



## Celebrating Methods

National Centre for Research Methods - Five years in



## **Foreword**

The challenges of social and economic research in the twenty-first century require that research and capacity in social research methodology keep pace with the rapid changes in society and with the opportunities and threats to research afforded by the information age. Understanding the changing nature of the social world, for example how new communication technologies have generated new forms of communities and social networks, requires new methods of inquiry. Knowing how to combine new kinds of data sources, for example how to integrate survey and administrative records to better understand how school and home affect children's educational outcomes, requires new techniques.

The National Centre for Research Methods was set up against a background where there were clear pockets of excellence in the UK in social research methodology, but there was a concern that the UK lacked the critical mass and focus to sustain its position at the international cutting edge. Moreover, there was an urgent need to integrate methodological innovation with ESRC's broader strategy to enhance the capacity of the UK social science community to deliver high quality quantitative and qualitative research.

The Methods Centre was tasked with the overall mission of providing a strategic focal point for identification, development and delivery of an integrated national research and training programme aimed at promoting a step change in the quality and range of methodological skills and techniques used by the UK social science community. In addressing this mission, it was able to build on work started under a number of other ESRC initiatives, most notably ESRC's Research Methods Programme, directed by Angela Dale.

In addition to having now established itself among many social science researchers as a first point of contact regarding research methods, the Centre has also promoted coordination among the growing number of ESRC-supported initiatives with remits related to research methods. The hub's series of reports on needs and impacts, prepared annually, have provided valuable evidence to inform strategic developments.

The vital role of social science research in addressing many of the most pressing issues faced globally is increasingly recognized. This recognition depends fundamentally, however, on the soundness of the research and the quality of the evidence and hence on the research methodology. ESRC's sustained commitment to developing methodology to meet the changing needs of social science research and to support the research community's capacity to use sound methods is thus essential.

Professor Jacqueline Scott University of Cambridge Chair, Advisory Committee for the National Centre for Research Methods



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## Intro

## Introduction

The National Centre for Research Methods was established in April 2004 with funding from the Economic and Social Research Council (ESRC) for five years. ESRC has now committed funding for a second five year term until 2014. To mark the completion of the Centre's first term and to celebrate some of the exciting developments in our field, this publication sets out some of what we have been up to over the last five years and presents highlights of the Centre's achievements.

The 'Methods Centre' was set up to provide more strategic integration and coordination of ESRC's investment in research methods. The Centre's 'hub' at the University of Southampton has a wide range of coordinating and strategic responsibilities, enabling the Centre to operate as a focal point for national activities in research methods. The hub takes on the Centre's longer-term functions and has been supported by ESRC since the Centre's inception in 2004.

In addition to its more general functions, the Centre has specific research and capacity building missions and these are 'twinned'. Groups from across the UK with established records of excellent methodological research have been funded as Centre 'nodes' to use their critical mass to ensure that the UK continues to produce world class research at the frontiers of development in their fields of methodological focus and to build the next generation of leaders in research methodology. The nodes have also devoted at least one third of their resources to activities designed to build the capacity of the general UK social science research community to make more effective use of methodological skills and techniques. The nodes have been commissioned for three year terms in two phases: 2005-2008 and 2008-11.

The hub and the nodes, in combination, operate as a network with a shared mission. This has not only led to synergies within the Centre, but it has also enabled the Centre to broaden and strengthen its outward engagement with the social science research community. Each node's research programme focuses on methodological aspects of a range of different substantive social science research questions and engagement with researchers and users in these substantive areas plays a central role in the Centre's work. The different parts of the Centre have combined, for example, in raising the profile of methods at conferences of social sciences learned societies.

The Centre has worked with other methodological researchers in a number of ways. It has established an annual programme of Networks of Methodological Innovation, which have helped bring experts together in particular fields and have widened awareness of new developments. The Centre has run an annual Summer (or Autumn) School which has provided a forum for early career researchers with methodological interests. It has highlighted points of connection between different fields of methodological research, promoted career development and provided opportunities to engage with key methodologists from the UK and elsewhere.

The biennial Research Methods Festival is now the Centre's flagship event. In addition to serving as a key forum for interaction between methodological researchers, it also provides a stimulating opportunity for researchers from across the social sciences to broaden their horizons and to find out about the many exciting developments taking place in our field.

The Centre has benefited enormously from the advice and support of its Advisory Committee, first, chaired by Paul Atkinson, advising the Research Methods Programme and the Centre jointly and now, chaired by Jackie Scott, advising the Centre alone.

I hope that this publication will give you a better understanding of what we do. We look forward to working with our various stakeholders and building on the results the Methods Centre has produced over the first five years.

Professor Chris Skinner Director, National Centre for Research Methods

## Objectives

## Objectives of the Methods Centre

## ESRC National Centre for



The National Centre for Research Methods (NCRM) seeks to provide a national focal point for research, training and capacity building activities in research methods. 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 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. Via its distributed structure, the Centre brings together researchers with a wide range of research methods expertise at the frontiers of developments in research methodology. This structure is based on a coordinating Hub at the University of Southampton and a network of Nodes with specific areas of methodological focus spread across UK universities.

The Centre's research programme has a wide range of methodological strands, each located at the cutting edge of international developments in its field of research methods and each embedded within substantive fields where key social science research questions require methodological advances. Each Node's research programme is designed to cut across social science disciplines with a view to producing methodological developments which are transferable across a range of subject area applications. The Centre disseminates innovations and developments in research methods in part through direct engagement with researchers, but also by adding value to other infrastructures, for example by cooperating with subject-based ESRC initiatives to strengthen the methodological elements of their work programmes.

The Centre's training and capacity building programme is designed not only to enable the general social science research community to learn about developments in the areas of current research focus of the Centre, but also to operate as a focal point and catalyst for broader developments and innovation in the national training and capacity building infrastructure in research methods. The Centre delivers a wide ranging programme of face-to-face events across the UK as well as building capacity through linked studentships, fellowships and other means of working directly with researchers. The Centre has also been developing online resources and its website to provide key sources of methodological support to researchers.

