A Strategy for Survey Methods Research in the UK

Peter Lynn (University of Essex)
Bob Erens (University College London)
Patrick Sturgis (University of Southampton)

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This report was prepared under the auspices of the ESRC Survey Resources Network (SRN; Lynn and Erens 2010), an initiative which was supported by the ESRC for three years from November 2008. The SRN drew together and extended a number of existing investments that undertook survey methodological research and provided associated resources and training. Core activities of the SRN were co-ordination of research projects commissioned under the ESRC Survey Design and Measurement Initiative, development and promotion of an online resource, the Survey Question Bank, and development and delivery of a training programme, the Survey Skills Programme. In addition to these core functions, SRN also coordinated a network of researchers across five institutions (Universities of Essex, Southampton, LSE, Institute of Education, and NatCen), organised research dissemination events, provided strategic advice on survey methods and carried out a scoping study into the potential for efficiency gains in longitudinal survey data collection. Funding for these activities ended in January 2012 (following a 3 month no-cost extension).
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Executive Summary

- UK social science research relies heavily on survey data, the quality and relevance of which depends on the survey methods used;

- Current challenges for survey research are considerable and survey methods are undergoing a transformation. The UK risks being left trailing other countries;

- The reliance on survey data and the challenges to producing good quality data mean that survey methods research and training is of vital importance;

- Survey methods training for postgraduate students should be supported and promoted. This includes specialist programmes, introductory modules for a broad range of programmes, and short courses;

- Continuing professional development for survey practitioners is also important and can be encouraged through the provision of short courses, seminars, workshops and networks which provide regular contact between academics and practitioners;

- Authoritative online information and advice on survey methods would be helpful to a wide range of people who do not have the time or the need for in-depth training;

- A strategically-focussed programme of survey methods research should be supported in the UK;

- Best practice in survey design and implementation should be promoted through a range of initiatives.
Introduction

The aims of this report are:

- To communicate why survey methods research is of vital importance to the future of the social sciences in the UK;
- To identify activities that require support in order to develop and maintain high quality survey methods in the UK;
- To outline the nature of the required support and possible mechanisms for delivering it.

The report begins by identifying the roles that survey methods play in the UK research community, the various parties with an interest in survey methods and the nature of relevant activities currently undertaken. Within this context, the report then moves on to identify ways in which current good practice can be maintained and ways in which practice might be improved in some areas.

The Role of Surveys

Researchers across the academic, government, third and private sectors rely heavily on survey data. This is particularly true in the social sciences, but survey data also play important roles in the humanities and core science disciplines. While other sources of quantitative data exist, survey data are unique in several ways and are likely to continue to retain those unique characteristics and advantages for the foreseeable future. The use of administrative and process data (such as retail store transactions or public transport ticket barrier movements) is often heralded as a potential replacement for the social survey, but the means to link such data at micro-level over time, over space and to data on the many other relevant dimensions of people’s lives, is presently far from being realised. Social surveys have the advantage that researchers can ask questions about precisely the topics that are of policy or research interest, covering the full range of issues and variables that may be relevant to a particular research question. The survey can be designed to represent well the complete population of relevance to the research question, rather than just those for whom data happen to be available for whatever reason. The timing of data collection can be controlled to suit the research aims, for example to allow comparisons of periods before and after some policy or procedural change, to control seasonal effects, to compare seasons, or to collect behavioural data relating to a particular period of time. And of course surveys can ask about attitudes, views, preferences, values, intentions and motivations – all things which simply cannot be captured in any other way other than by direct questioning of a sample of individuals.
ESRC allocates a substantial proportion of its total budget to survey data collection, including full or majority funding of: *Understanding Society*, the Cohort Studies (1958, 1970, 2000, and 2013), the British Election Study, as well as ad hoc and periodic surveys undertaken by Centres and through large grants such as the Time Use survey. It therefore has a particular interest in and responsibility to ensure that these activities are fit for purpose and are undertaken cost-effectively and to the highest methodological standard.

