

Family and Neighbourhood Origins of Joblessness and Education Outcomes

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Introduction

- To what extent are adult outcomes influenced by the differences in family and neighbourhood background?
- This study estimates sibling and neighbour correlations to gauge the impact of the family and neighbourhood environment in Northern Ireland
- Focus on three outcomes:
 - ① Unemployed – no job but searching for a job
 - ② Non-employed – no job (unemployed or economically inactive)
 - ③ Highly educated – having a degree/equivalent or higher

Literature

- Empirical studies mostly estimate correlations among siblings and among neighbours in years of schooling and income/earnings
- Sibling correlations:
 - ① Education: 0.50–0.62 in US (Mazumder, 2008) and 0.38–0.48 in Scandinavia (Björklund, Eriksson and Markus Jäntti, 2012)
 - ② Earnings/income: 0.18–0.20 in Scandinavia (Björklund et al., 2010) and 0.31–0.49 in the US (Mazumder, 2008)
- Neighbour correlations:
 - ① Low in many contexts, e.g. 0.06–0.11 in Norway (Raaum et al., 2006) and similar in Sweden and Germany
 - ② But mostly reflect correlated family characteristics, since families sort selectively into neighbourhoods.

- Northern Ireland Longitudinal Study (NILS) - 28% sample of the NI population (approx. 500k members) containing Census data 1991, 2001 and 2011
- Analysis cohort: 51,380 individuals aged 25-37 in 2011 (or 5-17 in 1991)
- Outcomes are observed in 2011, and the childhood environment is observed in 1991

Methods

- The following information is available at ages 5-17:
 - ① Family relationships
 - ② Super Output Area neighbourhood residence
 - ③ Household- and parent-level characteristics
- Enables sibling and neighbour correlations to be calculated – measuring later-life resemblances among siblings and among childhood neighbours
- E.g., the sibling correlation measures the contribution to each outcome of all observed and unobserved factors common to siblings.

Interpreting the Correlations

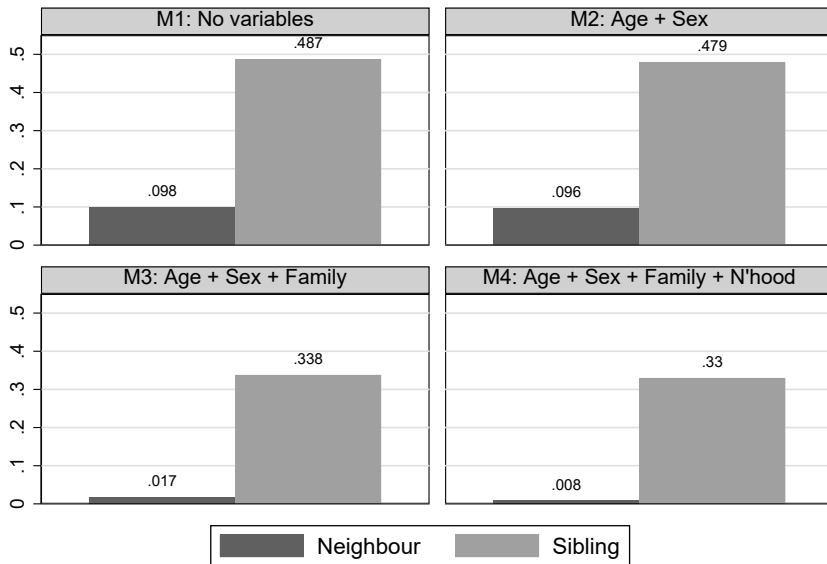
Estimated using mixed-effect probit models, each with different sets of variables

E.g: Sibling correlation – How economically similar are siblings?

