

Testing for sensitive periods of neighbourhood effects on wellbeing across the life course

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ONS Quality of life and personal wellbeing:

Research and data showcase

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Research questions

- How important are neighbourhood effects across the life course on health and wellbeing?
- Are these effects more important at certain points during the life course?

Data

- **1958** National Child Development Study and British Cohort Study **1970** birth cohort studies
- Linked to **Townsend** deprivation scores measured at censuses, **1971-2011** at 2011 lower super output boundaries

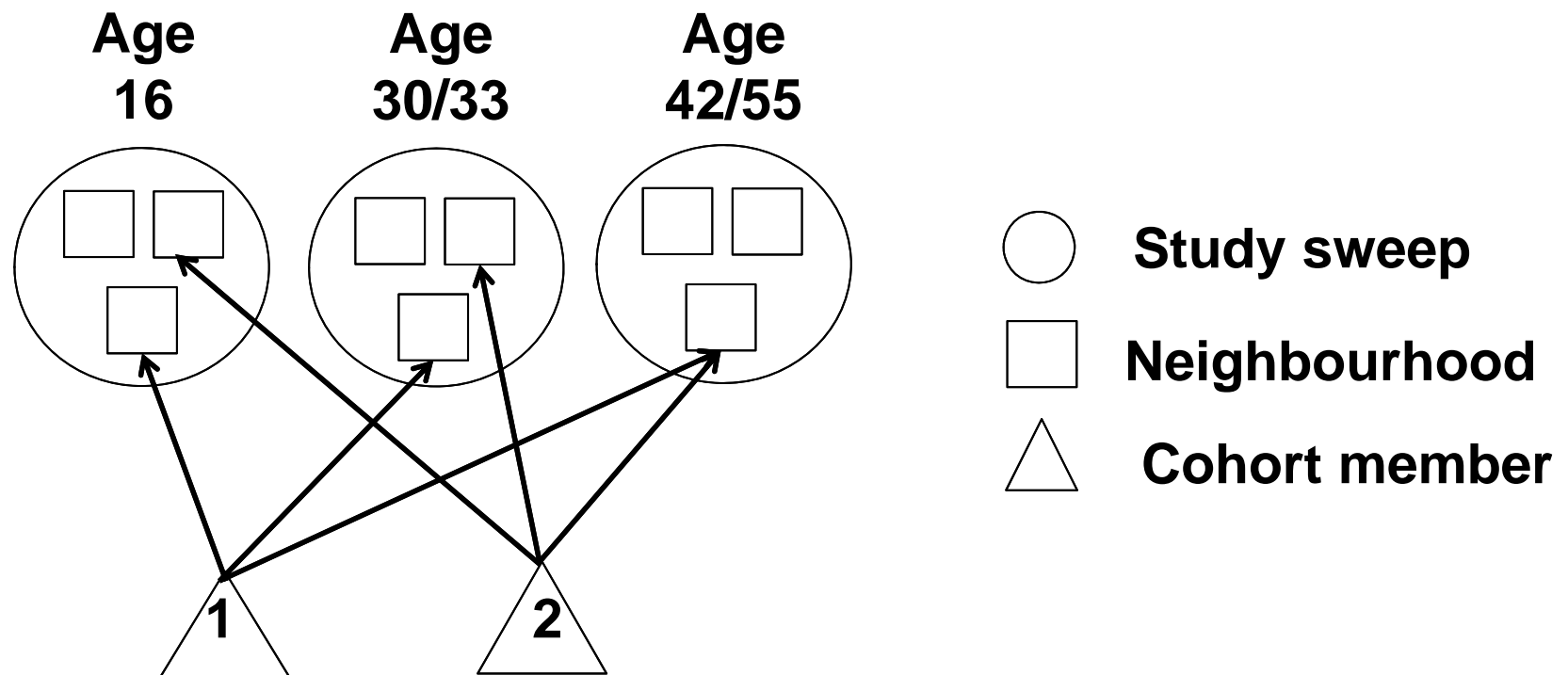
Outcome variables at age 42/55

- Self-rated health: in general, would you say your health is...
 - excellent, very good, good, fair or poor
- Mental wellbeing: Warwick-Edinburgh Mental Well-being (BCS70) and Control, Autonomy, Self-realisation and Pleasure (NCDS)