**Roles of Survey Methods**

Survey methods are therefore of fundamental importance as they underpin key knowledge resources for society and for government (in the widest possible sense of the term). By survey methods we refer to the full range of techniques used to design surveys, to collect survey data and to manage and add value to survey data. We also include those aspects of data analysis that are specific to survey data. We recognise the importance of activities such as documentation, archiving, dissemination and promotion as applied to survey data, but we do not consider them to fall within the jurisdiction of survey methods.

Survey methods therefore encompass, but are not limited to: sample design, data collection mode, instrument (questionnaire) design, contact and co-operation processes, measurement, imputation, weighting and estimation. In many of these areas, there are both issues related to field methods (e.g. how to minimise non-response or how to minimise measurement error) and issues related to post-field activities (e.g. how to assess and adjust for the effects of non-response error or measurement error). Survey methods draws upon theory and expertise from a range of disciplines, including psychology, statistics, sociology and economics. It is therefore of essence a multidisciplinary field.

Survey methods represent the toolkit of researchers who design and carry out surveys. Such researchers are found predominantly in the Office for National Statistics (ONS), the National Centre for Social Research (NatCen) and in private sector survey research organisations. Some can also be found in academia, in other government departments or public sector bodies, including local government and the NHS, and in private sector organisations. In short, any organisation that carries out surveys must have someone responsible for design and implementation.
In addition to the considerable number of survey practitioners in the UK, there is a smaller body of researchers who specialise in study of the methods themselves – survey methods researchers. These are mainly in academia, or in specialist groups within ONS1.

Survey methods are taught in a range of ways and a range of contexts. We can therefore think of there being ‘teachers’ and ‘students’ of survey methods, though both are rather heterogeneous groups. The majority of survey methods training in the UK probably takes place in the form of on-the-job training within survey organisations. Much formal training is delivered in the form of short courses on various survey methods topics. Many of the participants on such courses are survey professionals who have discovered, subsequent to choosing their profession, that they would benefit from (additional) training in survey methods. Other participants are survey commissioners, survey analysts and post-doctoral students. Short courses are delivered by academic institutions (often in partnership with one or more survey organisation), by professional bodies2, by survey organisations (notably Natcen Learning) and by independent consultants. Leading examples in recent years include several supported by the ESRC, notably the courses delivered by CASS (www.sssri.soton.ac.uk/cass/), the workshops delivered by the Survey Resources Network (www.surveynet.ac.uk/ssp/workshops/workshops.asp) and a number of ad-hoc courses delivered under the Researcher Development Initiative. Other courses are delivered regularly by the Universities of Surrey (www.fahs.surrey.ac.uk/daycourses/) and Manchester (http://www.ccsr.ac.uk/courses/). The University of Southampton deliver survey methods (and other) modules of its Masters programme in Official Statistics in a form whereby anyone can attend the module as a short course. Formal academic teaching of survey methods to postgraduate students takes place in many institutions. The only Masters programme devoted specifically to survey research methods is at the University of Essex, based in the Department of Sociology. Masters programmes with substantial survey methods components include the University of Manchester MSc in Social Research Methods and Statistics, the University of Southampton MScs in Official Statistics and Social Statistics (Research Methods), the MRes in Educational and Social Research at the Institute of Education and the MScs in Social Research Methods offered by City University, the London School of Economics and Political Science, the University of Sussex and the University of Surrey. Several other programmes include some teaching on survey methods, but this is typically a minor component of a research methods module as part of programmes in fields as diverse as sociology, applied statistics, business & marketing and health science. Such modules tend to concentrate on

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1 For more than 30 years there was a specialist survey methods centre/unit within the organisation now known as Natcen Social Research, but the unit was disbanded in 2010.

data analysis methods rather than data collection methods. The number of PhD students with a primary focus on a survey methods topic is very limited indeed, probably amounting to only around one graduate per year.

