

Training and Capacity Building: Summary of knowledge and skills training needs

Survey Futures is an Economic and Social Research Council (ESRC)-funded initiative (grant ES/X014150/1) aimed at bringing about a step change in survey research to ensure that high quality social survey research can continue in the UK. The initiative brings together social survey researchers, methodologists, commissioners and other stakeholders from across academia, government, private and not-for-profit sectors. Activities include an extensive programme of research, a training and capacity-building (TCB) stream, and dissemination and promotion of good practice. The research programme aims to assess the quality implications of the most important design choices relevant to future UK surveys, with a focus on inclusivity and representativeness, while the TCB stream aims to provide understanding of capacity and skills needs in the survey sector (both interviewers and research professionals), to identify promising ways to improve both, and to take steps towards making those improvements. Survey Futures is directed by Professor Peter Lynn, University of Essex, and is a collaboration of twelve organisations, benefitting from additional support from the Office for National Statistics and the ESRC National Centre for Research Methods. Further information can be found at www.surveyfutures.net.

Around 40 people representing organisations from across the UK with a vested interest in survey research methods training and capacity building (TCB) came together online in November 2023 to consider the training needs of survey research staff and TCB priorities.

Table 1 summarises the knowledge and skills training needs identified by this group and the priorities identified. This summary table differentiates between:

- Knowledge needs theories, concepts, ideas, research findings etc., and
- Skills needs practical application of knowledge to research problems.

It also differentiates between foundational and additional knowledge needs.

- Foundational knowledge requires understanding key survey concepts and methods and their strengths and weaknesses.
- Additional knowledge builds on and extends foundational knowledge, developing understanding of new techniques, theories, and approaches and in evaluating different design options.

Training incorporates not only courses but other knowledge exchange activities – workshops, webinars, conferences – and resources – guidance, best practices, examples.

The full report can be found at: https://surveyfutures.net/reports/

Table is taken from Collins, D., Mesplie-Cowan, S., Durrant, G. (2024) Training and Capacity Building: Report on Workshop with Stakeholders, November 2023

 Table 2 Survey Research Design and Methods Knowledge and Skills Needs

Торіс	Foundational knowledge needs	Additional knowledge needs	Skills training needs
Survey data quality (Priority)	 Survey data quality Measures of survey quality e.g. non- response bias 	 Factors that affect survey data quality Relationship between survey data quality and survey design 	 Assessing survey data quality during and after data collection Evaluating the quality of different survey designs
Survey design, including mixed mode survey design (Priority)	 Key survey concepts: measurement, representativeness, error and bias Theories and frameworks underpinning survey research, e.g. Total Survey Error (TSE) Framework Advantages and disadvantages of different modes of data collection Understanding of mode effects — measurement and representation 	 Application of behavioural insights to survey design Survey design good practices Learning from the COVID-19 pandemic: the impact of changes in survey designs on survey estimates, e.g. non-response bias, measurement error survey design and post data collection strategies found to mitigate non-response bias and/or 	 Application of behavioural insights to survey design (e.g. respondent communications) Evaluating different survey design options (e.g. using the TSE), identifying pros and cons and design tradeoffs Application of inclusive survey design principles How survey designs impact survey estimates, using real-life examples (e.g. from the COVID-19 pandemic) Designing, and interpreting

Торіс	Foundational knowledge needs	Additional knowledge needs	Skills training needs
		measurement error Designing experiments to assess the impact of different survey designs Understanding of inclusive survey research design principles and practices New survey research methods and design approaches e.g. working with non-survey data	survey design experiments Data linkage, including gaining access to data sources that researchers wish to link to and good practices
Survey practicalities (Priority)	 Operational considerations and constraints that effect surveys Survey data collection in practice 		 Observing survey data collection in practice Observing coding of open survey questions Sitting in on interviewer briefings
Research ethics and data protection (Priority)	 Ethical principles e.g. informed consent, risk of harm Data protection principles and legal requirements 	 Statistical disclosure control Ethical governance 	 Ethical decision- making in survey research Application of data protection principles to survey research

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Торіс	Foundational knowledge needs	Additional knowledge needs	Skills training needs
Data linkage (Priority)	Principles of data linkage	 How to gain access to data sources Data linkage good practices Ethical, data protection and statistical disclosure control considerations 	 Data linkage steps and techniques Application of good practices
Emerging technologies, including Al (Priority)	Emerging technologies, including AI and their application to survey research	 Use cases/ examples of emerging technologies/ Al use in surveys Quality issues arising from the use of emerging technologies 	 How to work with emerging technologies, including AI Ways of evaluating emerging technologies e.g. assessing risks, data quality
Effective communication of complex and technical information (Priority)	Not discussed	Not discussed	Communicating the pros and cons of survey designs with different stakeholders
Commissioning surveys (Priority)	Good practices	 Governance processes Factors affecting survey costs Judging survey data quality 	 Writing survey research specifications Evaluation of research proposals
Questionnaire design and testing (Priority)	Measuring conceptsGood question design principles	 Redesigning surveys for different modes Understanding optimode design 	 Use of qualitative methods such as cognitive

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Торіс	Foundational knowledge needs	Additional knowledge needs	Skills training needs
	 How to find existing questions/measures Cognitive testing/ UX methods 	 Testing cycles in questionnaire development, e.g. agile methods 	interviewing and UX methods
(Complex) Weighting and adjustment strategies (Priority)	Principles of survey weighting	 Weighting longitudinal data Complex weighting for cross-sectional surveys Adjustment strategies for mitigating mode effects 	 Weighting longitudinal data Weighting for complex cross- sectional survey designs
Computational methods (Priority)	 Understanding of computational methods 	Not discussed	Not discussed
Combining non-survey data sources with survey data	 Understanding possibilities and challenges of combing survey and non-survey data Non-survey data sources and topics covered 	 Understanding the strengths and limitations of different data sources, including biases that can impact data quality Weighting and imputation approaches Data fusion approaches 	 Working with non-survey data Weighting and imputation approaches Data fusion approaches
Mixed methods	 Mixed methods research design principles Types of designs 	Not discussed	 Designing mixed methods research involving surveys:

Topic	Foundational knowledge needs	Additional knowledge needs	Skills training needs
			principles and practices
Problem solving, critical and creative thinking	Not discussed	Not discussed	Skills development (no details provided)
Survey sampling	 Key concepts and principles Pros and cons of different sampling methods 	Not discussed	Not discussed