Exposure: Townsend deprivation index

- Inputs
 - Unemployment
 - Non-home ownership
 - No car access
 - Overcrowding

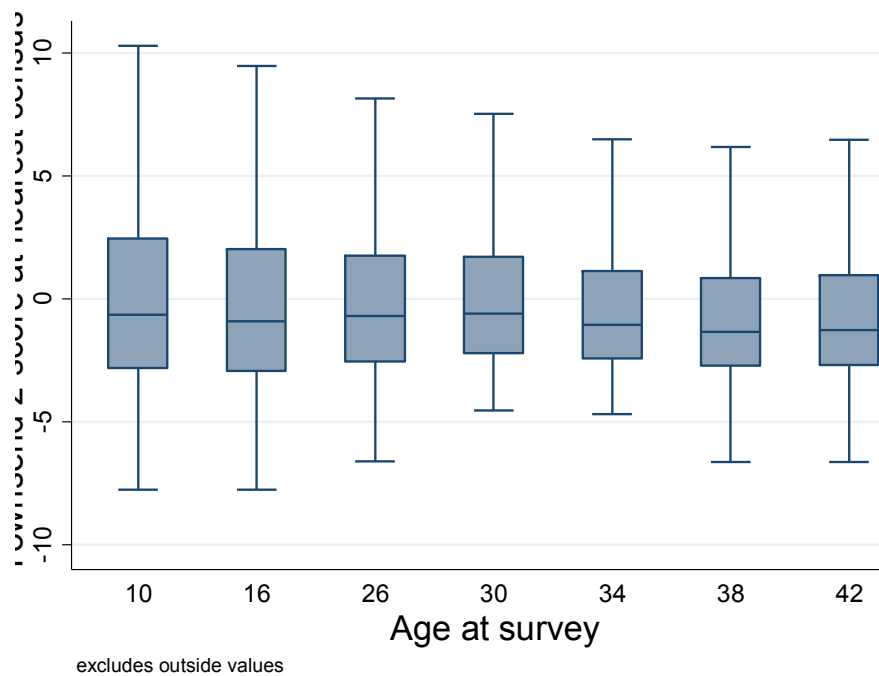
Statistical analysis



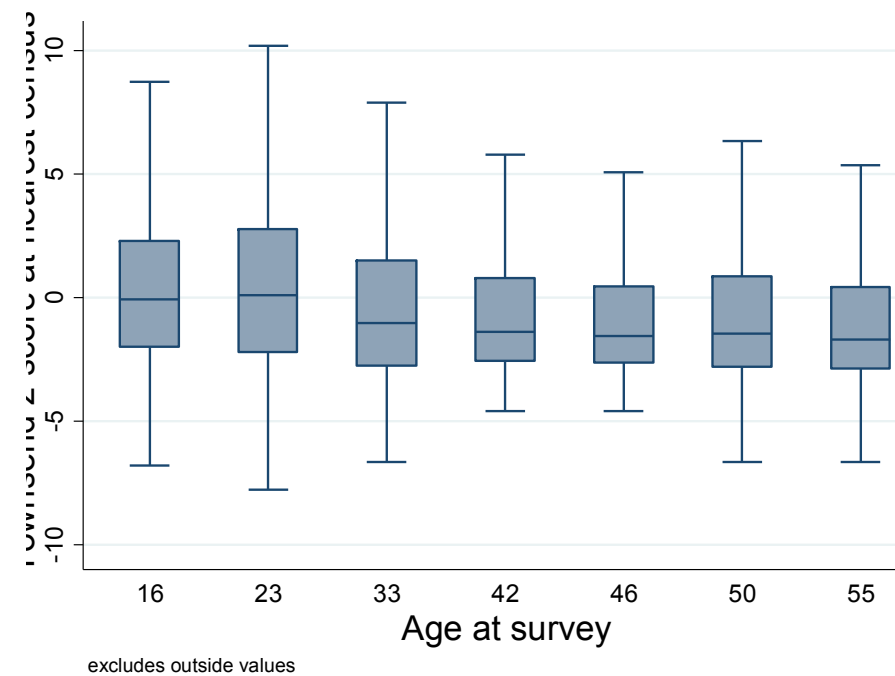
- Cross-classified multilevel model

