Stimulating new developments in quantitative, qualitative and mixed research methods





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In 2004 ESRC tasked NCRM to advance methodological understanding and practice across the UK social science community. Since then NCRM has succeeded in building a substantial programme of research and training at the frontiers of developments in social science research methodology. Phase 3 nodes are the next step in building on that success.

Professor Patrick Sturgis

NCRM Director

The National Centre for Research Methods (NCRM) forms part of the Economic and Social Research Council's (ESRC) strategy to improve the standards of research methods across the UK social science community. NCRM was established in April 2004 from funding from the ESRC to provide more strategic integration and coordination of ESRC's investment in research methods.

NCRM provides a focal point for research, training and capacity building activities. These activities are aimed at promoting a step change in the quality and range of methodological skills and techniques used by the UK social science community, and providing support for, and dissemination of, methodological innovation and excellence within the UK.

NCRM aims to

- (i) Advance methodological understanding and practice:
- (ii) Enable members of the UK social science research community to learn about recent developments in research methods and current 'best practice' and to acquire the capacity to use these methods effectively in their research:

- (iii) Play a strategic role in the promotion of high quality research methodology; and
- (iv) Enhance the UK international profile in methodological excellence and to ensure that the UK is at the forefront of international developments in social research methodology.

NCRM has a distributed structure, with a coordinating Hub at the University of Southampton and various Nodes at collaborating universities across the UK. Nodes are funded for three years at a time.

For more information about NCRM and its activities please visit the NCRM web site www.ncrm.ac.uk

What we do

Our research programme

The NCRM research programme is led by the ESRC strategy for a step change in research methods capacity in the UK. We aim to stimulate new developments in quantitative, qualitative, and mixed methods and to be responsive to emerging needs and opportunities.

The NCRM research programme is based upon (i) research projects focusing on innovative methodological development within the context of substantive research problems; (ii) methodological

reviews commissioned to cover a range of topics, including syntheses of literature in relation to methodological issues, descriptions of innovative approaches and discussions of methodological challenges; and (iii) methodological evaluations, assessments and consultations on the research and training needs of the social science community.

Find out more about our research in www.ncrm.ac.uk/research.

Our Training and Capacity Building programme

NCRM supports the social science research community by running methods-focussed training and events, facilitating access to training and developing online resources.

NCRM provides and commissions research methods training for researchers and for those who are involved in supervising research and teaching methods. NCRM maintains an online Training and Events database that contains up-to-date information about research methods focussed training and other events across the UK. NCRM also awards training bursaries for staff and contract researchers in UK higher education institutions who wish to develop their research methods skills.

The biennial ESRC Research Methods Festival is the NCRM's flagship event. The festival has a range of functions, but it is of particular importance in promoting interest in research methods and opportunities for further training. The festival brings together people from different sectors, methodological traditions, and disciplines who do not normally meet around a research methods-related agenda.

Search for upcoming research methods training courses and other events at www.ncrm.ac.uk/training

Who we are

NCRM provides a focal point for research, training and capacity building activities in social science research methods. NCRM has a distributed structure, with a coordinating Hub at the University of Southampton and Nodes at other locations across the United Kingdom.

The Hub

The main focus of the Hub is the strategic development of the NCRM and on the coordination of the NCRM activities. The Hub is responsible for developing the NCRM research, and training and capacity building strategy, coordinating the ESRC research methods training bursaries scheme and organising the biennial ESRC Research Methods Festival. The Hub also commissions methodological reviews and network projects, and manages NCRM communications and relations with the broader social science research community.

Members of the Hub team conduct research into the methodological research and training needs of the UK social science community, which informs policy and practice in relation to the development of research methods capacity in the UK. Hub staff also undertake methodological research.

The long-running ESRC-funded Courses in Applied Social Surveys (CASS) is coordinated by the Hub. CASS is a programme of short courses across the whole quantitative survey process from design and data collection to data analysis.

The Hub also hosts the ESRC-funded ReStore project, which preserves, sustains and actively maintains selected online research methods resources beyond the initial funding award.

The Hub is based at the University of Southampton.

Director of NCRM: Professor Patrick Sturgis LEMMA 3: Longitudinal Effects, Multilevel Modelling and Applications

Principal Investigator: Professor Fiona Steele

Social science is all about understanding complex social processes. For example, the processes by which people from families with differing socio-economic status obtain markedly different life outcomes are complex and develop over time. It has long been recognised that understanding such processes requires longitudinal data comprising repeated measurements of the key factors over time, and there has been substantial investment in the collection of such data.

The overarching objective of LEMMA 3 is to build capacity in the analysis of longitudinal data. LEMMA 3 aims to:

- (i) review and synthesise important developments in longitudinal data analysis;
- (ii) develop and adapt new methodology that addresses important problems in social research today;

- (iii) apply the newly developed methods to substantive research projects in collaboration with experts from medical sociology, health psychology, economics, education and developmental psychology; and
- (iv) implement the methodological research in the user-friendly e-STAT software environment. e-STAT has been developed to overcome one of the biggest barriers facing social researchers, namely, learning to use statistical software packages.

