

The Enduring Disadvantage of Residential Context

Investigating the Temporal Dimensions of Neighborhood Effects

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Background

Neighborhood effects capture the impact of the residential context on individual-level outcomes.

Residential context affect various aspects of life such as health, criminality and employment [1].

Most of the literature has focused on whether there is a neighborhood effect and less has been done on when, where, and for whom residential contexts matter most [2].

We focus on the temporal dimensions of neighborhood effects: duration and timing of exposure, with regard to educational attainment.

Data

Register data. LISA for socioeconomic variables, GEO for residential trajectory.

Sample: 1989 cohort with fully completed urban residential trajectory from 1990 to 2005. $n = 59,130$.

Construction of the treatment:

1. Compute the share of unemployed among the 500 nearest neighbors for each year.
2. Create a binary variable for belonging to the last quintile (where unemployment is the highest), for each year.
3. Compute the cumulative exposure by summing the binary for every year.

Outcome: graduation from upper secondary education (*gymnasium*) by 25 years old.

Methods

We use inverse probability of treatment weighting (IPTW) to account for both time-invariant and time-varying confounders.

Controls:

- Baseline: gender, immigration status, number of moves, parental education.
- Time-varying: parental income, family status, parents' employment status, number of children, residential mobility, local born.

Results

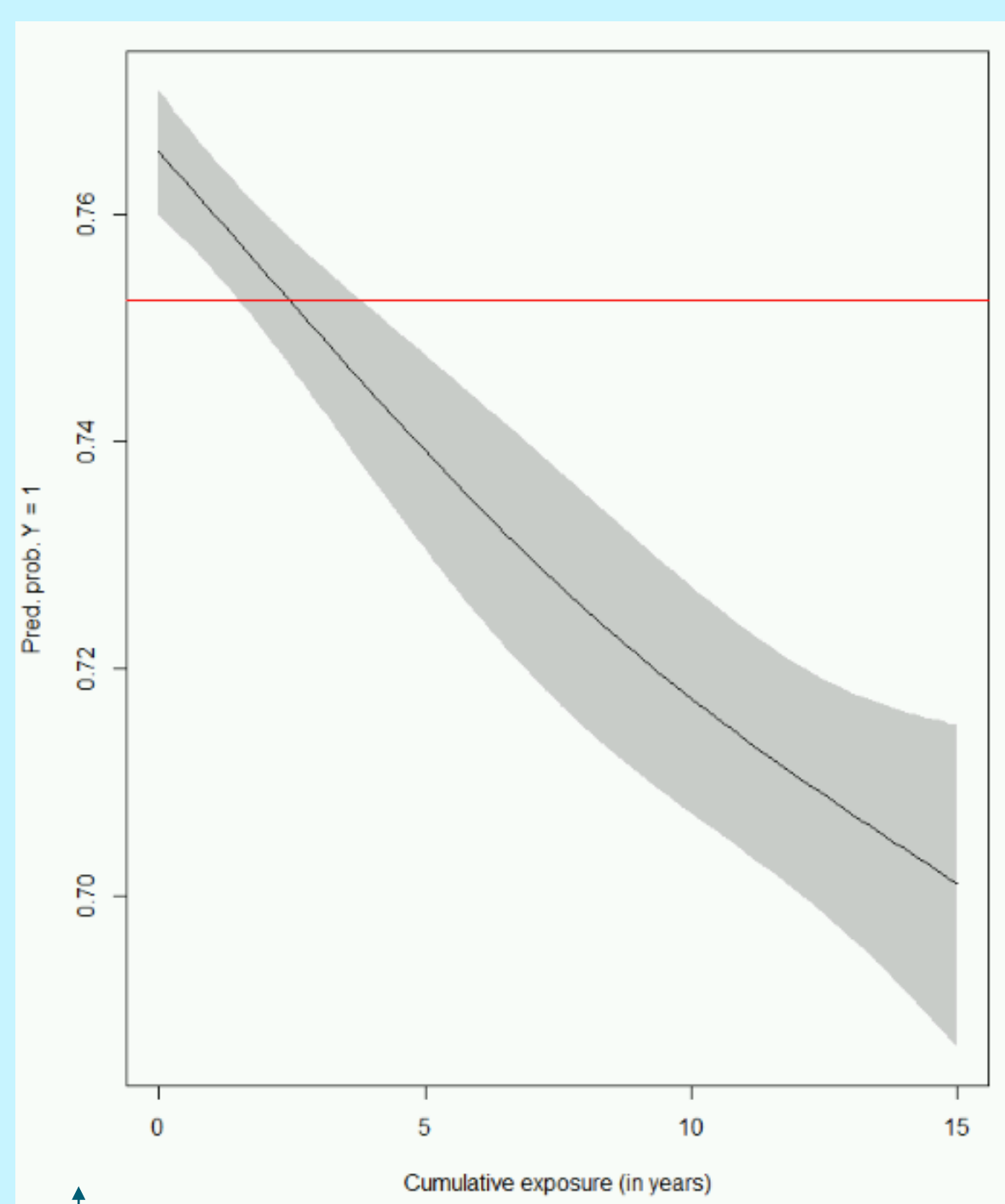


Fig. 1. Predicted probability of graduating from upper secondary school according to the number of years spent in a high-unemployment neighborhood.

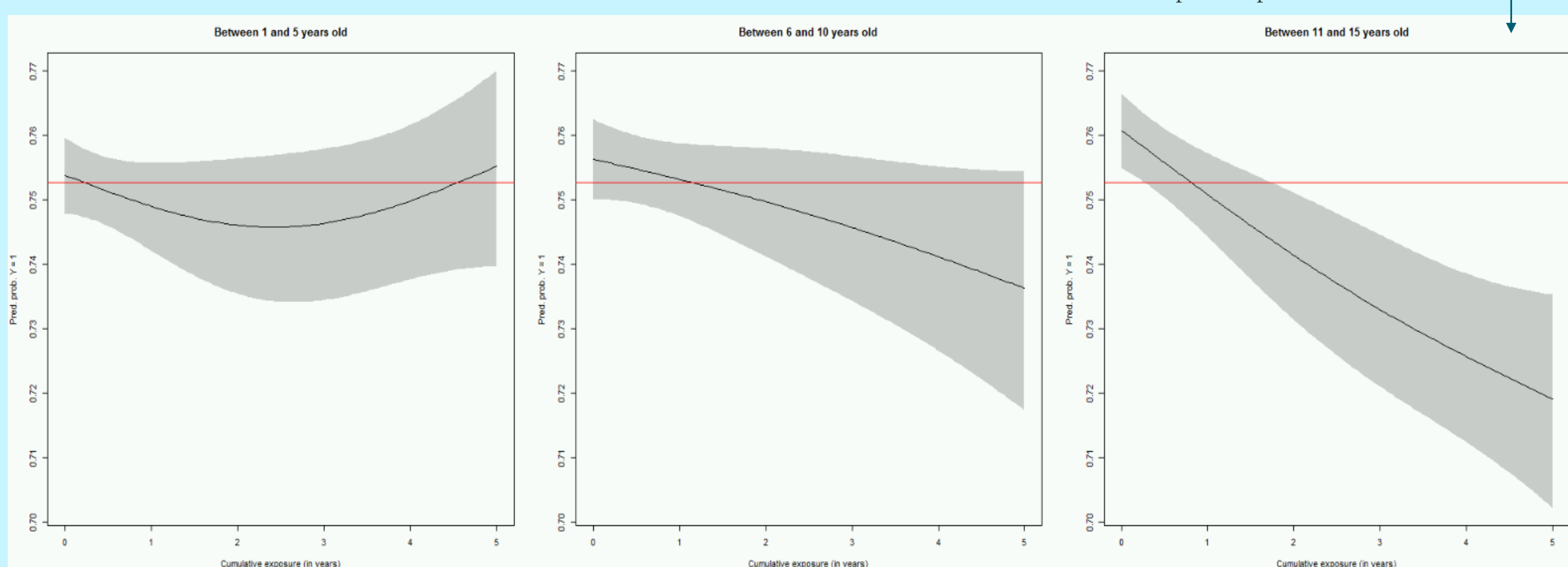
Discussion

Results indicate a linear and negative effect of cumulative exposure on high school graduation (fig. 1). It highlights the importance of residential trajectory.

Exposure at younger ages does not affect upper secondary education graduation while adolescence has harmful effects (fig. 2). It may be attributed to temporal proximity. It may also reflect the importance of role models and peers.

Those results are in line with previous studies conducted in the US [3,4] and in Sweden [5].

Fig. 2. Predicted probability of graduating from upper secondary school according to the number of years spent in a high-unemployment neighborhood and developmental periods.



Next steps

Sensitivity analyses.

Explore mechanisms.

References

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