Neighbourhood deprivation score by sweep

British Cohort Study 1970

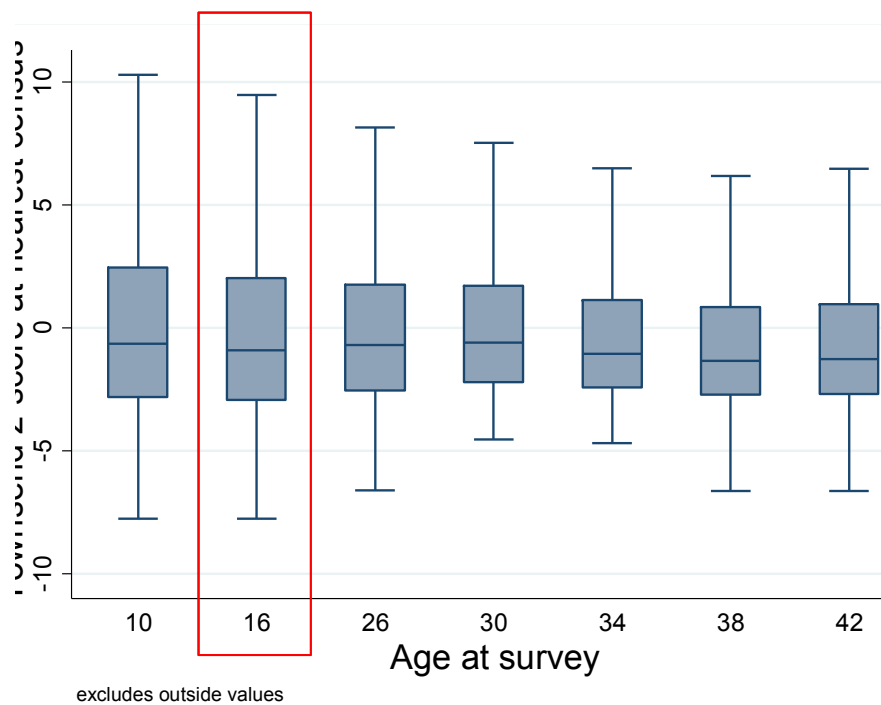


National Child Development Study

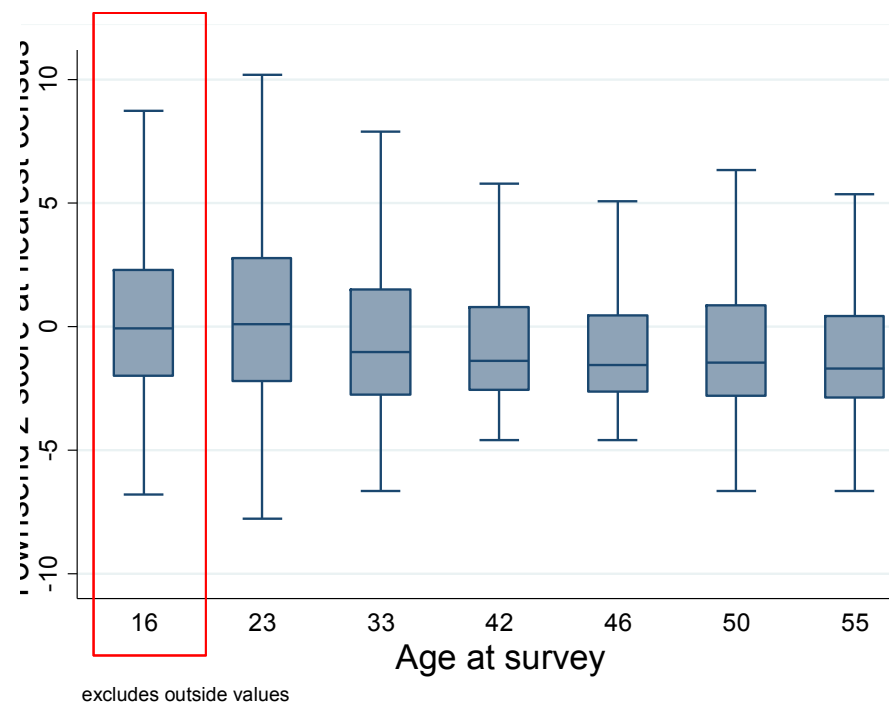


Neighbourhood deprivation score by sweep

British Cohort Study 1970

