

International Journal of Population Data Science

Journal Website: www.ijpds.org



Health, Wellbeing and Place: Developing data infrastructure and models to identify inequality drivers in children's mental health

Simona Rasciute^{1,2}, Louise Vesely-Shore MBE², Ella Marley-Zagar², and Alena Nash²

¹University of Loughborough, Loughborough, United Kingdom

²Office for National Statistics, Newport, United Kingdom

Objectives

With the prevalence of mental health problems in children increasing, identifying and addressing the factors underlying children's mental health is a growing priority. This research is using administrative data linked to survey and contextual data to elucidate the various factors and complex inter-relationships contributing to this mental health crisis.

Methods

To identify the drivers of child mental health holistically, an innovative data infrastructure has been built, which links a child's educational (National Pupil Database) and health records (Hospital Episode Statistics (HES)) to the health records and sociodemographic characteristics of their parents (using Census 2021, NHS Talking Therapies and HES), as well as contextual factors (Ordnance survey, Indices of Multiple Deprivation and Police data). Complex econometric modelling is being employed to test both associations and causal links. Initial analysis is cross-sectional, applying matching and instrumental variable estimators among other techniques, and sensitivity analysis to assess causal relationships.

Results

Analysis currently focuses on a subset of 1.15m children aged 5-16 who were living with two parents at the time of Census 2021. The study controls for a rich array of household and parental socioeconomic characteristics. Early analysis has identified a strong and statistically significant causal relationship between the mental health of a child and the mental health of their co-habiting parents. We have found heterogeneity across genders in the intergenerational transmission, with the maternal influences being larger than paternal influences. Results also indicate increased absence from school increases the likelihood of mental health issues. This relationship is influenced by the presence of special education needs support and chronic physical health conditions. Bi-directional relationships, as well as age and ethnicity differences, are also explored.

Conclusion

A holistic approach is needed, which recognises the importance of supporting the mental health of both parents and children if we are to address the growing mental health crisis in the UK. It is hoped that further analysis of this rich linked dataset will provide further areas for intervention.