#### **Key objectives of the Methods Centre**

- to advance methodological understanding and practice through its research programme, which will facilitate methodological innovation in quantitative and qualitative research;
- to enhance the UK international profile in methodological excellence and to ensure the UK is at the forefront of international developments in social research methodology;
- to enable members of the UK social science research community to learn about developments in research methods and current 'best practice' and to acquire the capacity to use these methods effectively in their research;
- to undertake research and training activities relevant to research users and of benefit to the economy and society;
- to play a strategic role in the promotion of high quality research methodology that involves the many inter-agency initiatives, including but not limited to those funded by the ESRC.



# Starting up

## Starting up

#### Phase I of the Methods Centre

The coordinating Hub at the University of Southampton started its work in April 2004 with the aim to start developing the infrastructure to support the Methods Centre's research and Training and Capacity Building (TCB) programmes. A framework for the nodes was first developed with ESRC, before establishing memoranda of understanding between the Methods Centre's different parts and effective management arrangements and other common procedures across the Methods Centre. The Bynner review of ESRC investments in research methods in spring 2007 concluded that

"Undoubtedly the Centre's major achievement is in getting a substantial programme of research and training going, for which the Hub team in building a robust infrastructure for the Centre must take the credit."

The Phase I nodes were commissioned to start their work in spring 2005 for a period of three years, during which they focussed on the development of leading edge research methods within the context of substantive research problems and also made a major contribution to the Methods Centre's Training and Capacity Building (TCB) activities.

#### Phase I nodes in 2005-08

- BIAS (Bayesian methods for combining multiple Individual and Aggregate data Sources in observational studies) at Imperial College, Professor Nicky Best
- Lancaster-Warwick at the universities of Lancaster and Warwick, Professor Brian Francis
- LEMMA (Learning Environment for Multilevel Methodology and Applications) at the University of Bristol, Professor Jon Rasbash
- MRS (Methods for Research Synthesis) at the Institute of Education, Professor David Gough
- Qualiti at the Cardiff University, Professor Amanda Coffey
- Real Life Methods at the universities of Manchester and Leeds, Professor Jennifer Mason

## **Building on the success of Research Methods Programme**

Many of the Methods Centre's resources and activities were taken over from the Research Methods Programme (RMP) that ended in September 2007. The Research Methods Programme aimed to improve methodological quality by funding research that directly enhanced methodological knowledge and developed tools to enhance research quality. It also disseminated methodological developments and good practice through training courses, online resources, seminars and awareness-raising events.

Some of the Methods Centre's most important online resources, such as the popular Training & Events database, were initially created by the RMP and later further developed by the Centre. The work conducted within RMP has been invaluable for the Centre. In addition to the Training & Events database, the Methods Centre took over the monthly Research Methods Ebulletin, the training bursary scheme and most importantly the biannual Research Methods Festival. RMP successfully organised the Festival in 2004 and 2006, laying good foundations for the Methods Centre to continue running the event.

## Activities and resources taken over from Research Methods Programme (RMP)

- Research Methods Festival from 2008 onwards
- Training & Events database
- Research methods training bursary scheme since Oct 2007
- The monthly Research Methods Ebulletin since Sept 2007

# Starting up

## Research

Until 2005 when the Phase I nodes started all research within the Methods Centre was conducted by the hub. Firstly, it undertook a consultation exercise, which was designed to research national needs and to assess current national provision and gaps in training. The results of the assessment fed into the call for Phase I nodes and to other strategic ESRC developments regarding training, including the development of the specification for the Researcher Development Initiative. Secondly, researchers at the hub developed a thorough methodology for forming the evidence base. A typology of research methods was created and this in turn was used to develop a database of training events and also it provided a basis for assessing national provision and identifying gaps. Research into the methods typology has fed into the development of various popular services that the Methods Centre provides, such as the online archive NCRM EPrints for research methods publications and the Training & Events database that contains information on a wide selection of upcoming research methods training courses and other events.

#### Research outputs of the Hub

- Assessment of the Training Needs in the UK Professional Social Research Community. Wiles, R., Bardsley, N. and Powell, J. (2008) http://eprints.ncrm.ac.uk/490/
- Assessment of Needs for Training in Research Methods in the UK Social Science Community. Wiles, R., Durrant, G., De Broe, S. and Powell, J. (2005). http://eprints.ncrm.ac.uk/91/
- A Typology of Research Methods within the Social Sciences. Beissel-Durrant, G. (2004). http://eprints.ncrm.ac.uk/115/

The Centre's research programme has been driven by its research teams, each with their own specialist areas of methodological focus and with critical masses which have enabled them to make significant impacts internationally at the frontiers of research.

#### The Methods Centre's publications

- Working paper series consisting of papers from the Methods Centre's research programme
- Commissioned methodological reviews, such as syntheses of literature in relation to methodological issues, descriptions of innovative approaches discussions of methodological challenges
- Other reports: Assessments of research methods, evaluation exercises of the training and research needs of the UK social science community, evaluation exercises of the Methods Centre's training and capacity building activities.

All Methods Centre publications are available in http://eprints.ncrm.ac.uk

The Methods Centre's research achievements during its first five years have been at the cutting edge of developments in research methods across the social sciences. This research has been undertaken in various fields, from Bayesian statistics in small area estimation to the representation of multi-media qualitative data, from paired comparisons in survey data to qualitative experiments, and from continuous random effects in non-hierarchical multilevel models to applying e-social science to support research synthesis.

## How does the research conducted within the Methods Centre benefit you?

The quality of any social science research depends critically on the soundness of the underlying research methodology. The work that is carried out within the NCRM is about refining and strengthening research methods that are used in social science research across all sectors—academic, local and central government, business and third sector.

Since 2005 NCRM researchers have been running research projects that are concerned with developing better and more powerful tools for analysing a wide range of social questions.



#### Case study: Knowing what policy works

Many of us have probably heard news about public policy initiatives and had doubts about whether that policy is going to do what it claims to do. How do we, and how does the Government, know what policy works?