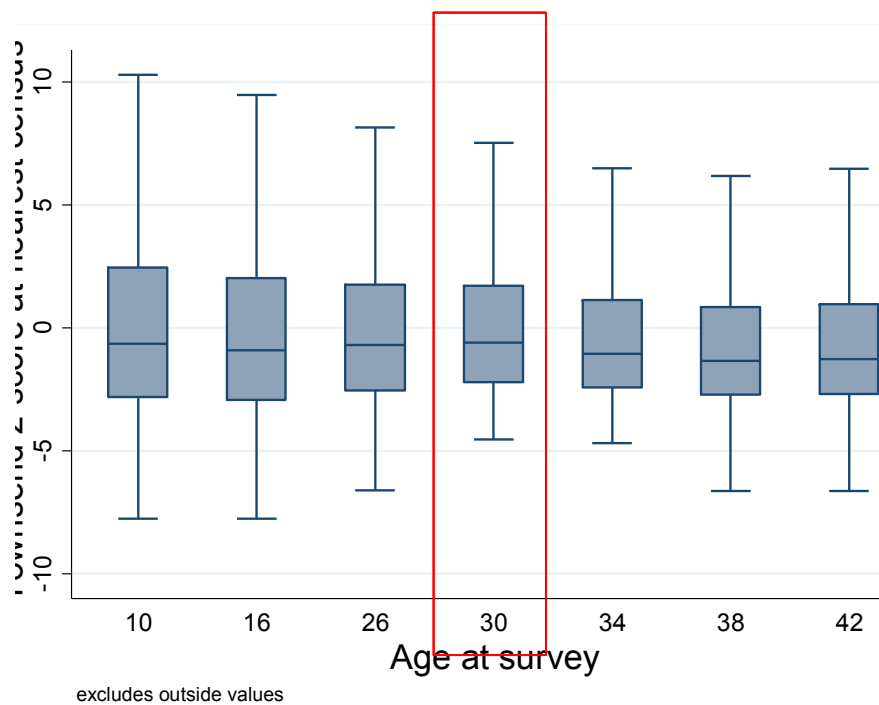


National Child Development Study

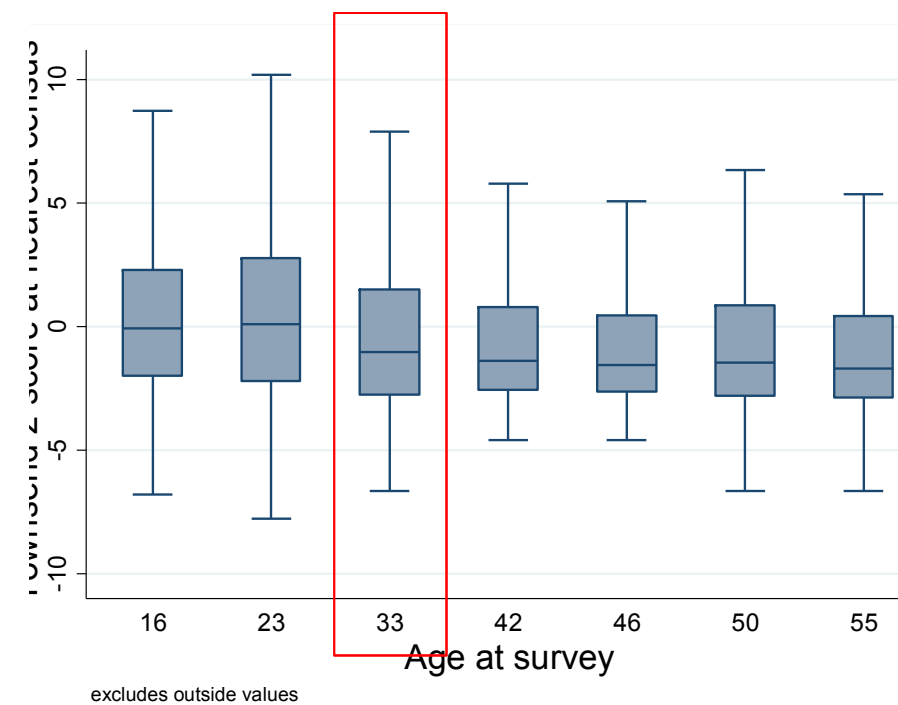


Neighbourhood deprivation score by sweep

British Cohort Study 1970

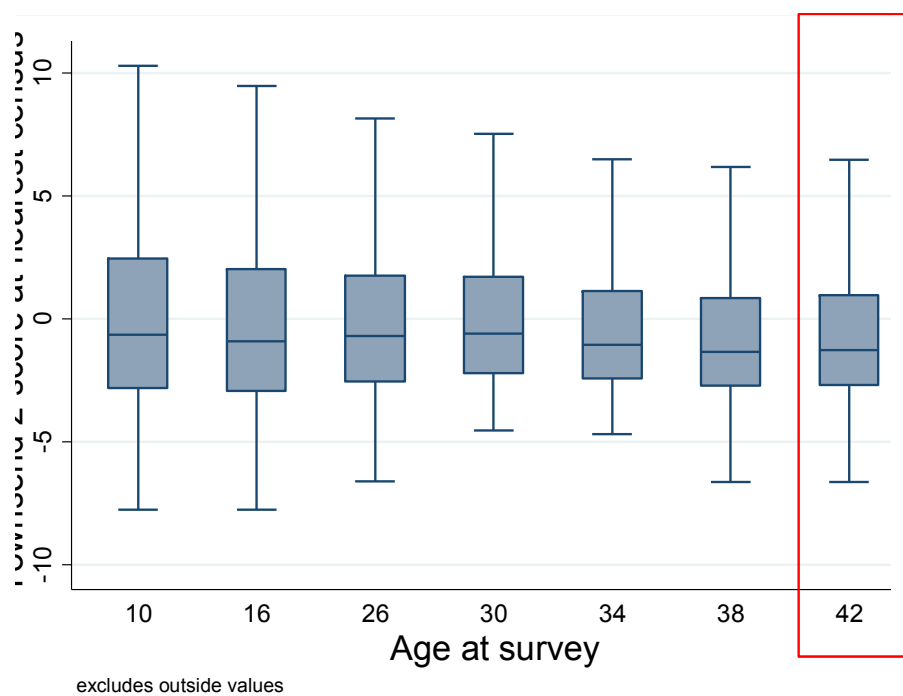


National Child Development Study