Other constituencies with an interest in survey methods include:

- Commissioners and funders of survey research, who need to be able to evaluate the appropriateness of methods proposed by bidders/applicants and subsequently to assess the quality of survey implementation;

- Analysts of survey data, who need to be able to understand aspects of the design and collection that should be taken into account in analysis and to be aware of the strengths and limitations of a survey data set;

- Journalists and other secondary reporters of research findings based on survey data, who need to be able to correctly interpret findings and to be able to judge the credibility of alternative surveys and other data sources.

Ultimately, society as a whole has an interest in the quality of survey methods as methods affect the information base that influences policy decisions. However, we see society as being influenced by survey methods rather than playing an active role in relation to survey methods, so we do not consider society broadly as a relevant constituency. Policy makers and others who make decisions based at least partly on survey findings could also be considered a relevant constituency, but again we see their interest in survey methods as a rather passive one. The quality of policy decisions may well be affected by the quality of underlying survey methods, but it is rare indeed to find a policy maker with a direct interest in survey methods.

We summarise the various constituencies with an interest in survey methods in Annex A.

**Improving Survey Practice**

**Survey methods training for students**

Specialist postgraduate courses in survey methods provide the most likely source of advanced specialist survey methods researchers and practitioners. In the absence of such courses, maintenance of a cadre of survey methods experts in the UK would be reliant on either a) immigration of researchers who have received similar training in other countries, or b) self-teaching and in-service professional development by researchers who had found other routes into survey practice. The existence of survey methods experts in the UK is crucial to maintaining good survey practices, so we therefore believe that specialist
postgraduate courses should be supported and promoted. The potential beneficiaries of such courses are not just the students themselves, but UK society as a whole.

Considering the wide range of contexts in which surveys are carried out, it is inevitable that many surveys will be designed and implemented without the direct input of a specialist survey methodologist. It is therefore important that researchers in many fields have a basic understanding of the fundamentals of survey methodology. Training in these fundamentals should therefore be included in degree courses which require the use of quantitative research methods. The more widespread basic knowledge of good survey practice is amongst the research community, the more likely it is that surveys will be well-designed and fit for purpose.

One important route by which training in fundamentals has been delivered to students (Lynn and Erens, 2010) is through the Survey Skills Programme of the ESRC Survey Resources Network (2008-2011) and, before that, through the Survey Link Scheme (1981-2008). These initiatives provided students with a 1-day introduction to surveys and survey methods, plus the opportunity to experience aspects of survey implementation at first hand, notably accompanying an interviewer in the field working on a major survey. As we noted earlier, however, these opportunities came to an end in 2011, when the ESRC discontinued funding.

**Continued development for survey professionals**

Inevitably, many surveys will be the responsibility of professionals who have no formal training in survey methods. Professionals from many backgrounds will find themselves needing to design, monitor or commission surveys. In some cases this will become the major element of their job. Suitable training and support for such professionals therefore plays an important role in the maintenance of good survey practice in the UK.

Short courses in key elements of survey methodology are important in servicing this need. These include some of the courses mentioned above, such as those provided by CASS, the Universities of Surrey and Manchester, and NatCen Learning.

Conferences, seminars and workshops on survey methods topics also provide an opportunity for survey professionals to refresh and enhance their knowledge of survey methods. A fair number of such events take place in the UK, predominantly in London. These are nearly always well attended and highly valued by attendees. These events provide an opportunity for networking and for the exchange of ideas and experiences across constituencies, being attended by researchers from government, academia, and
both public and private sector survey organisations. Typically, the social statistics section of the Royal Statistical Society holds around one meeting per year on a survey methods topic, often in the form of a half-day seminar with three or four speakers. In recent years a number of 1-day seminars have been organised under the auspices of the ESRC Survey Resources Network and/or the ESRC National Centre for Research Methods. Other events are organised as part of specific research projects or networks, which are themselves typically ESRC-funded. The Government Statistical Service annual methodology conference is an important forum for government survey researchers, though coverage of survey methods topics is patchy.