Researchers at the Methods for Research Synthesis (MRS) node have been developing methods for synthesising the results of all types of research and applied these methods to substantive review topics, such as health care and education policies. They aim to broaden methodological approaches to systematic reviews so that synthesis of research can accommodate diverse types of data, including statistical, narrative and conceptual data.

This is of particular interest to policy developers, who need to conduct and appraise systematic reviews and evaluate the potential for and implementation of evidence-informed policy. With the help of the research synthesis methods MRS has been developing, policy evaluation can be more accurate and efficient than before.

### Further reading:

Thomas, J. and Harden, A. 2007. Methods for the thematic synthesis of qualitative research in systematic reviews. NCRM working paper series. http://eprints.ncrm.ac.uk/468

### Case study: Making better sense of our health

How do you know if your health problems are caused by the area you live in or by your personal circumstances?

Many sources of data such as the Census, ONS neighbourhood statistics, and the national births, deaths and other health data sets, provide information on the average health and social circumstances of the whole population, and of different sub-groups of the population. On the other hand, there are various UK survey and cohort data sets that provide detailed individual-level information about health, lifestyle, socioeconomic and other personal characteristics, but on only a small subset of individuals. Researchers based at the BIAS node at Imperial College have developed methods for combining samples of individual level data with population-level data on the same variables. These methods have been successfully applied to study socio-demographic variations in the risk of self-reported limiting long-term illness and hospitalisation for cardiovascular disease in London. Findings suggest that, after accounting for

various individual level socio-economic characteristics, there was scarcely any remaining variation in the risk of being hospitalised for heart disease between London neighbourhoods. However marked differences remained between deprived and affluent neighbourhoods in prevalence of limiting long-term illness, even after accounting for personal socio-economic characteristics of residents.

Ongoing applied work includes studies of the effects of air pollution on childhood leukaemia and low birth weight, and effects of water disinfection byproducts on low birth weight.

### Further reading:

Jackson, C., Richardson, S. and Best, N. 2008. Studying place effects on health by synthesising areal-level and individual data. Social Science and Medicine (2008) 67:1995-2006. Also available in NCRM working paper series http://eprints.ncrm.ac.uk/461

#### Case study: Identifying patterns in criminal careers

What kinds of crimes are repeat offenders most likely to commit? Is there evidence of patterns in serious offences?

Researchers based at Lancaster and Warwick universities focussed on methodology for investigating the development of criminal activity throughout the life course, specifically focussing on the nature and type of activity which offenders are involved in, as well as the frequency of such behaviour. The researchers have shown that there has been a change in offender profiles: in the 1970's a typical young offender would specialise in a certain type of offence, such as theft, but by the end of the 20th century young offenders coming before the courts were much more likely to have been convicted of a wider range of crimes. The crimes are not necessarily more serious but the nature of offending will change public perception of the typical young offender.

This research helps to measure changes in offending over time and understand repeat offending. The methodology can also be used in different fields of research, such as in education and health research to understand life courses.

#### Further reading:

Soothill, K., Francis, B., Ackerley, E. and Humhreys, L. 2007. Changing patterns of offending behaviour among young adults. NCRM working paper series. http://eprints.ncrm.ac.uk/475

# Starting up

### **Networks for Methodological Innovation**

Networks for Methodological Innovation (NMI) are commissioned with the aim of stimulating discussion on new methodological challenges and reviewing developments within specific methodological fields. They consist of a series of network-based events and related activities over a period of up to one year. NCRM funds two networks each year with a maximum budget of £24,000 per network.

## Networks for Methodological Innovation, 2005-08

- Cross-cultural and comparative research methods: the challenges of global social science, Professor J. Holmwood (University of Sussex)
- Qualitative cross-national research networks, Professor J. Brannen (University of London)
- Developing mixed mode methods in comparative social surveys, Professor R. Jowell (City University)
- Metaphor analysis: theoretical and methodological challenges in using discourse data, Professor L. Cameron (University of Leeds)
- Building capacity for the use of participatory video in academic research, Dr C. High (Open University)
- Social Network analysis: advances, applications, theories and developments, Professor N. Crossley (University of Manchester)
- Quality of longitudinal survey data, Professor P. Lynn (University of Essex)
- Discourse Analysis Network, Dr A. Norval (University of Essex)
- Archiving and reusing qualitative data: theory, methods and ethics across disciplines, Dr N. Moore (University of Manchester)

In line with the Centre's broader remit, networks for methodological innovation contribute to the envisaged step change in the quality and range of methodological skills and techniques used by the UK social science community. They are orientated towards stimulating new ideas and improving understanding of methods and of the connections between methods and disciplines.

#### Case study: NMI award holder

Dr Chris High, Lecturer in Systems Thinking & Practice, Open University

Dr Chris High was awarded the NMI project in 2007 for building capacity for the use of participatory video in academic research. Chris says about his project:

"The participatory video research network (PV-NET) might not have come about without the impetus of applying for NCRM funding. Yet even as we began to make contact with one another during the process of establishing the grant proposal, we began to find connections between some quite diverse parts of the social sciences. Even better, as the web of potential contributors expanded it drew in action researchers and activists from outside of academia. Our common interest is in the intersection between participatory research and visual methodology, and most of us describe what we do as participatory video or PV. It uses the process of filmmaking to engage people in social learning. PV has a limited pedigree in research, in spite of a long history in community development and education.



Photo: Participatory Video workshop delegates at work

The network won funding for a programme of capacity building and training, and a series of events and outputs to raise the profile of PV within the social science community. An important part of this process was mapping out how PV is being used in the UK and elsewhere, and seeking a common understanding of the relationship between PV as a social practice and as a research tool.

Nearly two years on, and the network is standing on its own feet. We have produced a robust training curriculum and a joint statement about the use of PV in research and a joint statement. We fully expect the network to persist and grow and look forward to further establishing PV within social research methodology."

The call for NMI projects is out once a year in May.





## Training and Capacity Building

The Methods Centre's Training and Capacity Building (TCB) programme encompasses a wide range of topics, which were originally identified in the Assessment of Needs for Training in Research Methods in the UK Social Science Community (2005).