LEMMA 3 also runs an extensive programme of training and capacity building activities for academic and non-academic users. Additionally, LEMMA 3 provides support to other trainers who wish to develop their own courses in longitudinal data analysis. These activities are augmented by further developing online training materials and continuing to make available free software to UK-based academic users.

LEMMA 3 is based at the University of Bristol.





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MODE - Multimodal Methodologies for Researching Digital Data and Environments

Principal Investigator: Professor Carey Jewitt

MODE develops multimodal methodologies for social scientists, providing systematic ways to investigate all modes of representation and communication in digital environments.

MODE activities are organised around five thematic strands:

- (i) Collection and analysis. How to gather, produce, select and analyse digital data?
- (ii) Transcription. How to represent digital data in different modes and media?
- (iii) Mixed methods. How to combine multimodal methodologies with other concepts and frameworks?
- (iv) Time and space. How can multimodal methodologies help investigate time and space in digital environments?
- (v) Body. How can multimodal methodologies help investigate the body in digital environments?

MODE runs two research projects:
The 'Digital technologies in the operating theatre' project explores the potential and use of digital data for professional and educational purposes, and the 'Researching embodiment with digital technologies' project investigates the body in digital environments in secondary school.

MODE also delivers a programme of training and capacity building activities for social science researchers. These activities include public lectures, seminars, data workshops, training courses and online activities.

MODE is based at the London
Knowledge Lab, Institute of
Education, University of London.



NOVELLA - Narratives of Varied Everyday Lives and Linked Approaches

Principal Investigator: Professor Ann Phoenix

NOVELLA is concerned with the everyday habitual practices of families. These are frequently taken for granted, but orientation to the social world and what people do are (at least partly) negotiated within families. 'Disconnections' between people's narratives and actions also tell us about their identities, values and possible future actions.

NOVELLA conducts research projects on family practices that are highly socially relevant and of concern to policymakers and practitioners in the UK and internationally.

(i) 'Parenting Identities and Practices builds on previous narrative studies and compare these data sets with data from the Millennium Cohort Study. It addresses the question of how narratives of habitual family practices fit with what parents say and do over time.

- (ii) 'Families and food: Methodological innovations' for studying habitual practices aims to inform ongoing and substantial policy concern about the difficulty of changing established habitual family practices in relation to food.
- (iii) 'Family lives and the environment: Cross-national perspectives on habitual practices' examines the intersection between family narratives about climate change, climatic events and understandings of everyday practices in relation to the environment, and 'ecological' activities in everyday family life. The project builds on data from the Young Lives study, but includes new research with families India (Andhra Pradesh) and the UK.

NOVELLA also runs a training programme in secondary analysis and comparing narrative analysis

NOVELLA is based at the Institute of Education, University of London.

PATHWAYS - Biosocial Influences on Health

Principal Investigator: Professor Emily Grundy

PATHWAYS aims to identify pathways that link socio-demographic variables in causal analysis. circumstances and biological disadvantage to adult health, and parental family and socio-economic circumstances to infant mortality, with a particular emphasis on the mediating factors that lie on these pathways.

PATHWAYS research projects include:

- (i) pathways to and from particular fertility histories and their implications for later life health:
- (ii) pathways to and from marital status trajectories and health in mid life;
- (iii) pathways from parental socioeconomic and demographic circumstance to birth weight of infants and infant mortality; and

(iv) use of genes as instrumental

The methodological focus of this node is the development and dissemination of rigorous approaches for the identification of these pathways. In addition to research projects PATHWAYS runs training courses and develops web-based materials.

The substantive and methodological strands aim to enhance the ability of the social science community to investigate specific hypotheses and therefore design public health interventions, and also to promote methodological exchange between the social and biomedical research communities.

PATHWAYS is based at the London School of Hygiene and Tropical Medicine, University of London.



PEPA - Programme Evaluation for Policy Analysis

Principal Investigator:
Professor Mike Brewer

Answering questions about the effectiveness of state interventions in economic and social domains – such as "did this training programme help the participants get back to work?", or "did this child health programme improve children's outcomes?" – is the goal of programme evaluation.

Robust programme evaluation is difficult: researchers have to estimate causal impacts credibly and understand the uncertainty in their estimates, and policy-makers have to determine how best to synthesize and generalise the lessons learned from multiple studies.

PEPA aims to stimulate a step change in the conduct of programme evaluation, and maximise the value of programme evaluation by improving the design of evaluations and improving the way that such evaluations add to the knowledge base.