**Reaching out to other constituencies**

Professionals whose primary concern is not surveys, but who have some, often occasional, involvement in surveys, also have influence over survey practice. These people may not have the motivation or time to attend specialist courses or events, but still require some basic knowledge and support. They are likely to rely upon easily-accessible information such as the advice of colleagues, or whatever can be found quickly on the internet. The existence of simple, sound information on the internet, which can be easily found, is therefore important. Much information of this kind already exists, though it is scattered between many websites and very little of it is UK-based. There may be a need for some basic UK-specific information and advice to be made available on a suitable website, with links to other websites that already provide generic advice.

**Review/Assessment**

Review and assessment of survey design and implementation plays an important role in quality assurance and quality improvement, especially for continuous or repeated surveys. Some surveys produce Quality Profiles (e.g. Lynn, 2006) and others are subject to regular quality reviews or occasional methodological reviews. Although such reviews are designed to inform the future of one specific survey, findings may be symptomatic of trends or issues that apply also to similar surveys. As such, the influence of review findings may spread well beyond the target survey.

When resources are scarce, routine quality assessment and review may be suspended. Such activities are an easy target as their suspension does not appear to affect routine survey production. However, this can prove a false economy. On the other hand, reviews with a specific remit to identify ways to save costs may be initiated. Such reviews can be beneficial to a survey, provided that quality considerations are appropriately taken into account. A key constraint of the ability of quality reviews to deliver improvements in
survey quality is the availability of appropriately-skilled staff to undertake the review. A good knowledge of survey methods is needed. Such experts are in short supply in the UK.

**Giving Direction to Survey Methods Research**

Survey methods research is undertaken via a number of routes. Sometimes, such research is the subject of a research grant application. In the UK, it is rare that any research-funding body other than the ESRC will fund survey methods research. Other times, survey methods research is a component of a larger research project with a mainly substantive focus. And other survey methods projects are commissioned in the context of specific surveys by the funders of the survey data collection.

As a result, the nature of survey methods research is to some extent haphazard and opportunistic, and much of the research carried out serves the specific needs of particular surveys rather than the generic needs of the survey research community as a whole. There is a need for strategic oversight of survey methods research in the UK. The ESRC would appear to be perfectly placed to attempt to identify and monitor key issues, emerging trends, and knowledge needs. However, there is currently no mechanism or role for doing this. Consequently, there is no guiding strategy or framework to inform funding decisions regarding survey methods research.

**Current Challenges**

Over recent years social surveys around the world have been finding it increasingly difficult to achieve high response rates. The UK is no exception: response rates on most major regular surveys have fallen. Many survey design and implementation features that can be deployed to help maintain response rates are costly, and this has simultaneously pushed up the cost of carrying out surveys based on probability samples. This trend is driving a quest for more cost-effective ways of achieving good response rates. However, focus has also shifted away from merely achieving a high response rate to achieving a balanced response across sample subgroups (Schouten et al, 2009). This is an appealing objective, as it may enable researchers to avoid the worst effects of non-response, by minimising nonresponse bias, in a world where very high response rates may no longer be possible. However, methods for achieving balanced response are still under development.

Meanwhile, survey data can now be obtained cheaply and quickly and from large samples using internet panels. Some researchers believe that the convenience of internet panels
outweighs any concerns about representativeness and quality. Others argue that relying on probability sampling to deliver accurate estimates through representative samples is simply no longer tenable and that internet panels may represent the best alternative. Yet other researchers are attempting to harness the strengths of web survey data collection while combining them with the well-established traditions of probability samples and high response rates. In Europe these endeavours have led to an academically-driven probability-based web panel being set up successfully in the Netherlands (Scherpenzeel and Bethlehem 2011) and similar enterprises are currently underway in Germany (Gathmann 2011) and France (Lesnard 2011). The UK is in danger of being left behind.