The Methods Centre's TCB programme involves more than conventional training courses, and although one day face-to-face workshop style courses are most common, longer courses and events delivered in a range of styles, including online learning and placements, have been provided. The Centre has aimed to make the training accessible to researchers from all sectors and geographical locations. The training courses and events have attracted thousands of participants who consistently rate the courses to be of high quality. To ensure the quality of the TCB programme, the Centre continuously evaluates the courses' content and delivery by asking the course participants for their feedback. In 2006-08 88% of the participants considered the course they attended to be interesting or very interesting, 85% thought that the structure of the course was good or very good, and 74% thought that the clarity of explanations was good or very good. The feedback suggests that the level of the sessions has been appropriate for the audience. In addition to this, the Centre has also conducted an evaluation of the impact of the TCB programme.

In addition to the Centre's core TCB programme, the Centre awards research methods training bursaries and funding for Networks for Methodological Innovation projects, and organises an annual summer school and a biannual Research Methods Festival.

#### Impact of the TBC programme

An evaluation of the impact of the Methods Centre's TCB provision was conducted in 2007. This evaluation focused on the perceived impact reported by individuals who had attended the Centre's events. The evaluation comprised qualitative interviews with a sub sample of event attendees and a survey of all event participants from 2005-07. The findings indicated that participants perceived a range of benefits from attending these events. Benefits related primarily to undertaking research rather than contributing to teaching and supervision. These findings are used to further inform the Centre's TCB strategy particularly in relation to the style of delivery of events and the postcourse support we provide as well as the marketing of events to specific groups.

#### Methods Centre's TCB activities in numbers

- 280 days of training courses and events across the UK
- 3700 training participants
- 700 participants at the Research Methods Festival 2008
- 79 training bursaries awarded Oct 2007 Sept 08

#### Case study: Training bursary award recipient

Dr Nilima Gulrajani, Lecturer in Public Administration and Development, London School of Economics and Political Science (LSE)



Photo: CASS training course participants at work

Dr Nilima Gulrajani from LSE is one of many from the UK social science community who have benefited from the NCRM research methods training bursary scheme. She took part in a 3-day course Essentials of Survey Design, which was organised by Courses in Applied Social Surveys (CASS) and took place in Edinburgh in October 2008.

Nilima is going to incorporate her newly acquired skills in survey design to set up a survey of 23 bilateral aid agencies. The purpose of the study, which is intended to commence in summer 2009, is to create a new dataset that collects key descriptive statistics and organizational perceptions relating to bilateral assistance. The hope is to relate these survey data to key metrics of aid performance and effectiveness to inform policy reforms of bilateral agencies.

NCRM training bursary call for applications is out three times a year in January, April and September.



# Highlights

## Enhancing methods for Small Area Estimation

BIAS (Bayesian methods for combining multiple Individual and Aggregate data Sources in observational studies), Phase I node

Principal Investigator: Professor Nicky Best

Location: Imperial College

BIAS is interested in estimating the value of a given indicator such as income, crime rate or unemployment for every small area, using data from individual-level surveys in a partial sample of areas, and relevant arealevel covariates available for all areas from e.g. census and administrative sources.

#### **Small Area Estimation**

Researchers at BIAS have been collaborating with Office for National Statistics (ONS), and made a review of widely used methods in Small Area Estimation. A comparison of the performance of these methods has been conducted and illustrated on the estimation of the average equivalised income per household in Sweden. BIAS team have also developed and implemented Bayesian methods for deriving cross-sectional estimates of small area indicators, in which several types of random effects are introduced to improve estimation. Important advantages of this are that estimates can readily be produced for areas with missing data by taking account of spatial dependence between areas, and the method can produce a useful ranking of areas (with associated uncertainties) that can take into account policy goals e.g. an estimate of the probability that an area's average equivalised income is below some threshold, or that an area's income is in the lowest 10% of areas. The BIAS team have also extended their Bayesian cross-sectional methods to provide estimates for each small area over time, by including a weighted mixture of global and areaspecific time-dependent random effects. Applying these methods to the Swedish income data

Applying these methods to the Swedish income data showed substantial improvements in accuracy of the small area estimates using Bayesian random effects models compared to traditional small area estimators, particularly when the spatial correlation of the small areas was taken into account. The results also demonstrated how misleading it can be to ignore uncertainty in the small area estimates when ranking them for classification and policy evaluation purposes. Using Bayesian estimates of the uncertainty interval for each small area rank, the BIAS researchers found that it was possible

to identify the very poorest areas with fairly high level of certainty. However the uncertainty intervals on the rank of most areas overlapped substantially, making it difficult to accurately rank or otherwise separate the medium and higher income areas. BIAS researchers then applied their extended space-time models to the Swedish income data to provide annual estimates for seven years. This led to further improvements in accuracy of the small area estimates in any particular year compared to the cross-sectional estimates. They also showed that the estimated weight on the area-specific temporal effect in the model could be used to classify areas with unusual changes in income compared to the national trend.

## **Developing software**

Researchers at BIAS have continued to collaborate with ONS to apply these methods to provide small area estimates of income in the UK using data from the Family Resources Survey, and to implement space-time extensions of the models. The space-time models are computationally demanding and the research team has been investigating ways to improve computational efficiency of the BUGS software, such as implementing a parallel version of WinBUGS and using algorithms for sparse matrices to speed up computation in space-time models.

#### Software packages WinBUGS and R

- WinBUGS and R package on Hierarchical Related Regression: ecoreg package
- WinBUGS and R package on Small Area Estimation: SAE package
- · WinBUGS code for fitting multiple bias models

WinBUGS and R packages are available in www.bias-project.org.uk/software

### **Further reading:**

R.S. Bivand, E.J. Pebesma and V. Gómez-Rubio. Applied Spatial Data Analysis with R. Springer (2008).

V. Gómez Rubio, N. Best, S. Richardson and P. Clarke. Bayesian Statistics Small Area Estimation. Under revision for JRSSA.

# Highlights

## Developmental change and development of executive function in young children

Lancaster-Warwick, Phase I node

Principal Investigator: Professor Brian Francis Location: University of Lancaster and University of

Warwick

Measuring the development of cognitive functions

Studies in Developmental Psychology typically acquire data of distinct kinds: measurements may be continuous, discrete or categorical and are taken at a pre-specified set of follow-up times.

