

ESRC Longitudinal Studies Review 2017

Further analysis of responses to the consultation

Paper 9:

Comparability and harmonisation

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

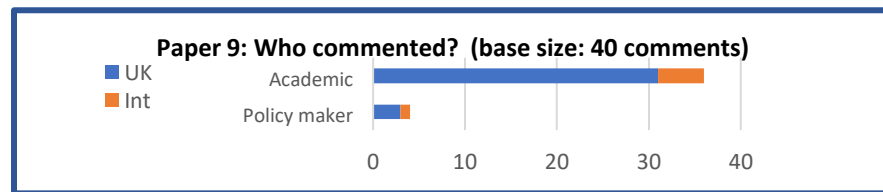


Introduction

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 9: Comparability and harmonisation

This paper examines respondents' comments about comparability and harmonisation. In response to question 9, respondents made 40 comments (out of a total of 661 coded comments for this question) which prioritised the issue of comparability across waves, cohorts, countries and studies, indicating a need for improved harmonisation of measures and consistency of data.



Cross-cohort comparison

Just under half (41%) of comments about comparability and harmonisation focussed on issues relating to cross-cohort comparison, or the ability to compare findings from different cohort studies. Most of the comments

simply stated the need for harmonisation of measures and data across cohorts in order to facilitate increased and more effective cross-cohort research. A small number of respondents mentioned the work by CLOSER to harmonise key variables across the cohort studies, whilst a few people summed up some of the on-going challenges as follows:

- > Different cohort studies have been measuring similar constructs and concepts differently (e.g. mental health) - efforts should be made to harmonise the use of different scales, measures, tests and variables
- > The use of geographically clustered samples (e.g. Born in Bradford and ALSPAC) raise a number of methodological challenges for comparability, both in terms of data processing and statistical analysis
- > Could ESRC and other funders establish an oversight group to advise on the choice of questions and measures for different topics across studies?
- > Harmonisation of metadata would be helpful to enable easier cross-cohort searching.

"In many studies similar concepts are measured, but different measures are used which makes it difficult to eliminate methodological artefact as a reason for different findings. There are good reasons for different scales to be preferred but I am not sure these always motivate the choice of measure. I would like to see some sort of oversight group that could advise on the choice of questions for different topics across studies." (ID 50)

"Cross cohort comparisons are possible but the data often vary considerably challenging any sort of harmonisation especially for social and developmental measurement. it would be helpful if the ESRC worked more closely with other cohort funders to bring some of these issues together." (ID 163)

Cross-wave comparison

Just under one third (31%) of comments related to the ability to make comparisons across different waves, or time-points, of the same cohort study, both for individual participant level data and for panel data. Respondents highlighted the value that only longitudinal studies bring of being able to observe and understand changes in the same variables over time, for the same individuals or groups. They also mentioned some of the challenges that are currently hindering their ability to undertake cross-wave comparison:

- > For Understanding Society - the gap in life satisfaction measures across the waves; the changes in measures for social class from SC/SEG to NS-SEC - in situations when the unit of measurement changes, look-up tables should be available to allow for conversion between the two measures
- > For MCS – incompatibility of some measures across waves – e.g. child cognitive performance – one respondent suggested that adding some later measures of 'ability' as tested in the home environment which are comparable to those in earlier waves, rather than relying on linkage to educational outcome data, would open up many new opportunities for cross-wave analysis
- > Comparability and harmonisation of data within domains when collected using different methods – e.g. controlling for the mode effects of face-to-face versus online data collection
- > The need for expertise and input on the specific variables being harmonised to determine what could or should be measured.

"Keep compatibility across waves. Please I beg you, don't break the series by changing criteria all the time with no compatibility with previous classification." (ID 295)

"The longitudinal studies can fruitfully be exploited to analyse within-individual changes over time from a comparative perspective. To this end, one should investigate how data is comparable (e.g. the panel datasets BHPS and PSID) and make sure that these comparative elements are kept in the data." (ID 246)

Cross-national comparison

Just over a quarter (26%) of comments prioritised the comparison of findings from cohort studies in different countries. Key issues mentioned by respondents included:

- > Cross-national comparison offers opportunities for understanding the effects and influences of different socio-historical and cultural contexts on core areas (e.g. income mobility)
- > Pooling cross-national data creates larger samples for more statistical power, particularly in areas where samples are likely to be small (e.g. rare medical conditions)
- > The need for standardised measures – questions that are specific enough to measure key elements at national level, but broad enough for cross-country comparison
- > The need for harmonisation – of sampling, variables and data
- > Further funding for existing studies and projects to develop more cross-national research – e.g. the creation of 'partner studies' in developing countries so that it is possible to investigate topics across different cultural and socioeconomic settings.

"More focussed support for cross-country comparisons, CLOSER could be expanded to support comparisons with some of the major developed countries (e.g. Australia, US, Germany). Further support for research projects to conduct cross-country comparisons would also be welcome." (ID 442)

"Harmonisation between surveys both domestically and internationally, in design, questions and sampling where possible. This allows more comparisons between different contexts, but also supports the linking of data across countries where larger sample sizes are required e.g. study of rare conditions / genetic analysis." (ID 658)