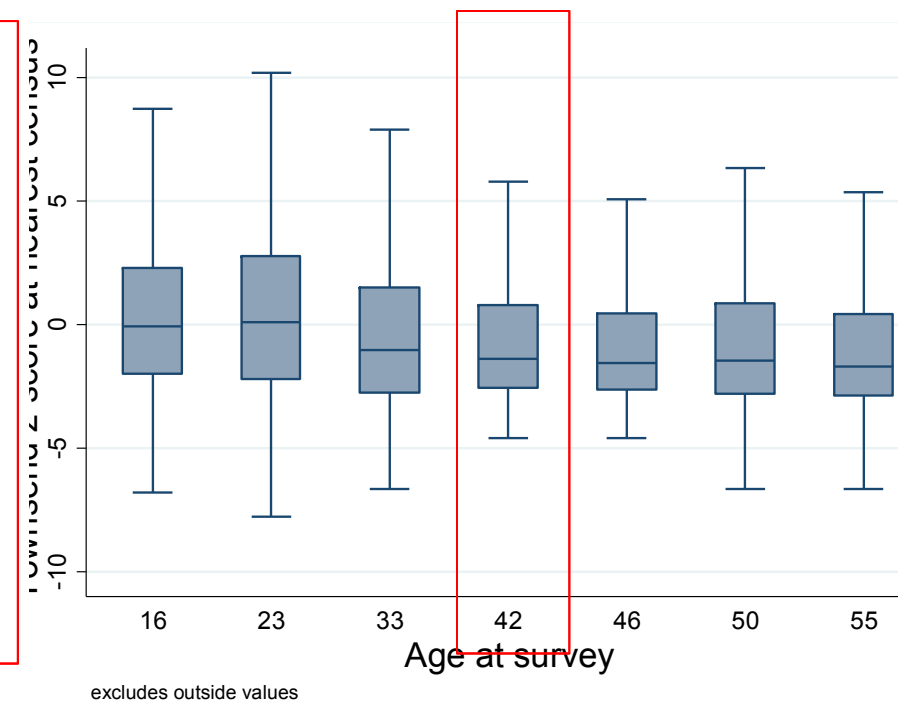


Neighbourhood deprivation score by sweep

British Cohort Study 1970

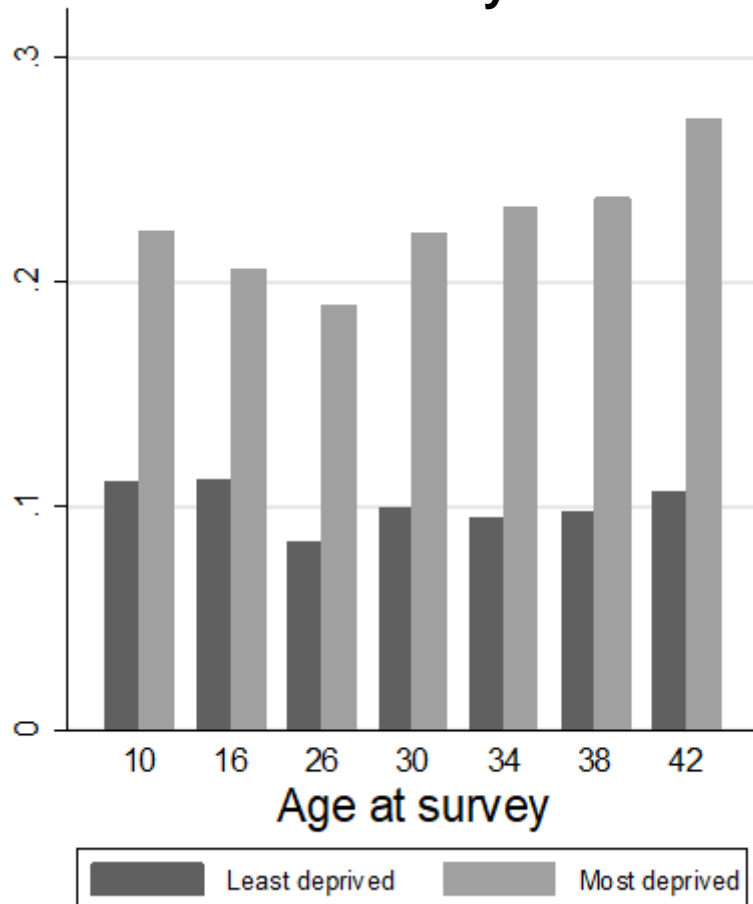


National Child Development Study

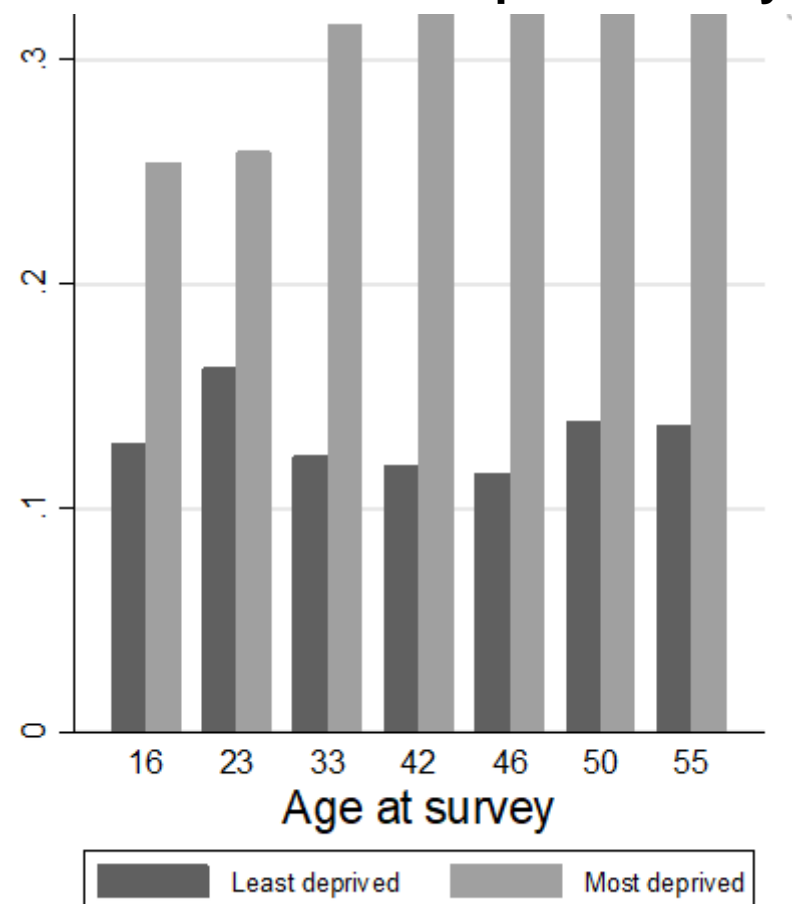