Researchers at the Lancaster-Warwick node have been developing likelihood-based statistical inference to assess change in performance of young children on repeated measures of executive functions i.e. tests of working memory, set shifting and inhibitory control. To do this the researchers have built random-effect-transition regression models that take into account variability between individuals, dependence between results on successive testing occasions and inter-relationships between tests.

They have addressed many substantive questions: How do cognitive skills develop in young children? Can we distinguish between competing psychological models? For example, when preschoolers develop skills in executive function, what causes such change?

## Analysing underlying constructs and their development

Most test batteries in developmental psychology require participants to undertake a sequence of tasks. Reducing the results obtained by each participant to a summary score is inefficient and potentially invalid. This project by the Lancaster-Warwick node of the Methods Centre has developed latent variable models for analysing complex multivariate repeated measurement data in which the sampling distributions associated with individual measurements take non-standard forms. Models have been developed for a range of tasks under the banner of executive functions, each with a different pattern of performance and thus model structure. For example, in one working memory task the odds of succeeding become smaller as the test proceeds. The researchers

have also addressed the nature of psychological constructs like working memory, by building a joint model of four tasks. These analyses have been feeding into an overall model of the development of executive function skills from a variety of measures with differences in their numbers of trials, response types and criteria for success.

## **Findings**

The project has produced three types of result. First, their analysis of individual tasks has revealed the importance of assessing the effects of test order when a battery of measures is administered – it is not sufficient to counterbalance test order effects. Secondly, the team is developing models of the development of the skills that comprise executive functions. Thirdly, they have applied these techniques to the development of skills like the child's early understanding of number. This work shows the importance of a statistical modelling approach in developmental psychology. It has led to the team questioning prevailing assumptions about the role of counting skill in early number development and highlighted the role of the child's understanding of sharing in that process (Muldoon, Lewis & Freeman, 2009). This shows that skills considered in the literature to be 'cognitive' have a clear social-cognitive foundation.

## **Further reading:**

Flynn, E., Pine, K. and Lewis, C. 2007. Using the microgenetic method to investigate cognitive development. Infant and Child Development, 16.

Cheshire, A., Muldoon, K. Francis, B., Lewis. and Ball, L. 2007. Modelling change: New opportunities in the analysis of microgenetic data. Infant and Child Development, 16, 119-134.

Muldoon, K., Lewis, C. and Berridge, D. 2007. Predictors of early numeracy: Is there a place for mistakes when learning about number? British Journal of Developmental Psychology, 25, 543-558.

Muldoon, K., Lewis, C. and Freeman, N. H. 2009. Why set-comparison is vital in early number learning. Trends in Cognitive Science, in press.



## Learning Environment for Multilevel Methodology and Applications

LEMMA (Learning Environment for Multilevel Methodology and Applications), Phase I node Principal Investigator: Professor Jon Rasbash Location: University of Bristol

Researchers at LEMMA node specialise in the analysis of data with complex structure that mirrors substantive research questions. Such complex structure includes household and family data, contextual, neighbourhood and area effects, spatial analytical models, longitudinal data structures, event-duration models, and mover-stayer models. In addition to their substantive research projects they have developed an e-learning course as a part of their programme on capacity building in quantitative social science.

## **Multilevel Modelling Online Course**

A free online course in multilevel modelling (MLM) was launched in April 2008, for use by students and researchers for study, and lecturers for teaching. LEMMA's experience in running face-to-face workshops is that learners' background knowledge of multilevel modelling is often weak, and therefore the course starts from the basics of quantitative research.

Each module is split into lessons with two integrated components: 'concepts' describing models, assumptions and interpretation and 'practice' with exercises using a free training version of the MLwiN software. The materials also include a 'pre-requisites' quiz to help learners decide which module to start with, and quiz questions in each module are designed for self-evaluation of progress.

#### **MLwiN Software**

The Methods Centre has funded development of the MLwiN multilevel modelling software package since the LEMMA project began in 2005. By February 2009, the software has been distributed to at least 1500 UK researchers and a further 2000 international researchers.

To download the software, please go to http://www.cmm.bristol.ac.uk/MLwiN/index.shtml

## Applications of multilevel modelling: The impact of school resources on pupil attainment

Improving educational achievement in UK schools is a priority for the Government, and of particular concern is the low achievement of specific groups, such as those from lower socio-economic backgrounds. An obvious question is whether we should be improving the outcomes of these pupils by spending more on their education. However, assessing the effect of educational spending on pupil achievement is difficult because more resources are systematically allocated to local education authorities and schools that have lower attaining pupils.

Steele et al. (2007) use a multilevel simultaneous equation modelling approach to model jointly pupil attainment at age 14 and the allocation of school resources. It is clear that additional resources do have a positive impact on attainment in mathematics and science but not for English, and these effects are particularly strong once we account for the non-random allocation of school resources, measured by expenditure per pupil and the pupil-teacher ratio.

### Further reading:

Steele, F., Vignoles, A. and Jenkins, A. 2007. "The effect of school resources on pupil attainment: a multilevel simultaneous equation modelling approach." Journal of the Royal Statistical Society, Series A 170(3): 801-824.

# Highlights

## Synthesising qualitative research

Methods for Research Synthesis (MRS), Phase I node Principal Investigator: Professor David Gough

Location: Institute of Education

Researchers at the MRS node develop methods for synthesising the results of all types of research and apply these methods to substantive review topics across the social sciences. Methods include statistical meta analysis of quantitative data, conceptual synthesis of qualitative research findings, combining quantitative and qualitative research and the analysis of non-research data, such as patient information leaflets.

The massive expansion in social science research makes it difficult for even academic specialists to have complete knowledge of a field. Rigorous, transparent and thus accountable methods of synthesising what we know from research are needed. The logic of rigour and transparency is a requirement of primary research and this logic has been applied extensively to the synthesis of research on the relative efficacy of different health interventions. The aim of the MRS node is to further apply this logic to (i) social interventions not just health interventions and (ii) all research questions not just ones of efficacy. The MRS team have identified nine distinct approaches to systematically reviewing qualitative research, and these nine approaches vary in important ways across five dimensions: question, idealist/realist, quality appraisal, iteration, and homogeneity.

