

Education Committee inquiry: Life chances

Written evidence submitted by CLOSER, the home of longitudinal research

1. Summary

- 1.1 CLOSER is a collaboration of leading social and biomedical longitudinal studies, the British Library and the UK Data Service, funded by the Economic and Social Research Council (ESRC) and Medical Research Council (MRC).
- 1.2 Over the course of 70 years, the UK's longitudinal studies have been a leading source of evidence on how our early lives continue to shape us as we grow up, and grow old. The studies typically collect a rich array of information, allowing insights into how different areas of life intersect. By studying individuals throughout their lives (often from early life into adulthood), longitudinal research is uniquely placed to help identify the factors early in someone's life that influence later life outcomes.
- 1.3 Longitudinal research is essential to understanding the complexities of the factors that influence an individual's life chances. It allows an exploration of how different groups vary, and how and why people's lives change, enabling a greater understanding of the difference between causal relationships and correlation. Findings from the UK's longitudinal studies have continuously demonstrated the vital role that early life plays across a wide range of biomedical and social areas of life. For example, research has shown that a mother's personality can affect children's mental health, the key role of fathers in influencing a child's early years, the importance of early language skills in laying the building blocks of success, and that reading improves vocabulary regardless of background.
- 1.4 There are a number of ways in which longitudinal research could add additional insights to our understanding of how early years education might influence life chances. In particular, linking longitudinal survey data to administrative records would provide a more complete picture of participants' life stories and vastly improve our understanding of how different aspects of people's complex lives interrelate.
- 1.5 Comparing data from longitudinal studies that look at different cohorts of people provides a unique window into the lives of generations who have grown up during very different administrations and policy regimes. The ability to compare findings from different studies can only be achieved through harmonising longitudinal survey variables to ensure the data is comparable – something in which CLOSER is investing heavily.
- 1.6 Further longitudinal research is needed to understand how multiple factors interact and to assess the impact of specific interventions, whether universal or targeted. Continued investment in the UK's existing longitudinal studies will ensure they can keep generating the evidence that many of them have been collecting for decades. Serious consideration is needed

about how best to capture data about the newest generation of children living in the UK – those born in the last decade. Otherwise, the most recent evidence available will be of people born at the turn of the century, who are already moving into adulthood.

2. Longitudinal evidence

- 2.1 Over the course of 70 years, the UK’s longitudinal studies have been a leading source of evidence on how our early lives continue to shape us as we grow up, and grow old. The studies typically collect a rich array of information, allowing insights into how different areas of life intersect. By studying individuals throughout their lives (often from early life into adulthood), longitudinal research is uniquely placed to help identify the factors early in someone’s life that influence later life outcomes and to examine the experiences of different groups. [1]
- 2.2 Research using the Millennium Cohort Study, run by the Centre for Longitudinal Studies, demonstrates the importance of communications skills and language development in relation to later life outcomes. Research looking at the gender gap in literacy and language development found that boys are more likely to fall behind than girls by the time they start school. This underlines the importance of high quality teaching in the early years, which the research suggests should be a priority area for investment. Interventions designed to address poor language and pre-literacy skills in the preschool years should ensure boys as well as girls gain access to rich language and literacy learning environments. [2] Findings have also shown a link between reading for pleasure and better vocabularies, suggesting that if young people are encouraged to discover a love for books at an early age it could alter the course of their lives, regardless of their background. [3]
- 2.3 Research has shown that early language is a crucial stepping-stone to literacy and that children with good language ability at age five are more likely to have both higher qualifications and to be in employment compared to their peers. [4] The Millennium Cohort Study helped to understand this long-lasting effect of early life on later years and the importance of language development. Research discovered that Wales’s poorest children are starting primary school already struggling with language skills – one in four children growing up in poverty in Wales leaves primary school unable to read well, and this reading ‘gap’ begins in the early years. Ultimately children who read well by age 11 do better at school, get better exam results and do better in the workplace. The evidence found that employing early years’ teachers with graduate level qualifications has a measurable impact on children’s language development. [5]
- 2.4 The importance of support for parents and families is clear – without appropriate support, there is a far greater chance of children experiencing negative effects later on in life. Research using the Avon Longitudinal Study of Parents and Children found that the children of women with personality traits associated with emotional and relationship difficulties were at greater risk of depression, anxiety and self-harm in their late teens than their peers. This also held true after a range of other factors associated with such personality traits were considered, including the mother’s education, her age when she gave birth, her family income, and any

history of partner violence. This research suggests that mothers with these personality traits may benefit from additional support. [6]

- 2.5 The Avon Longitudinal Study of Parents and Children has also demonstrated the importance of fathers in influencing a child's early years and subsequent life chances. The nature of parenting in a child's early years is thought to influence their short and long-term wellbeing and mental health, which are in turn linked to how well they develop and do at school. Research found that children whose fathers adjusted well to parenthood and felt confident about their new role may be less likely to have behavioural problems in the run-up to their teens. The findings suggest it is how fathers see themselves as parents in the child's early years, rather than the amount of direct childcare they give, that seems to be important. [7]

3. Recommendations

- 3.1 A renewed effort to link longitudinal survey data to relevant administrative records would provide a more complete picture of participants' life stories and vastly improve our understanding of how different aspects of people's complex lives interrelate. [8]
- 3.2 Comparing data from different cohorts of young people provides a unique window into the lives of generations who have grown up during very different policy regimes. The ability to compare findings from different studies can only be achieved through harmonising survey variables to ensure the data is comparable – something in which CLOSER is investing heavily. [9]
- 3.3 Further longitudinal research is needed to understand how multiple factors interact and to assess the impact of interventions, whether universal or targeted. Continued investment in the UK's existing longitudinal studies will ensure they can keep generating the evidence that many of them have been collecting for decades. Serious consideration is needed on how to capture data about the newest generation of children living in the UK – those born in the last decade century. Otherwise, the most recent evidence available will be of people born at the turn of the century, who are already adults. [10]
- 3.4 We also would like to draw the Committee's attention to the recommendations contained in the submission from the Centre for Longitudinal Studies [11]:
- 3.5 The available evidence shows consistent impacts of early years education on cognitive development, and points to an important role for the quality of the environment that children experience in the early years.
- 3.6 Work based on the cohort studies highlights the importance of supporting parents in creating an environment that promotes child development and health.
- 3.7 Socio-economic gaps in language attainment emerge early and persist over time. Early language development is highly consequential for later outcomes. Research suggests that

families and schools should be supported to promote reading for pleasure as a key tool for language growth.

