

# Parental Birth Order: Insights on Intergenerational Mobility of Human Capital

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## Motivation

- Numerous studies investigate how childhood experiences shape adult success
- Do childhood experiences also have intergenerational consequences?
- Focus on an important aspect of childhood: **birth order**

### Research question

What are the causal effects of *parental* birth order on children's education and crime?

### Why birth order?

- Birth order effects on human capital and income are significant and long-lasting. Suggests that spillovers may be **economically meaningful**
- Birth order provides **rare 'as-if-randomized' variation** that applies to a **large fraction of the population**

What can we learn from parental birth order effects?

- Improve understanding** of intergenerational mobility: which childhood experiences have inter-generational spillovers?
- Quantify magnitude** of intergenerational spillovers

## Identification and data

Birth Order → Sibling Fixed Effects regressions

Parental Birth Order → **Cousin Fixed Effects** regressions

**Key assumption:** grandparents' fertility decisions were unrelated to the children's quality

- Muslimova et al. (2020): children of different birth orders do not differ in their genes
- We also consider birth order effects for children who are not last-borns and find similar results here

We use **rich administrative data** from Statistics Netherlands.

First generation

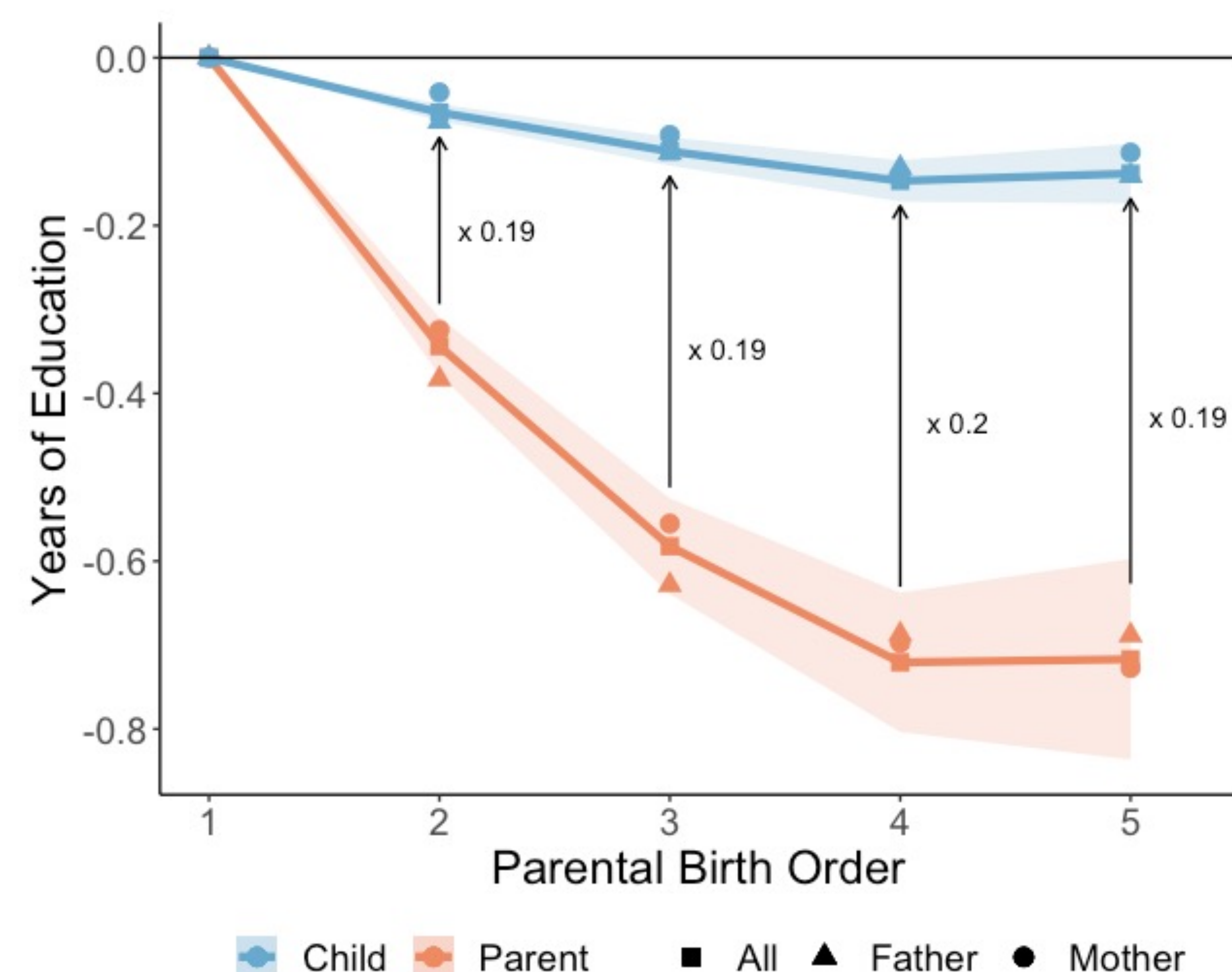
- All individuals** born in NL between 1945-1970
- Exclude migrants, twins, single-child families or families with incomplete birth data