But what gaps are there in the methods of synthesis to address all social science research questions? To identify the variety of research questions, the MRS team sampled research papers from all social science disciplines. This was used to create a question-led framework, based on the nature of the research activity associated with different questions and its relation to theory and values. This was done to examine the fitness for purpose of current review methods for addressing different issues and to explore where further new review methods might be helpful. As well as identifying gaps in research methods such as mixed methods empirical synthesis, this framework has helped to assess the specific stages in different types of review.

## Developing new tools for research synthesis

Working with a broader range of review questions and methods required new tools to support the review process so the MRS researchers have developed the web based review software EPPI-reviewer in two ways. First, the software was expanded so that it could support the whole review process from bibliographic capture, study management, data coding, analysis to reporting. Second, the software was extended so that it supports reviewers to undertake inductive coding and analysis as well as deductive coding, narrative analysis and statistical meta-analysis.

#### **EPPI-Reviewer**

EPPI-Reviewer is a web application that enables researchers to manage the entire lifecyle of a review in a single location. Users are able to upload studies for screening, complete keywording and data extractions and analyse the results over the internet. For further information please go to http://eppi.ioe.ac.uk

This work on systematic reviews has provided the basis of the development of a Masters course on systematic reviews and evidence informed policy and practice at the Institute of Education. The course has already been delivered to over six hundred participants and an on-line module is also available for greater access to the courses in the UK and internationally.

The MRS node has shown that the question 'what do we know and how do we know it?' applies to all social science questions. The MRS node provides the methods, tools and training to support a multi paradigm approach to the synthesis and application of research knowledge and concepts.

#### **Further reading:**

Barnett-Page, E. and Thomas, J. 2009. Methods for the synthesis of qualitative research: a critical review. NCRM Working Paper series.

http://eprints.ncrm.ac.uk/690/

Gough, D. 2007. Weight of evidence: a framework for the appraisal of the quality and relevance of evidence In J. Furlong, A. Oancea (Eds.) Applied and Practice-based Research. Education, 22,(2), 213-228.





## Contributing to qualitative research ethics

Qualiti, Phase I node

Principal Investigator: Professor Amanda Coffey

Location: Cardiff University

The Qualiti team have 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. In addition to developing innovative, multimodal and participatory methods of qualitative inquiry, they have made a significant contribution to contemporary debates on research ethics including;

- developing the concept of 'becoming participant' as an alternative discourse to informed consent.
- exploring the role of researchers' emotions when collecting, reading and analysing sensitive data
- commissioning an inquiry into researcher safety.

The development of the concept of 'becoming participant', particularly in relation to longitudinal and participatory research has contributed to the rethinking of informed consent in research as mobile and fluid. Particularly through qualitative research with children and young people, Qualiti has been able to document the impact of the research context and personal relations on understandings and expectations of consent.

The Qualiti team, through sociological work on suicide cases, has been able to document the potential emotionality of secondary and documentary data, as a counter to an understanding that emotions in social research are uniquely and solely related to face-to-face data collection. Qualiti has sought to clarify distinctions and explore relations between emotional reaction and analytical insight in relation to 'reading sensitive data'. One conclusion has been that, while emotional reactions to disturbing data can tell us much about dominant and societal discourses, we should be cautious of harnessing such reactions for analytical purchase in relation to individual cases. This has resonance in relation to both secondary and primary data collection and handling.

## Risk to well-being of researchers in qualitative research

The Qualiti commissioned inquiry 'Risk to well-being of researchers in qualitative research' found that there

was a definite risk of physical and emotional harm to qualitative researchers, and made recommendations in relation to researcher safety that have been well received and debated within the UK social science community. The specific recommendations were:

- Postgraduate research methods courses should include researcher safety in their curricula.
- Research councils should consider whether provision of safety training in postgraduate research methods curricula should be a factor in determining recognition.
- University in-service training courses for PhD supervisors and principal investigators should routinely include content on researcher safety.
- All university departments should be subject to periodic health and safety audits, which would include examination of provision for researcher safety.
- All funders should require principal investigators to comply with the Social Research Association (or similar) safety guidelines.
- All funders should formally invite referees to comment on researcher safety issues, where salient, as part of their assessment of applicants' research methods.
- All university ethics committees should accept formal responsibility for oversight of provision for postgraduate student safety, with safety issues being addressed in the context of a specific question on the application form and of the guidance notes on form completion.

Researchers at Qualiti have demonstrated how key issues in relation to the development of qualitative research can be addressed positively, and in ways that speak to both methodological innovation and research impact. Rather than rehearsing philosophical dispute over paradigms and ethnographic representation, researchers at Qualiti have engaged in practical methodological experimentation concerning multimodality and representational conventions, and have made positive contributions on ethics, participation, risk and evidence based policy.

#### **Further reading:**

Bloor, M and Fincham, B and Sampson, H. 2008. Qualiti (NCRM) commissioned inquiry into the risk to well-being of researchers in Qualitative Research. http://eprints.ncrm.ac.uk/407/

# Highlights

## Researching complex realities

Real Life Methods (RLM), Phase I node Principal Investigator: Professor Jennifer Mason Location: University of Manchester and University of Leeds

Researchers at RLM have been developing methods and approaches which can yield understandings that are not only incisive, insightful and analytical, but also evocative of lived experience. Social science methodology should produce knowledge that resonates with real life in all its complexity and nuance, rather than being too simplified or abstract. RLM researchers have pursued this agenda through interdisciplinary working and creatively mixing methods in an approach that can be described as qualitatively-driven.

Four research projects explored different aspects of family, youth and community. These ranged from investigating the significance of family resemblances in everyday family dynamics, connections and networks in a local community, young people's everyday lives and relationships, and an exploration of the family relationships of couples who come from different family backgrounds. The researchers used a range of methods including creative interviews, ethnographic immersion in a locality, photography and photo elicitation, participant-filmed events, their own survey and survey questions commissioned in a national omnibus, participatory social mapping, walking interviews, relational maps and self portraits, and repeated interactions in a longitudinal design.