PEPA research programme aims to:

- (i) advance our understanding of the value of randomised control trials in social science;
- (ii) improve inference for policy evaluation;
- (iii) develop the key relationships between alternative methods for policy evaluation;
- (iv) combine quasi-experimental methods with dynamic behavioural models; and
- (v) determine how to measure social networks and then use such data for programme evaluation

PEPA also apply the methods they develop to evaluate a number of important policy questions, and they run a programme of training and capacity building activities.

PEPA is based at the Institute for Fiscal Studies and cemmap.





TALISMAN: Geospatial Data Analysis and Simulation Principal Investigator: Professor Mark Birkin

The TALISMAN node develops methods for geospatial data analysis and simulation, specifically models of spatial systems that emphasise interactions which reflect potential and flows at and between locations. The methods researchers at TALISMAN develop are based on spatial interaction, agent-based models (ABM), cellular automata (CA), and microsimulation methods that span the range from aggregate to individual populations, at different spatial scales and over different temporal periods. Cutting across these models are new developments in computer media that emphasise new ways of collecting data from the bottom up, popularly referred to as 'crowd-sourcing' and new methods of visualising model inputs, outputs and the process of model building using new methods of visual analytics.

TALISMAN develops models which are part of a long tradition in applied geography and urban and regional economics. TALISMAN progresses these models in various forms, developing more generic types of models and methods for their implementation through calibration and use in forecasting. Their emphasis is on developing substantive extensions to these models by embedding them in new media using Web 2.0 and 3.0 technologies as well as improving them through participatory involvement of model builders and stakeholders in both the academic community and the outside world.

TALISMAN runs a training and capacity building programme, which includes a series of modules reflecting the latest progress in spatial modelling as well as new developments in data sharing, sourcing and visualisation.

TALISMAN is based at the University of Leeds and University College London.

NCRM nodes 2005-08 (Phase 1)

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BIAS focused on modelling the complexities and core processes that underlie observational social science data and on developing a set of statistical frameworks for combining data from different sources. BIAS was based at Imperial College. Principal Investigator: Professor Nicky Best.

Lancaster-Warwick node's focus was to promote good statistical modelling in the social sciences through training and also to develop new statistical modelling methodology for longitudinal and other correlated data. Lancaster-Warwick node was based at the Universities of Lancaster and Warwick. Principal Investigator: Professor Brian Francis

LEMMA focused on the methodological developments in the specification and estimation of multilevel models for handling realistic complexity in data structures and social processes. LEMMA node was based at the University of Bristol. Principal Investigator: Professor Jon Rasbash

Methods for Research Synthesis developed methods for synthesising the results of all types of research and applied these methods to substantive review topics across the social sciences. MRS was based at the Institute of Education, University of London. Principal Investigator: Professor David Gough.

Qualiti focused on the innovation, integration and impact of qualitative research methods, paying particular attention to the social contexts in which research methods and methodologies are situated. Qualiti was based at Cardiff University. Principal Investigator: Professor Amanda Coffey.

Real Life Methods explored new research methods that aim to grasp the multidimensionality of "real lives". Real Life Methods was based at the Universities of Manchester and Leeds. Principal Investigator: Professor Jennifer Mason.

NCRM nodes 2008-11 (Phase 2)

ADMIN exploited newly linked administrative and survey data to develop and disseminate methodology for making the best use of administrative data and reassessing how best to deal with some of the common problems associated with using survey based longitudinal data. ADMIN was based at the Institute of Education, University of London. Principal Investigator: Professor Lorraine Dearden.

BIAS II focused on addressing methodological challenges in the modelling of biases and complex structure in observational data, in particular surveys, longitudinal studies and small area data. BIAS II was based at the Imperial College London. Principal Investigator: Professor Nicky Best.

Lancaster-Warwick-Stirling node developed statistical methodology and models related to correlated and longitudinal data with substantive applications in criminology, psychology, sociology and education. The Lancaster-Warwick-Stirling node was based at the universities of Lancaster, Warwick and Stirling. Principal Investigator: Professor Brian Francis.

LEMMA II focused on the development of new multilevel modelling methodology to address important social science research questions and capacity building in quantitative social science. LEMMA II was based at the University of Bristol. Principal Investigator: Professor Fiona Steele.

QUIC focused on the integration and analysis of multiple data sources using Computer Assisted Qualitative Data Analysis Software (CAQDAS) and the dissemination of such techniques through a training and capacity building programme. QUIC was based at the University of Surrey and Royal Holloway, University of London. Principal Investigator: Professor Nigel Fielding.

Realities specialised in researching and analysing 'relationalities' - personal relationships and connections between people via innovative qualitative and mixed methodologies. Realities node was based at the University of Manchester. Principal Investigator: Professor Jennifer Mason

SIMIAN developed the methodology and the applicability of simulation and Agent Based Modeling in the social sciences. SIMIAN was based at the University of Surrey and University of Leicester. Principal Investigator: Professor Nigel Gilbert.

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