ESRC Longitudinal Studies Review 2017

Further analysis of responses to the consultation

Paper 1:

Key areas of scientific and methodological interest to policy makers

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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 1: Key areas of scientific and methodological interest to policy makers

Of the 637 individuals who responded to the consultation, 63 (10%) identified their work sector as central or devolved government (n=40) or local government (n=9), or public sector (n=14), indicating a connection with policy making. Of these, 52 were UK-based whilst 11 were international respondents. This paper provides more detail on the key areas of scientific and methodological interest for the policy makers who responded to the consultation.

Policy makers' scientific priorities for longitudinal research

Thirty-five policy making respondents provided 49 suggestions for current and future scientific priorities, grouped under the following main areas (where n=number of suggestions):

1. Long-term effects of childhood and adult experience (n=20)
2. Demographic shifts and mobilities (n=11)
3. Health and well-being (n=10)
4. Equality & inequality (n=5)
5. Ageing population (n=2)
6. Diversity and identity (n=1).

In comparison to other respondents, policy makers made no suggestions relating to biosocial research and genomics.

Key sub-areas of scientific interest for policy makers

The five most frequently cited scientific sub-areas of interest to policy makers were changes in work and employment patterns, pathways and labour markets; mental health and well-being; access to new media and technology; and education and skills. A number of sub-themes and questions were highlighted under each of these areas as outlined as follows:

- Changes in work and employment patterns, pathways and labour markets:
  - Employment and labour market participation - the experience of parents and carers in the labour market; the experience of disadvantaged groups in the labour market; What events are worst

for losing contact with the labour market and best for regaining contact?

- Industrial and employment changes – rise and decline of certain industries; management of employment relations; employee representation; payment systems and pay determination; collective disputes and procedures; redundancies, grievance and discipline.
- The changing workforce - employment opportunities, redundancies, changing patterns of work hours, educational and employment trajectories and pathways (e.g. studying longer and not necessarily finding related employment), impact of changing technologies on employment; remote working.

- Education and skills (school, FE, HE, lifelong):
  - Higher Education - aspirations to go onto higher education; transition to and from HE for different socio-economic groups; impact of changes to the HE system, including tuition fees; impact of high levels of debt/reduction of housing benefit on graduates/cost of housing/low opportunities for jobs
  - Educational inequality - how to reduce the attainment gap among children from advantaged and disadvantaged social backgrounds
  - Government provision for special educational needs and disabilities (SEND) from primary years until university – to understand what is required in terms of funding, teacher training and resources for schools to best address the support needs of children with SEND
  - Impact of specific policies and student-teacher relationships on student achievement – need for longitudinal student, class and teacher-level data in order to understand the difference these factors make.

- Impact of policy on individuals, groups and communities
  - Cumulative impact of austerity cuts
  - Impact of Brexit
  - Positive, negative, or lack of impact of public health, policy and non-clinical interventions on individuals, groups and communities.

- Mental health and well-being:
  - Exploring the impact of experiences in childhood and teenage years on mental health
  - Impact of school pressure and social media on mental health and well-being
  - Population differences in lifestyles and mental attitudes and the effect of these in a global arena.

- Access to new media and technology:
  - Impact of new communication and media technologies on individuals and society, including on population behaviour and attitudes, e.g. the introduction of autonomous vehicles and the impact they have on society and the economy
  - Exploring how new media and technology can be used positively, e.g. in relation to health behaviours.
  - Use and impact on lifestyles, learning and the labour market from a young age

Other scientific sub-areas of interest to policy makers included:

- Intergenerational continuities and discontinuities
- Ageing, health and well-being - including dementia and cognitive ageing
- Environmental factors, climate change and sustainability
- Parenthood, parenting and separation (impact on children, parents, family)
- Environmental factors, climate change and sustainability
- Social, economic, educational, geographic and digital/technological
- Neighbourhood change and development & impact of housing/living situation
- Transportation use and change
- Changes in time use

- Work, health and well-being
- Supporting and sustaining healthy living
- Long term health conditions and outcomes
- Identification of risks and protective factors
- Political values, attitudes and voting behaviour
- Language development
- Psychosocial and emotional factors
- Diet and nutrition
- Health inequalities
- Lifecourse and trajectories
- Experience of and demand for health (and social care) services
- Migration
- Inequalities relating to race and ethnicity.

