

International Journal of Population Data Science

Journal Website: www.ijpds.org



Housing quality and educational outcomes in England: linking the Millennium Cohort Study with the National Pupil Database

Gergo Baranyi¹, Katie Harron¹, and Emla Fitzsimons¹

¹University College London, London, United Kingdom

Objectives

One in seven households in England lives in homes that do not meet housing standards, and poor-quality housing is associated with worse health outcomes among children. This study aimed to explore the relationship between housing quality, school absences, and educational attainment during compulsory schooling.

school more often and performed worse in high stake exams. Future research should explore how specific housing policies could benefit child health and educational attainment.

Methods

The Millennium Cohort Study is a nationally representative cohort of children born in 2000/2001 in the UK. Housing quality was assessed using six indicators—accommodation type, floor level, garden access, damp and mould, heating, and overcrowding—reported by the main caregiver at age 7. Educational administrative data were linked from the National Pupil Database, providing information on the percentage of missed sessions from Year 1 to Year 11, as well as Maths and English exam scores in Key Stage (KS) 1, KS2, and KS4. Confounder-adjusted linear regression models with complex survey weights were conducted.

Results

Poorer housing quality was associated with higher school absences across the 11 years of compulsory schooling ($\beta = 0.24$, 95% CI: 0.11, 0.38; $n = 7272$), with associations observed for both authorized and unauthorized absences. Similarly, poorer housing quality was linked to lower Maths (KS1: -0.03 [95% CI: -0.05, 0.00]; KS2: -0.04 [95% CI: -0.07, -0.01]; KS4: -0.04 [95% CI: -0.06, -0.01]) and English (KS1: -0.03 [95% CI: -0.05, 0.00]; KS4: -0.04 [95% CI: -0.06, -0.01]) exam scores ($n = 6741$). Indicator-specific analyses suggested that damp and condensation, accommodation type, and overcrowding contributed to higher school absences, while overcrowding was associated with lower test performance.

Conclusions

Children living in overcrowded homes, in flats or flat shares, and in accommodations with damp and condensation, missed