The importance of the continuing development of survey methods in the context of these new challenges and opportunities has been reflected in major investments in other countries. The German National Research Foundation (DFG) has for the very first time funded a major programme of survey methods research, the Priority Program for Survey Methods (PPSM). PPSM (http://www.survey-methodology.de/) has so far funded sixteen projects in two phases, enabling Germany to suddenly become a world leader in survey methods research. In the USA, the National Science Foundation – Census Bureau Research Network (NCRN, http://www.census.gov/NCRN/) is a recent initiative which has so far commissioned eight nodes, each with their own research programme. These major investments reflect a recognition by the German and American governments respectively of the importance of survey methods and the value of adapting and developing methods for society today.

**Supporting Survey Methods Research**

It is important that a strategically-focussed programme of survey methods research should be supported in the UK and that best practice in survey design and implementation should be promoted. We believe that the ESRC has an opportunity to ensure that both sets of activities take place.

Regarding the promotion of best practice in survey design and implementation, a range of initiatives could be envisaged, including seminars, meetings, co-ordination of training, and perhaps the publication of position papers.

Regarding research, very little academic research in survey methods is taking place in the UK since the SDMI projects ended in 2011. Without a co-ordinated programme of research, there is a risk that major surveys will not be able to make well-informed decisions about survey design options, that the academic skills base in survey methods will be eroded, and that the UK’s reputation as a world leader in survey methods research
will also suffer. There are signs that this is happening already, with significant investment in the USA and with major survey initiatives in Europe taking place in Germany, France and the Netherlands. A UK programme of survey methods research could take any one of several forms. It could be a guided initiative, a programme with an open call for proposals, a portfolio of activities funded by existing schemes, or a specific infrastructure, for example. Laying the groundwork for such a research programme is however an urgent task.

We also believe that regular, repeating and longitudinal surveys would be well-advised to continually fund methodological research and development. The research may be survey-specific, but there may also be generic topics that require study but which are relevant to many surveys. To tackle this latter category, it may be efficient for surveys to combine their support, to enable a larger study than any survey alone would be able to fund, or to collaborate in studying the same or related issues in a synergistic way across several surveys. The ESRC could play a vital role in facilitating and supporting co-operation to achieve these aims.
References


## Annex A: Constituencies with an interest in survey methods

<table>
<thead>
<tr>
<th>Constituency</th>
<th>Who / where</th>
<th>Interest / role</th>
</tr>
</thead>
<tbody>
<tr>
<td>Survey practitioners</td>
<td>Mainly in survey organisations, including ONS, NatCen and private survey companies. Some in academia and in diverse organisations with an in-house research function.</td>
<td>Survey methods are the tools used to carry out their job.</td>
</tr>
<tr>
<td>Survey methods researchers</td>
<td>Mainly in academia. Some in ONS and NatCen. Very few elsewhere.</td>
<td>Survey methods are their subject of study.</td>
</tr>
<tr>
<td>Academic teachers</td>
<td>Universities.</td>
<td>Survey methods are their subject of instruction – from an academic perspective.</td>
</tr>
<tr>
<td>Other instructors</td>
<td>In other training providers, primarily survey organisations of all types.</td>
<td>Survey methods are their subject of instruction – generally from a more practical/implementation perspective.</td>
</tr>
<tr>
<td>Specialist PG students</td>
<td>Universities.</td>
<td>Survey methods are their subject of study.</td>
</tr>
<tr>
<td>Other PG research students</td>
<td>Universities.</td>
<td>Survey methods are a tool to be used in their own – typically small-scale – research.</td>
</tr>
<tr>
<td>Short course participants</td>
<td>From any of the other constituencies listed in this table.</td>
<td>Survey methods are usually a tool to be used in their work or study</td>
</tr>
<tr>
<td>Commissioners/ funders</td>
<td>Government departments, research councils, foundations and trusts</td>
<td>Survey methods are often the tool of funding applicants</td>
</tr>
<tr>
<td>Analysts</td>
<td>Universities, government departments, other institutes, NGOs, commercial institutions, public sector bodies</td>
<td>Survey methods are something they have to account for in their analysis and interpretation</td>
</tr>
<tr>
<td>Journalists</td>
<td>Media</td>
<td>Survey methods are something they should account for in their interpretation</td>
</tr>
</tbody>
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