4. About CLOSER

- 4.1 CLOSER is a unique collaboration of leading social and biomedical longitudinal studies, the British Library and the UK Data Service, funded by the Economic and Social Research Council (ESRC) and Medical Research Council (MRC). [12]
- 4.2 There are currently eight studies in the CLOSER Partnership, comprising four national and three regional birth cohort studies and Understanding Society (the UK Household Longitudinal Study). [13]
- 4.3 Longitudinal studies follow the same people and households over time, often from birth, collecting a wide array of information about participants' lives and enabling researchers and policymakers explore how changes in society affect health, community and education.
- 4.4 CLOSER's mission is to maximise the use, value and impact of the UK's longitudinal studies to help improve our understanding of key social and biomedical challenges, including how best to combat life threatening diseases, reduce obesity and improve social mobility and life chances.

5. About the CLOSER studies

- 5.1 The **Hertfordshire Cohort Study** comprises a nationally unique study of 3,000 men and women born during the period 1931-1939 and still resident in the English county of Hertfordshire during the 1990s. The principal objective of the study is to evaluate the relationship between early (prenatal and early postnatal) growth, genetic influences, adult lifestyle and the risk of common age-related disorders such as osteoporosis, osteoarthritis, sarcopenia, type 2 diabetes and cardiovascular disease. The study has been a key source of evidence for lifecourse influences on health and disease in later life.
- 5.2 The **1946 MRC National Survey of Health and Development** is the oldest and longest running of the British birth cohort studies comprising of men and women born in England, Scotland or Wales in March 1946. Today, with study members in their seventies, the study is a leading source of evidence on the long-term biological and social processes of ageing and how ageing is affected by factors acting across the whole of life.
- 5.3 The **1958 National Child Development Study** follows the lives of 17,415 people born in England, Scotland and Wales in a single week of 1958. It has tracked the lives of study members to reveal how the different educational and other paths people take affect their wages, jobs, relationships, and health later in life. It has also been used to uncover genetic risks for a range of diseases.

5.4 The **1970 British Cohort Study** follows the lives of 17,198 people born in England, Scotland and Wales in a single week of 1970. The study has shown the importance of reading for pleasure for children's cognitive development, especially in vocabulary and spelling, but also in maths.

5.5 The **Avon Longitudinal Study of Parents and Children** charts the lives of 14,500 people born in the former county of Avon between April 1991 and December 1992 as well as the lives of their parents and their children. It is rich resource for the study of the environmental and genetic factors that affect a person's health and development throughout their life.

5.6 The **Southampton Women's Survey** is the only birth cohort study in Europe in which the mothers were recruited before conception of the child. The aim of the study is to assess the influence of maternal dietary, lifestyle, intrauterine, genetic and epigenetic factors on the children's health and development, and on the health of the mothers themselves.

5.7 The **Millennium Cohort Study** follows the lives of 19,517 children born across England, Scotland, Wales and Northern Ireland in 2000-01. The study has provided important evidence to show how circumstances in the early stages of life can influence later health and development, including that children who are breastfed tend to be healthier and to show better cognitive development and that children born in the summer months were more likely to be placed in lower ability groups than their autumn-born peers.

5.8 **Understanding Society:** The UK Household Longitudinal Study follows the lives of all individuals within 40,000 households over time. It covers the whole population, with boost samples to ensure it is representative of immigrant and ethnic minority groups, and its large sample enables sub-population groups to be examined. The study includes data on key domains of people's lives – their family, health, wellbeing, employment, education, income, expenditure, wealth, time use, behaviours, housing, transport and neighbourhoods, attitudes and beliefs – which enables researchers to investigate the inter-relations between different aspects of people's lives.

6. References

[1] <https://www.closer.ac.uk/news-opinion/blog/lifelong-consequences/>

[2] <http://www.cls.ioe.ac.uk/>

[3] <https://www.closer.ac.uk/wp-content/uploads/CLS-briefing-paper-what-influences-vocab-web.pdf>

[4] <https://www.savethechildren.org.uk/content/dam/global/reports/education-and-child-protection/ready-to-read-wales.pdf>

[5] <https://www.closer.ac.uk/news-opinion/2015/wales-poorest-children-falling-language-time-start-school/>

[6] <http://www.bristol.ac.uk/alspac/news/2017/mothers-and-mental-health.html>

[7] <http://www.bristol.ac.uk/alspac/news/2016/fatherhood-1500th-paper.html>

[8] <https://www.closer.ac.uk/about-the-research-we-fund/data-linkage/>

[9] <https://www.closer.ac.uk/about-the-research-we-fund/data-harmonisation/>

[10] <https://esrc.ukri.org/files/news-events-and-publications/publications/longitudinal-studies-strategic-review-2017/>

[11] <http://www.cls.ioe.ac.uk/>

[12] <https://www.closer.ac.uk/about/>

[13] <https://www.closer.ac.uk/about/partners/>

June 2018