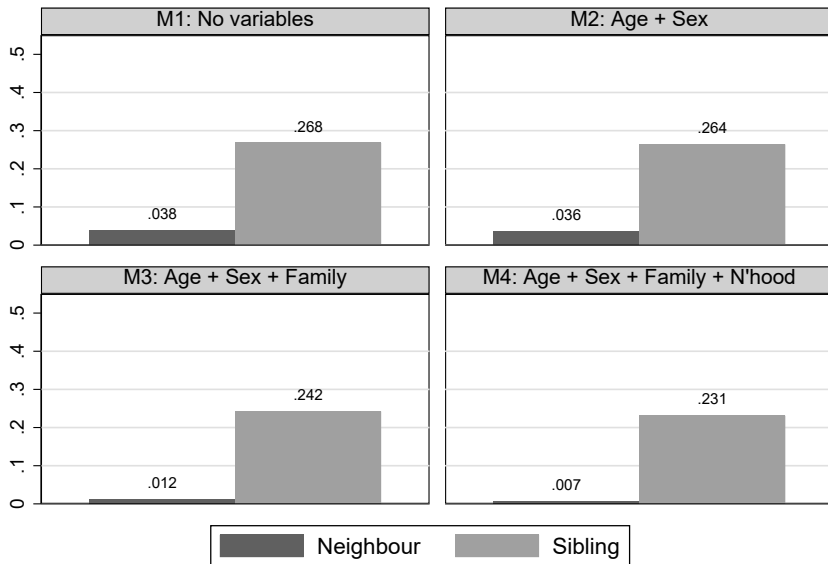


Interpretation: High value implies a high share of outcome variation attributable to factors *common* to siblings

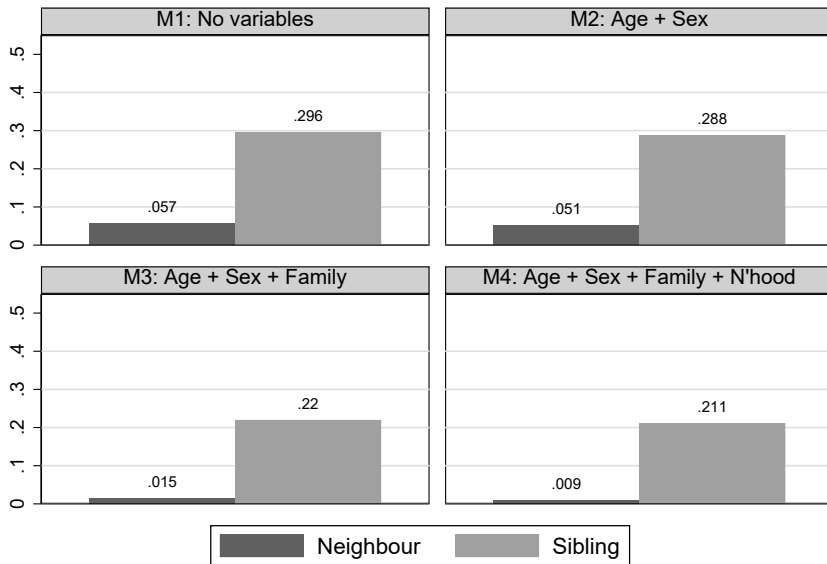
Results: Highly Educated – Sibling and Neighbour Correlations by Model



Results: Unemployed – Sibling and Neighbour Correlations by Model



Results: Non-employed – Sibling and Neighbour Correlations by Model



Key Results: Education

- Sibling correlation is almost 0.50
- “50% of educational inequality is due to factors common to siblings”
- However this falls to 33% after accounting for observable factors (e.g. parental education level)
- Neighbour correlation is 0.10
- “10% of educational inequality is due to factors common to former neighbours”
- However this disappears once you account for similarities between former neighbours, e.g. family background

Conclusions

- Neighbouring youth have little economic resemblance as adults
- Children from the same family are much more similar (as expected)
- Shared family background is more important for education compared with job outcomes
- Shared family background comprises factors we can observe (e.g. parental education) and factors we cannot observe (e.g. shared genes)
- But most of the variance is unexplained, especially for job outcomes, so non-shared factors are more important.

Acknowledgements

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Appendix: Variables

- Personal: Age in 2011, gender, whether moved LGD 1991-2011
- Parental: age, religion, birthplace, general health
- Parental: unemployment and non-employment status, and education level (depending on outcome)
- Household: Number of siblings and other residents, tenure, marital structure
- Neighbourhood: % any qualifications, married, in work, not Catholic, 2 or more vehicles