Policy makers' methodological and technological priorities

Thirty-six policy making respondents provided 48 suggestions grouped under the following main scientific priority areas:

1. Data collection (n=19)
2. Data linkage (n=12)
3. Longitudinal study design (n=9)
4. Data handling and treatment (n=3)
5. Infrastructure and capacity building (n=3)
6. Other LS issues (n=2).

Unlike other respondents, policy makers made no suggestions relating to data analysis or documentation and dissemination.

Key sub-areas of methodological and technological interest to policy makers

Within these main priority areas, the three most frequently mentioned sub-areas of methodological interest for policy makers were data linkage; attrition, non-response and bias; and online/digital forms of data collection. Various issues and questions were noted which are summarised as follows:

- Data linkage:
  - Understanding what possibilities (and limits) exist for linking data across a wider range of sources – e.g. which key datasets have the potential for linkage and how can this best be achieved?
  - How can permissions to access datasets held across government be streamlined so that the value of these studies to society (including government) can be increased?
  - Practical, ethical and legal issues for data owners/controllers, including the sharing and dissemination of linked data in a safe and secure environment
  - Approaches to gaining and maximising consent from participants to link their data – is a common understanding and approach needed?
  - Understanding how best to analyse large-scale linked data and developing longitudinal methods for doing so
  - What are the potential methodological impacts of data linkage for example in terms of: reducing survey collection; more frequent data; small area estimation; developing new (and potentially standardised) modelling methods.
- Attrition, non-response and bias:
  - Implications of attrition on representativeness of the sample and robustness/quality of the data – for example to ensure that children from disadvantaged backgrounds do not become too under-represented

- Exploration of new methods/modes of data collection to help prevent attrition
- Improving response in the context of tighter financial constraints, e.g. behavioural science/economics techniques; targeting different modes of interview for different groups of the population.

- Online and digital forms of data collection:
  - Understanding the possibilities and potential of new forms of data collection, e.g. moving from paper and face-to-face interviews to web, computer, wearable, social media, and video technology
  - Potential and limits for linking survey data with participants' social media presence
  - Greater use of technology to engage young people
  - Need for a strong online and social media presence for longitudinal studies – the importance of effective digital techniques for contacting, interacting with, and disseminating findings to participants and for reducing losses from attrition.

"The birth cohorts and Understanding Society are a national asset that are the envy of other developed countries such as Australia. Following a review of our longitudinal data assets this year, the number one recommendation was to preserve the existing longitudinal studies. This should also be the number one priority of the review with a focus as to how the research and policy community can leverage further insights from these important government investments." (Policy maker: international)

"Many longitudinal studies have been in existence for a number of years. In the context of tighter financial constraints, how can further iterations be re-designed in such a way that delivers quality and retains methodological rigour?" (Policy maker: UK)

"ESRC's longitudinal studies are internationally renowned and incredibly valuable. They are a major source of data for UK studies, provide a key insight into UK society - both in snapshot and over time - and are major source of comparable data and methodologies for international studies too. Whatever the outcome of this review, they should be preserved." (Policy maker: international)

"Longitudinal studies by their nature are unique and future unspecified uses should not be underestimated!" (Policy maker: UK)

Other methodological and technological sub-areas of interest to policy makers included:

- Comparability and harmonisation (across studies, time, cohorts and countries)
- Need for a new birth cohort
- Collecting bio-marker data
- Weighting and imputation
- Mixed mode data collection
- Missing data and reliability
- Sampling and population representation
- Coding and quality assurance
- Ethical and sensitive/complex issues
- Big data
- Quantitative and qualitative integration.