

ESRC Longitudinal Studies Review 2017

Further analysis of responses to the consultation

Paper 6:

What did respondents say about birth cohort studies?

April 2017

Report author:

Ruth Townsley, Independent Researcher

The views represented in this report are from those who responded to the consultation and do not represent the views of ESRC

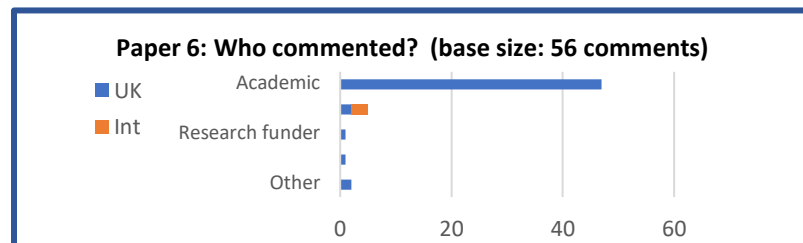


Introduction

The ESRC Longitudinal Studies Review 2017 is exploring the current and future scientific and policy-relevant need for longitudinal research resources. The review started in October 2016 and will report to ESRC Council early in 2018. An open online consultation in autumn 2016 sought input broadly, resulting in 637 completed responses from UK (83.4%) and international (16.6%) respondents. Respondents were predominantly from the academic sector (80%) as well as government, civil society and business sectors (20%). The main findings of the consultation were published in December 2016 in an [initial report](#). This report is supplemented by short briefing papers that examine key themes from the consultation data in more detail.

Paper 6: What did respondents say about birth cohort studies?

This paper focuses on respondents' comments about birth cohort studies. A search across all consultation responses identified 56 comments relating to either birth cohorts generally, the Life Study (now closed), or both topics. Of these, 20 comments (in response to survey questions 8, 9 and 10) made a case for setting up a new birth cohort to replace the Life Study.



"The UK's birth cohorts have proven an unrivalled resource for understanding how socio-economic and other inequalities arise ... as well as showing the mechanisms operating across generations and across the life course which either perpetuate or potentially reverse these." (ID 81)

The importance, value and contribution of birth cohort studies

Respondents were virtually unanimous in stating the importance, value and contribution of the current suite of birth cohort (and panel) studies, and made the following key points:

- > Cohort studies are a valuable UK and international resource and it is essential that the current suite of studies is maintained
- > The complementarity of the birth cohorts and panel studies is central to their value – the set of successive cohorts, used in combination (and supplemented by panel study annual sweeps) is more powerful than individual, stand-alone studies, particularly for policy making purposes
- > Cohort studies have made particularly valuable contributions to science, policy and public understanding in the following areas:
 - > Intergenerational continuities and discontinuities – differences and inequalities between generations in terms of wealth, social values and attitudes
 - > Intergenerational health inequalities – particularly in terms of mental health and obesity
 - > Social mobility, education and intergenerational transfers
 - > Ageing, health and well-being – the NCDS cohort has reached late middle age and will thus become an ageing study of major strategic importance alongside other ageing studies initiated in mid-life
 - > Extending working lives – NCDS has continuous work histories from age 16 to 60 and is uniquely positioned to consider the factors that encourage or inhibit extended labour market participation
 - > Processes underlying differentiated outcomes in areas such as family building, education, social and geographical mobility, political engagement, and health and mortality.

Birth cohort studies: lessons from the Life Study and other methodological issues

Respondents noted a number of ways in which current and future birth cohort studies could be enhanced or extended. Some of these reflected lessons learned from the early closure of the Life Study.

- > Many people felt it is vital for social scientists to re-state the importance of nationally representative, probability-based sampling for the UK's cohort studies, particularly with the forthcoming merger of the research councils to become UKRI – there was concern that as biomedical researchers/funders have a very different inferential framework they may not view nationally representative probability-based samples as central to cohort studies
- > For future birth cohort studies, opt-out access to birth registration records should be the optimal sampling method
- > Collection of bio-samples and the study of genetic, epigenetic and other omics effects should be included in future cohort studies and added to existing studies where possible (if not already in place)
- > Data collection from both fathers and mothers, resident and non-resident, should be undertaken for current and new birth cohorts
- > There should be consideration of qualitative data collection in birth cohort studies to enhance and add insight to existing measures
- > Different ways to obtain causality within birth cohort studies should be explored, e.g. use of natural experiments; collection of data on experiences and outcomes of siblings
- > Further investment in Next Steps and ALSPAC could help fill retrospectively the 30-year gap between 1970 and 2000 birth cohorts
- > ESRC may wish to review the governance, management and administrative systems of the cohort studies it funds now and in the future – there were concerns of the heavy administrative burden on those running studies, the need for more flexibility in terms of outputs, and that the 'single PI' model may not be the most effective means of managing longitudinal resources.