Poor-rated health (%) by neighbourhood deprivation decile

British Cohort Study 1970

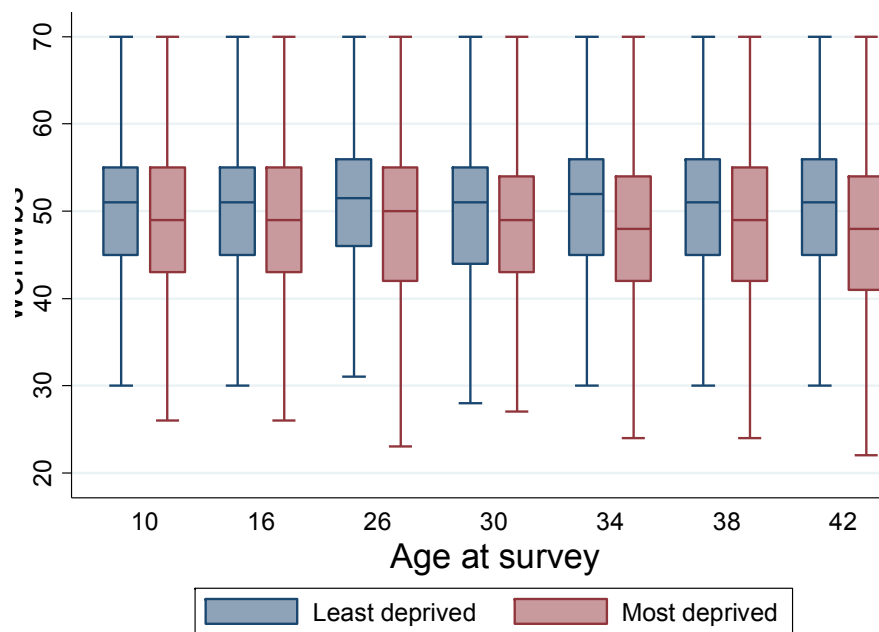


National Child Development Study



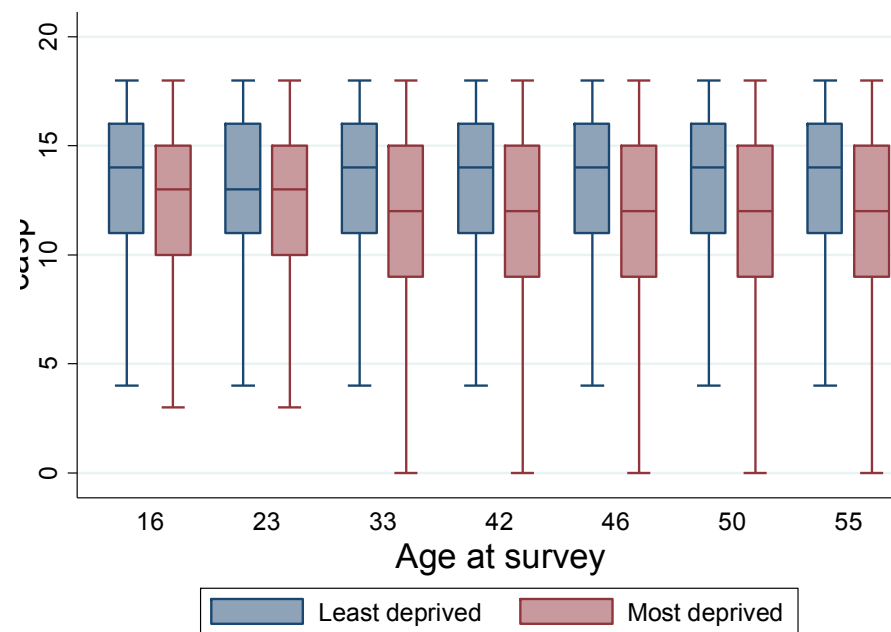
Mean mental wellbeing by neighbourhood deprivation decile

