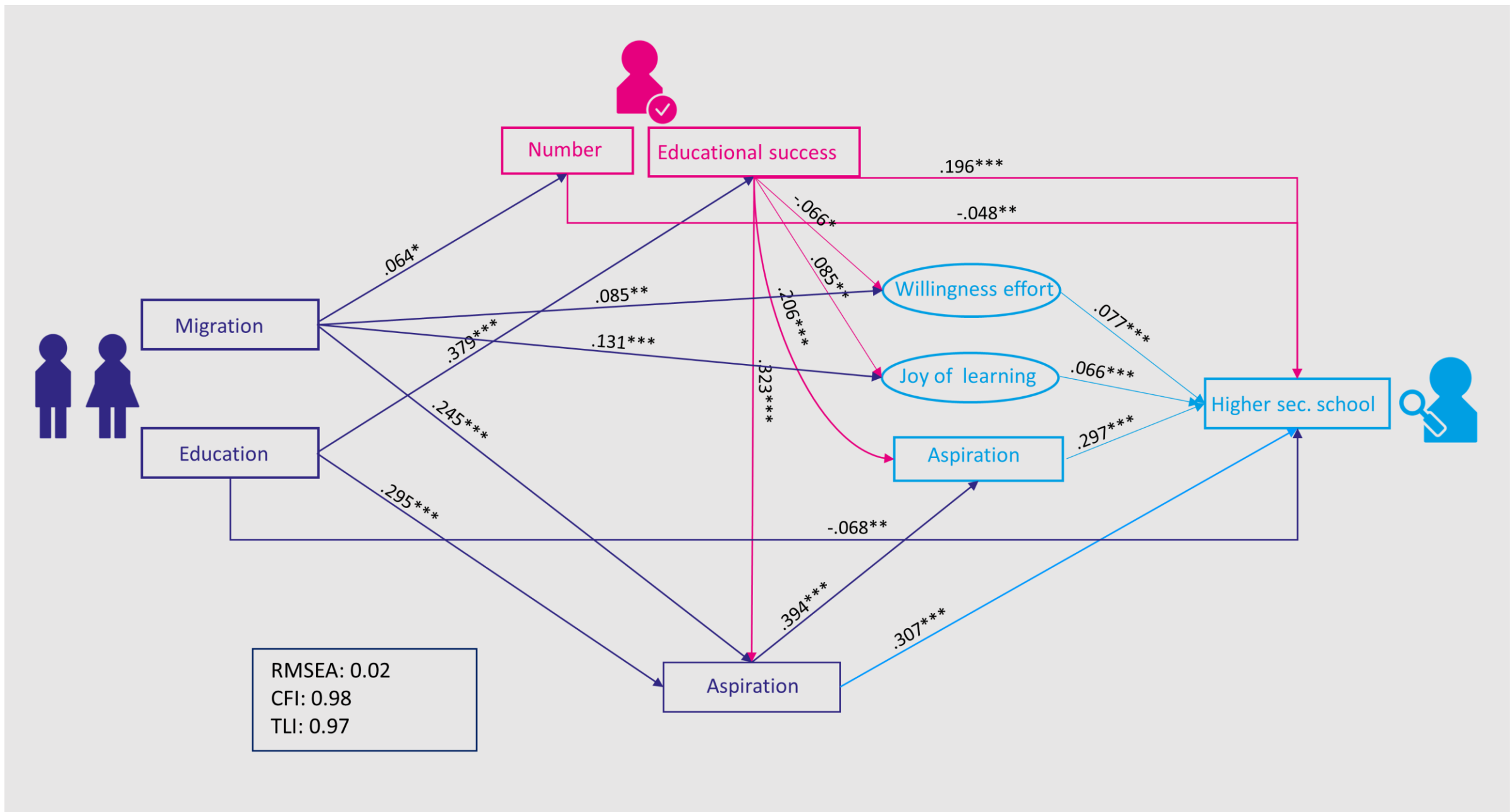


Figure 2:  
Structural Equation Model; multiple imputed data; standardized coefficients; \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$   
Note: only significant paths reported.

independent variables	parents with high educational background	parents with low educational background
Direct effects		
DV: higher secondary school		
number of siblings	-0.035	-0.085*
sibling's educational success	0.216***	0.055
parents' migration background	0.013	-0.030
parents' aspiration	0.324***	0.323***
willingness to make an effort	0.077**	0.076
joy of learning	0.061**	0.059
child's aspiration	0.224***	0.343***
Indirect effects		
DV: number of siblings		
parents' migration background	0.036	0.163***
DV: parents' aspiration		
parents' migration background	0.056	0.231***
sibling's educational success	0.457***	0.452***
DV: sibling's educational success		
parents' migration background	-0.015	0.030
DV: willingness to make an effort		
parents' migration background	0.030	0.052
sibling's educational success	0.082**	0.120*
DV: child's aspiration		
parents' migration background	-0.028	0.004
sibling's educational success	0.187***	0.267***
parents' aspiration	0.440***	0.364***
DV: joy of learning		
parents' migration background	0.037	0.095**
sibling's educational success	0.121***	0.162***

Table 1:  
Multigroup Comparison; multiple imputed data; standardized coefficients; \*  $p < 0.1$ ; \*\*  $p < 0.05$ ; \*\*\*  $p < 0.01$ ; CFI: .99; TLI: .99; RMSEA: .01

## Discussion and Limitations

- H1:* ✓ *H1b:* ✓
- H1a:* ✓ *H2:* ✗ / ✓ (only indirect effects)

- Older sibling's educational success has a positive influence on the younger sibling's transition to Gymnasium
- However, there is no information on actual time siblings

spent together/transmission processes  
→ Besides structural features of the family of origin, it is worth looking at what happens in the family