### **Living Resemblances**

Despite being the subject of joking and teasing, family resemblances are not trivial matters. They are fundamental elements in the dynamics of family life. Family politics and disagreements or alliances are often connected with whether and how someone resembles or 'takes after' someone else. These are not just 'given' facts - they are often contested and sometimes cultivated or coveted. There is a politics of who is 'good at' perceiving resemblances and who isn't, that is not always in line with the cultural assumption that women are the best resemblance spotters. To explain how family resemblances 'work' we need to understand that they transcend the social, biological, sensory and spiritual or magical domains.

### Family Background in Everyday Lives

The experience of family background does not equate with standard or conventional sociological variables for measuring it like social class, ethnicity, or father's occupation. It includes a whole range of tangible and intangible elements – past, present and imagined. Memories of how one was brought up and what one's family was 'like' can have a vivid presence and an active role in interpersonal relationships with family and other associates. Even those parts of the past that have been consciously 'buried' can inform current family negotiations.

### **Young Lives**

Familial and peer group relationships are central in young people's lives. There is little evidence that young people assert their own needs above those of their family members. In contrast to recent emphases on young people's belief that the bases of success in life are individualistic and merit driven, the survey and qualitative research into young people's experiences reveal the value of social relationships and family emotional support for doing well in life. Friendships are experienced as highly significant but ephemeral

#### **Connected Lives**

Reports of the death of geographically-situated communities are greatly exaggerated. Place and locality are important in everyday life. Walking interviews provoke memories of events, activities, and attachment, and stimulate animated stories of aspiration and ontological fears, thus revealing boundaries otherwise hidden to the researcher. Although communities are maintained through a range of media, meeting face to face in specific places remains the most important way in which ties are maintained.

#### **Further reading:**

Clark, A. 2007. Understanding community: a review of networks, ties and contacts. *NCRM Working Paper*. http://eprints.ncrm.ac.uk/469/

Mason, J. 2008. Tangible affinities and the real life fascination of kinship. Sociology, 42 (1)



## Research Methods Festival 2008

The Hub

Director: Professor Chris Skinner Location: University of Southampton

Following the great success of the first two ESRC Research Methods Festivals in 2004 and 2006 run by the Research Methods Programme, it was proposed that the Methods Centre take over the organisation of this event from 2008 onwards, an opportunity the Centre was happy to take up. The third Research Methods Festival took place over the four days 30 June-3 July 2008, and stayed with much of the successful format of the first two festivals, including returning to the same venue, St Catherine's College, Oxford.

#### Diverse festival audience

The 700 people who attended came from diverse disciplinary backgrounds, and the Festival provided opportunities for delegates to venture into unfamiliar territories that conventional discipline-based conferences cannot. Delegates also came from all sectors of the social science research community. It was particularly pleasing to see so many social researchers and government researchers as well as a smaller number of people in market research, indicating that attendance extended well beyond the core of academic social scientists. People from all career stages came, with research students making up over a quarter of delegates. There was also a welcome presence of international delegates.

## Festival delegates by discipline and sector of employment (%)

' ' ' '				
Central government	8	Anthropology	2	
Commercial	1	Computing	3	
HE and FE	52	Economics	5	
Health authority	<1	Education	8	
Local government	2	Geography/planning	6	
Market/social research	4	Health	7	
Student	22	History	<1	
Voluntary organisation	4	Management/business	6	
Other	7	Politics	4	
		Psychology	5	
		Social policy/social work 7		
		Sociology/social research 33		
		Statistics/demography	8	
		Other	6	

## Festival programme: going beyond quantitative vs. qualitative

The Festival aimed to achieve balanced coverage of methods, going beyond just the quantitative and qualitative divide and encompassing, for example, mixed methods, ethical issues, and e-social science. It also set out to maintain the emphasis on interdisciplinarity of previous Festivals. A key aim was to allow researchers at all career stages to up-date themselves and to raise awareness of new developments in methods. In this context the 'What is?' presentations in which experts were given 25 minutes to speak about their chosen method to an audience whom they were told to assume had no prior knowledge were particularly popular. They have continued to be of great interest on the Centre's website, where they regularly feature among the resources consulted most frequently.



Photo: Festival delegates networking and enjoying the sunshine

The practical challenge of organizing an event at which there were up to ten parallel sessions taking place at any one time, and sixty nine sessions overall, were considerable for the hub-based team with responsibility for the festival running smoothly. However, the evaluations were positive, with a typical comment being "All good! A chance to think".

The 4th Research Methods Festival will take place on 5-8 July 2010, at St Catherine's College, Oxford.

#### **Further information:**

Research Methods Festival 2008 home page http://www.ncrm.ac.uk/RMF2008/festival

## Stakeholders

## Working with our stakeholders

From the very beginning the National Centre for Research Methods has been active in developing relations across academic, public, commercial and third sectors. It is of highest importance for the Centre to collaborate with a wide range of organisations with an interest in social science research methods.

The range of activities varies from joint research projects and workshops to presenting at each other's conferences and collaborating on training needs assessments.

Although academic organisations often tend to be the most obvious partners, the Methods Centre has developed its relations with learned societies, public sector social research organisations, national third sector organisations and commercial sector organisations. The Methods Centre has aimed to develop its relations with the third and commercial sectors in the UK mainly through national associations and societies that represent social researchers.

The Centre has organised and collaborated on joint methods seminar series with Government Social Research and the Scottish Executive and has close links, through the Methods Centre's research programme in Cardiff, to the Welsh Assembly. The Centre has also undertaken joint events on methods with various ESRC initiatives, including the ESRC Identities and Social Action Programme. The Methods Centre has close links with our sister centre the National Centre for e-Social Science (NCeSS) with whom we have collaborated on several activities and programmes of work.