British Cohort Study 1970



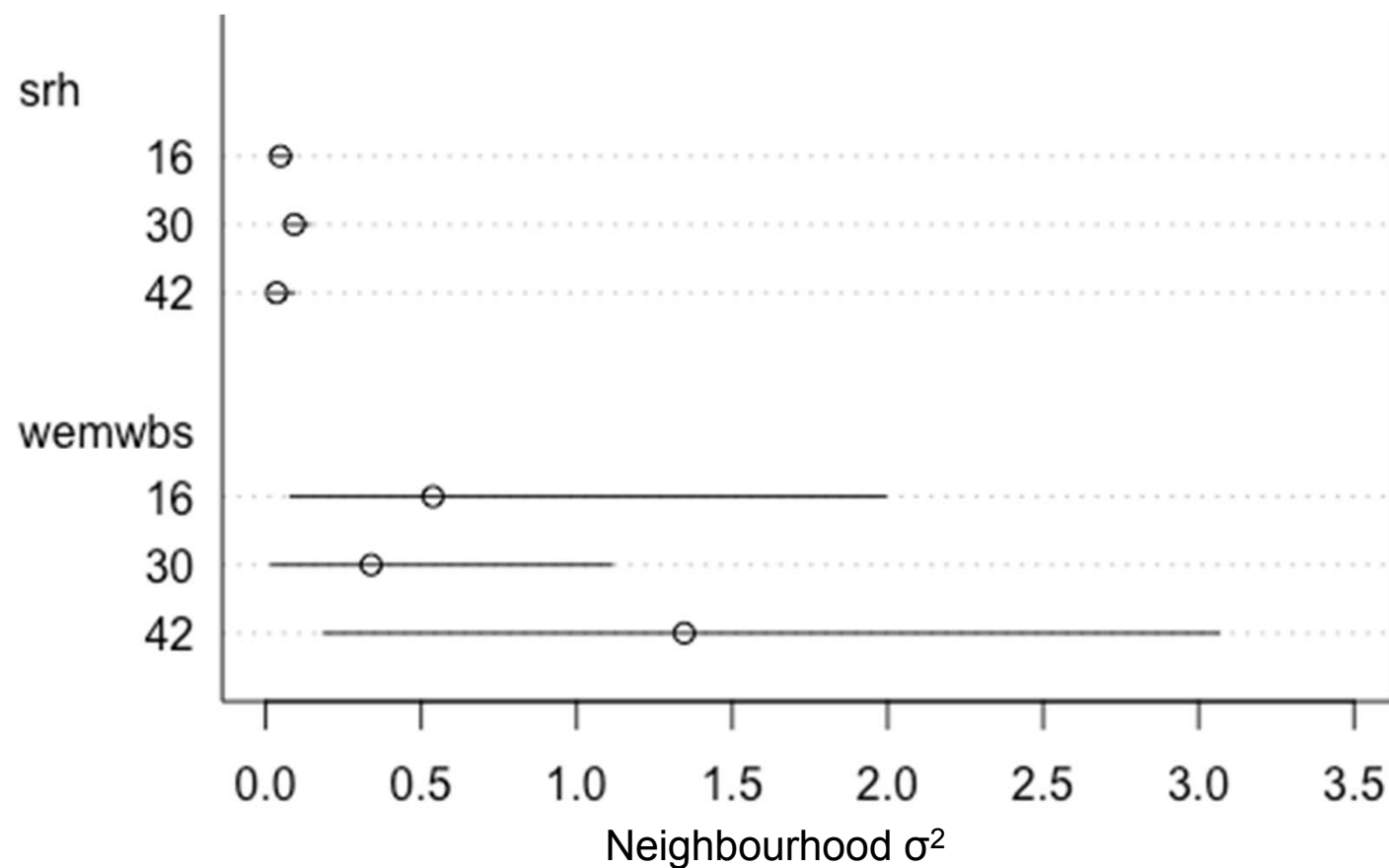
excludes outside values

National Child Development Study

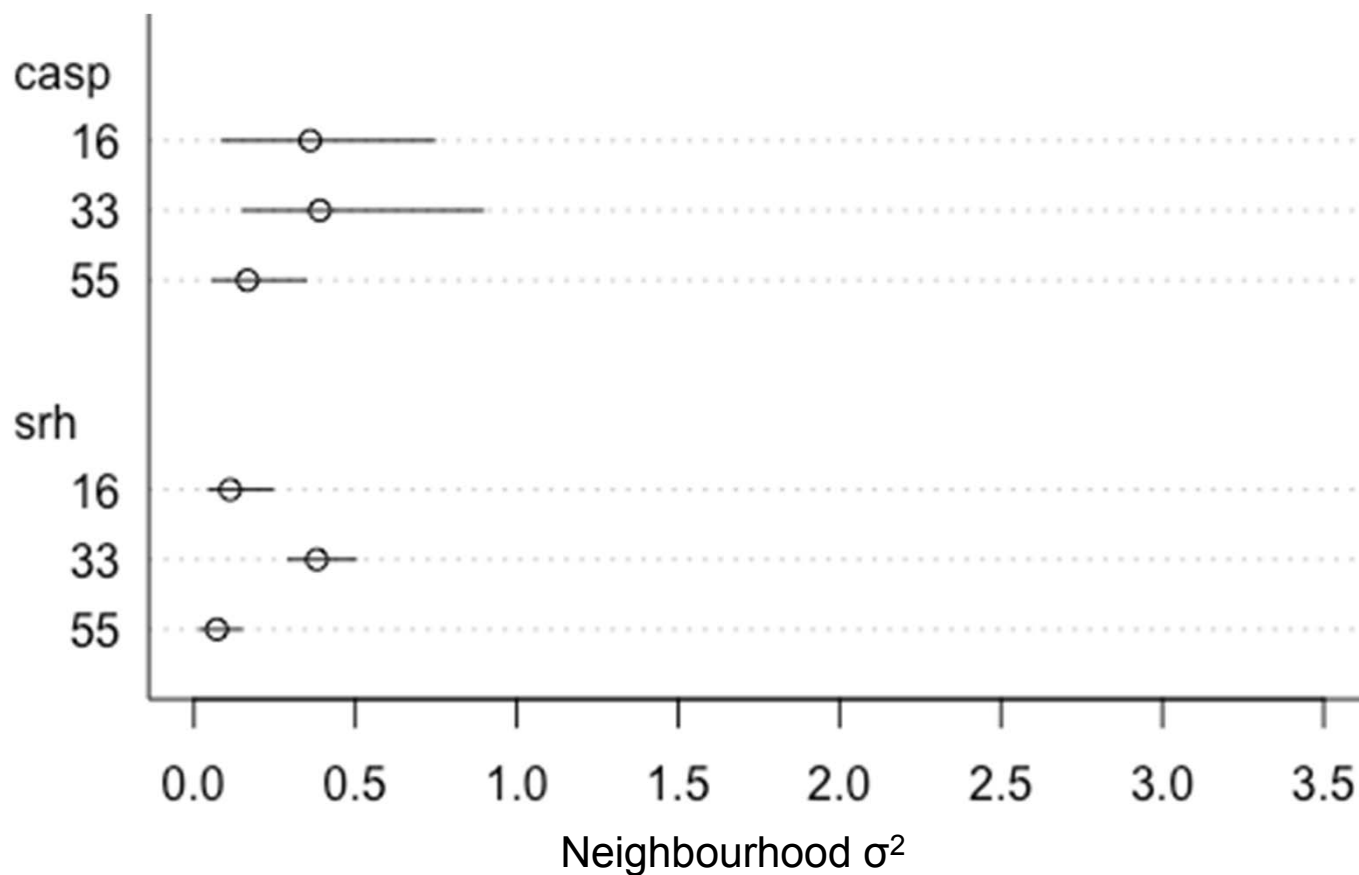


excludes outside values

Neighbourhood variance cross-classified variance components models – BCS70



Neighbourhood variance cross-classified variance components models – NCDS



Summary

- General neighbourhood effect is small across the life course (3-9% total variance)
- General neighbourhood variation is constant across the life course
- Neighbourhood deprivation-later life wellbeing association stronger in later life