Residential mobility and residential histories: an innovative analysis

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Intergenerational transmission of neighbourhood poverty: an analysis of neighbourhood histories of individuals

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The extent to which socioeconomic (dis)advantage is transmitted between generations is receiving increasing attention from academics and policymakers. However, few studies have investigated whether there is a spatial dimension to this intergenerational transmission of (dis)advantage. Drawing on the concept of neighbourhood biographies, this study contends that there are links between the places individuals live with their parents and their subsequent neighbourhood experiences as independent adults. Using individual-level register data tracking the whole Stockholm population from 1990 to 2008, and bespoke neighbourhoods, this study is the first to use sequencing techniques to construct individual neighbourhood histories. Through visualisation methods and ordered logit models, we demonstrate that the socioe conomic composition of the neighbourhood children lived in before they left the parental home is strongly related to the status of the neighbourhoods are very likely to end up in similar neighbourhoods much later in life. The parental neighbourhood is also important in predicting the cumulative exposure to poverty concentration neighbourhoods over a long period of early adulthood. Ethnic minorities were found to have the longest cumulative exposure to poverty concentration neighbourhoods. These findings imply that for some groups, disadvantage is both inherited and highly persistent.

Key words intergenerational transmission; deprived neighbourhoods; neighbourhood biography; sequence analysis; Sweden

Long tradition of residential research

Why Families Move

A STUDY IN THE SOCIAL PSYCHOLOGY OF URBAN RESIDENTIAL MOBILITY

By PETER H. ROSSI

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The Free Press, Glencoe, Illinois

- Rossi used the life-cycle concept to understand residential mobility behaviour in the 1950s.
- Moving characterised as a discrete event.



Life cycle model critiqued heavily by 1980s

- 1. Highly normative
- 2. Out of touch with demographic and social trends
 - a) \uparrow Life expectancy
 - b) \uparrow cohabitation and age at marriage
 - c) \uparrow age at first childbirth
 - d) Longer spells as single and ↑ divorce/separation
 - e) 'Boomerang children'

Which brings us to....

- Some evidence from the US that childhood neighbourhood matters for later life (cf. Sharkey 2013; Vartanian et al., 2007)
- Is individual disadvantage is 'inherited'?
- Answering question has importance for a wide range of studies throughout the social sciences.



Source: Sharkey, P. (2013) Stuck in Place. University of Chicago Press.

Individual Biographies

- Lives can be thought of as biographies (Dykstra and van Wissen, 1999; Elder 1994)
- Requires a much longer time frame than is usually employed in mobility studies (also see Coulter and van Ham, 2013)
- Neighbourhood is a key component of residential mobility, but one that is frequently overlooked.

Conceptual framework

- Situating analysis of neighbourhood mobility within the life course is useful
- Key features of the life course model are:
 - 1. Concept of the biography
 - 2. The importance of event *ordering*, not just occurrence
 - 3. Need to situate events within wider personal and macro-contextual contexts
- Empirical analysis has yet to operationalize these concepts and move beyond 'snapshot' analysis of specific transitions

3 (empirical) gaps in the residential mobility literature

- Intergenerational transitions of neighbourhood characteristics
- Analyses of mobility events (snap shots) vs. analyses of real life courses (life histories)
- Nbh Effects: history not current environment?

- GeoSweden:
 - Longitudinal database
 - Full Swedish population between 1990 and 2008 (+/- 9 million individuals)
- Selected data:
 - Residents of Stockholm (all periods) aged 16-25
 - Must have lived with parents in 1990 and left family home by 1991
 - 13,526 home leavers.



- "EquiPop" (John Östh, Uppsala University)
- Individual income from employment measured in quintiles
- Nbds categorised by percentage of low income (bottom quintile) residents
- Bespoke neighbourhoods based on the nearest 500 individuals
- Representative of residential environment, not constrained by administrative units...

- Visualising neighbourhood histories
 - Neighbourhood history using sequenced quintiles
 - Not allowing in-situ neighbourhood change
 - Nbh quintile only change in conjunction with residential move (change in 100x100m co-ords)
 - Individual timelines visualised using "SQIndexPlot" in STATA
 - 1 line = 1 person
 - Used random samples of individuals (cannot plot 13,000+ histories together!)

Data and Methods

Hypothetical mobility histories



- Two models:
 - Model destination at 6, 12 and 18 years as ordered logisitic regression.
 - Cumulative exposure model at 18 years using linear regression.
 - Controls include: household status, ethnicity, employment, & parental neighbourhood).

Visualising neighbourhood histories.....

Neighbourhood histories 1990-2008 (10% sample of histories) of those leaving the parental home 1990-1991 by parental neighbourhood quintile 1 (low % low income neighbours)



Neighbourhood histories 1990-2008 (10% sample of histories) of those leaving the parental home 1990-1991 by parental neighbourhood quintile 5 (low % low income neighbours)





Neighbourhood histories 1990-2008, ethnic minorities (full population) with parental neighbourhood quintile 5



Neighbourhood histories 1990-2008, Swedish born (5% sample) with parental neighbourhood quintile 5



Modelling Results

Neighbourhood outcomes after 6 years after leaving the parental home....



Neighbourhood outcome 12 years after leaving the parental home....



Neighbourhood outcome 18 years after leaving the parental home....



		Cumulative exposure to neighbourhood income										
		quintiles 1991-2008 (%)										
Parental												
neigh/hood												
1990		1	2	3	4	5	Total					
	1	17.9	14.9	16.0	20.6	30.6	100					
	2	16.3	14.7	16.9	21.9	30.3	100					
	3	13.1	12.8	16.9	23.6	33.6	100					
	4	10.6	10.9	15.7	24.4	38.3	100					
	5	8.9	9.0	13.1	20.3	48.8	100					

Linear regression, cumulative exposure to quintile 5 neigh/hoods over 18 years.



Parent NBH Q2 Parent NBH Q3 Parent NBH Q4 Parent NBHQ5 Ethnic minority Parent NBH Q2*ethnic minority Parent NBH Q3*ethnic minority Parent NBH Q4*ethnic minority Parent NBH Q5*ethnic minority Middle education (measured 2008) University degree (measured 2008) Private renting

Some (initial) Conclusions

- This the first study to analyse whole neighbourhood histories over an 18 year period. Using innovative sequence visualisation techniques we showed:
- Parental neigh/hood is a strong predictor of the neighbourhood people end up in 18 years after leaving the parental home.
- The visualisations clearly showed that although many experience a drop in neigh/hood status after leaving the parental home, they catch up after a number of years.
- Ethnic minorities were the least likely to catch up.
- Furthermore, ethnicity is a strong predictor of the cumulative exposure to poverty concentration neigh/hoods.
- Finding of significance not only to the residential mobility literature, but also to the literature on neighbourhood effects: where you live has a lasting effect on your future neighbourhood career!

Neighbourhood histories 1990-2008 (10% sample of histories) of those leaving the parental home 1990-1991 by parental neighbourhood quintile 2 (low % low income neighbours)



Neighbourhood histories 1990-2008 (10% sample of histories) of those leaving the parental home 1990-1991 by parental neighbourhood quintile 3 (low % low income neighbours)



Neighbourhood histories 1990-2008 (10% sample of histories) of those leaving the parental home 1990-1991 by parental neighbourhood quintile 4 (low % low income neighbours)