Second generation ( $n \cong 4$  million)

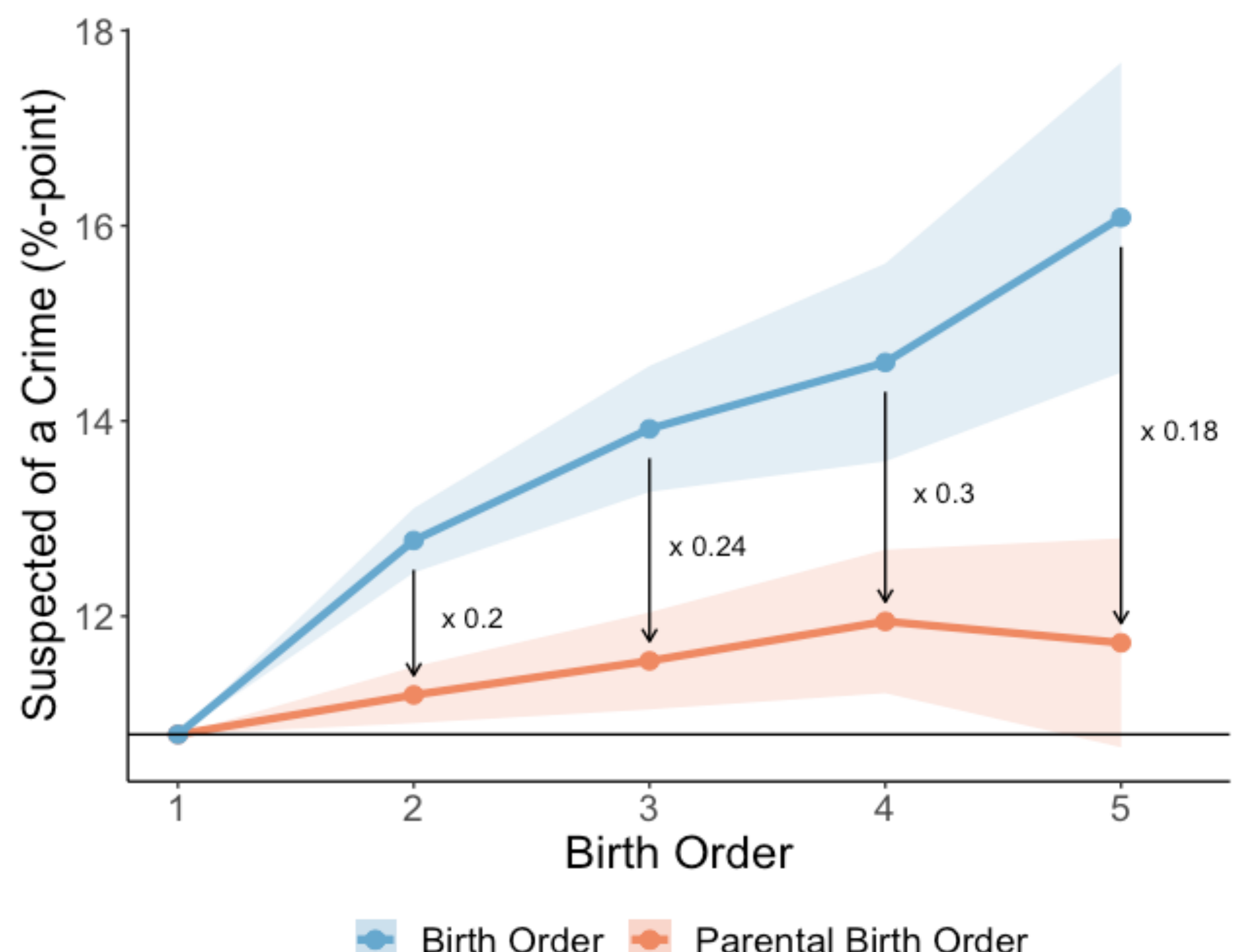
- Education: children of first generation born before 1995
- Crime: boys born between 1985-1999

## Results

### Parental birth order *decreases* children's education



### Parental birth order *increases* boys' crime



## Main takeaways



**20 percent** of birth order effects on the parents' education are transmitted to the children

The next generation's **non-cognitive skills (crime)** are also affected



Returns to childhood interventions may be underestimated when they do not take into account the *intergenerational* and *multidimensional* effects