"Britain leads the world in having long-established birth cohort studies. It would be an act of gross academic and intellectual vandalism to break this extraordinarily valuable research tradition." (ID 170)

"Representative sampling is also vital if any new birth cohort will be able to be compared with previous cohorts, in order to compare the experiences of new generations with those of their predecessors." (ID 51)

"There are significant inter-generational differences in health. It is the birth cohort studies – especially through comparison of cohorts – that will have most to tell us about the contributing and ameliorating factors in these shifts. Since the ESRC's review of 2006 there have been considerable investments in collecting biological and social data side-by-side. This continues to present exciting new avenues of inquiry, which cohort studies are uniquely placed to facilitate." (ID 52)

"Longitudinal studies are very important scientific and policy resources - more important than the career of any one individual. Given this, and in light of the recently discontinued LIFE birth cohort study, I would hope that there are systems in place to ensure that the continued running of existing longitudinal studies is not entirely (or mainly) the responsibility of any one individual. Means of mitigating this risk may include a more balanced management structure (rather than a 'single PI' model), enabling feedback (in a non-onerous manner) at different points from multiple individuals, and ensuring that those running studies are resourced appropriately." (ID 98)

The case for a new birth cohort

Of the 56 comments relating to birth cohort studies, 20 stated the case for reconsidering a new birth cohort, to replace the Life Study which closed in 2016. The main reasons given by respondents are summarised as follows:

- > A new birth cohort study is needed to sustain the UK's longitudinal research capacity, both in terms of scientific need for data, and to maintain the UK's international reputation and facilitate cross-national research
- > Maintaining a continuous flow of data is important to track societal changes and their impacts on generations born in the 21st century – the current lack of sequence since the MCS presents a gap in scientific knowledge and limits the extent to which some policy questions can be addressed
- > Time is now of the essence – if research councils are considering funding a new birth cohort study then planning needs to start as soon as possible to avoid too lengthy a gap
- > Regular collection of biomarkers should be at the core of the case for a new birth cohort study – health expenditure is increasing and the ability of longitudinal data to map early experiences and exposures on later health outcomes can make a crucial contribution to early intervention strategies
- > A new birth cohort may need to be simpler and less ambitious than the previous Life Study, but the importance of a probability based, opt-out sample should remain central.

"The unfortunate experience of the very ambitious Life Study, with its substantial clinical element, should not be taken as proof that a more modest, probability sample based, cohort study could not be viable in the future." (ID 99)

"The gap between the BCS in 1970 and the MCS in 2000 is widely thought to have left a gap in our knowledge about the progress in social mobility, long run impact of child input and schooling decision. The cancellation of the Life Study means that there will already be a gap of more than 16 years between the MCS and the next national cohort study. Given that it takes a number of years for the studies to be funded and organised, if a new study is not organised soon, there is a risk the gap become similarly large." (ID 530)

"I urge the research councils to start planning now for a funding a new birth cohort to take around 2020-21. This must include the collection of biomarkers and some biological samples but, following the experience of the Life Study, very careful thought needs to be given and piloting undertaken to determine how much can be achieved without incurring excessive costs or seriously affecting response rates. A slightly less ambitious design and smaller sample might actually prove more productive and more achievable." (ID 13)

"We propose that data collection from resident and non-resident fathers is a core part of birth and child cohort studies in order to adequately address the scientific priorities of 'long-term effects of childhood experience' and 'biotechnology revolution' (the genetic contribution of biological fathers). This includes tracking resident fathers/ mothers into new households when they become non-resident as a result of relationship separations (similar to the 'split-off households' followed in Understanding Society)." (ID 55)