The Centre has sought to develop links with other sectors of the research community, such as practitioner researchers, and to support them in their attempts to build capacity through the Researcher Development Initiative or other funding schemes. The Methods Centre has built good relations with the Social Research Association (SRA) who are a central link to the social research community outside of academia with whom we are committed to engaging. We have also built links with organisations which facilitate public involvement in research. As an example of this is a joint event with INVOLVE on public participation in social research, which brought together social researchers from various sectors as well as members of user communities.

In addition to jointly organised activities, the Methods Centre staff have been and are represented in various Advisory Boards, working groups and commissioning panels.

## The Methods Centre representation in other organisations and initiatives

#### Government

- National Statistics Methodology Advisory Committee
- UK Census Design and Methodology Committee
- ONS Longitudinal Study Steering Group
- Home Office Advisory Subcommittee on Surveys, Design and Statistics

#### <u>International</u>

- European Science Foundation programme (2003-7) on Quantitative Methods in the Social Sciences (QMSS) Steering Committee
- European Science Foundation programme (2006-10) on Qualitative Research in the Social Sciences in Europe (EUROQUAL) Steering Committee
- European Science Foundation selection and evaluation board on the EUROCORES initiative on Cross-national and multi-level analysis of Human Values, Institutions and Behaviour (HumVIB)

## **ESRC**

- National Centre for e-Social Science
- Researcher Development Initiative
- · Centre for Microdata Methods and Practice
- Cross-Board Working Group in Quantitative Methods
- · Qualitative Data Sharing and Research Archiving
- UK Longitudinal Household Survey
- Census Programme Advisory Committee
- National Longitudinal Strategy Committee
- Timescapes Study
- Virtual College



## Case study: Working with the Social Research Association on the Assessment of the Training Needs in the UK Professional Social Research Community



"The SRA has been pleased to work in partnership with NCRM in relation to the identification of the training needs of the professional social research community. This has proved to be an extremely useful collaboration with clear benefits in terms of providing an evidence base to underpin the future development of the SRA's training programme."

Janie Percy-Smith, Training Development Director, the SRA

National Centre for Research Methods has a good working relationship with The Social Research Association (SRA), which represents social researchers in central and local government, higher education, market research, the voluntary sector and independent institutions as well as freelance consultants. Over the years NCRM and SRA have joined forces in various collaborative activities ranging from consultative events to research projects.

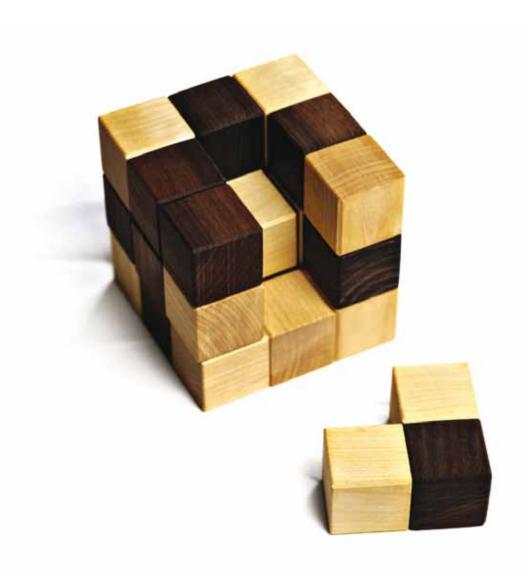
In 2008 NCRM conducted an assessment into the research methods training needs of the UK professional social research community. The assessment was carried out with the co-operation of the SRA who assisted the NCRM researchers in distributing questionnaires and in providing information in relation to various aspects of the project. Their support was valuable, as they were able to provide insights into and contacts for the professional social research community that they represent.

"Reaching out and engaging with the social research community, in all its complexity, is a difficult task but it is one to which the members of the Methods Centre are committed. We have made progress on this in the first five years and we look forward to developing our links with our existing and new stakeholders in the next phase of the Centre"

Dr Rose Wiles, Principal Research Fellow and Co-director, National Centre for Research Methods The findings of the report indicated a need for training in the methods that are commonly used by researchers working in the applied or policy sectors: survey design and analysis; evaluation methods; meta analysis and synthesis; focus groups and collaborative research approaches, such as action research, participatory research and deliberative and consultative methods. Research-related skills were identified as an important area of training need. Areas identified were in the interpretation, presentation and dissemination of research findings as well as general communication and influencing skills. At the senior level, skills and/or training needs were identified in research management, both of projects and people, as well as in relation to communication with clients and research commissioners.

### **Further reading:**

Wiles, R., Bardsley, N. and Powell, J. 2008. Assessment of the Training Needs in the UK Professional Social Research Community http://eprints.ncrm.ac.uk/490/



## Moving forwards

## Our research programme

## Further developing research methods

The momentum which has been built up during Phase I in 2004-08 is carrying on into Phase II with an equally broad range of projects. Four of the Phase II nodes are building directly on the research that they undertook as Phase I nodes, while the work of the three new nodes in Phase II is developing lines of inquiry that are complementary to these activities. Among the continuing nodes, there is work being undertaken on projects that include developing statistical models for the analysis of correlated and structured longitudinal data, modelling segregation and diversity, modelling biases in survey non-response, and the combination of autobiographical, ethnographic and archival qualitative materials. Among the new nodes that joined the Methods Centre in 2008 there are projects devoted to methodological developments in the analysis of administrative data, the integration of qualitative and quantitative data, and using simulation techniques to develop new ways of understanding the cognitive bases of normative behaviour.

The brief of the Methods Centre to bring about a step change in the UK social science community's capacity and capability in research methods is a broad one, and the process by which nodes are commissioned is by no means easy. The range of methodological foci is clearly much more extensive than it would be possible to cover with one node devoted to each, and so the process of commissioning has to prioritise among the various possibilities. A key consideration in this process is the identification of where the needs of the UK social science community are particularly great, and the review of research needs undertaken by the hub played an important part in identifying those areas of research methods where additional investments are likely to pay the most dividends.

Working at the cutting edge of research methods innovation is only a necessary and not a sufficient condition of being commissioned, because applications from prospective nodes were peer-reviewed in the normal way, and only those proposals that received very positive ratings of their quality as well as their prospective contribution to the 'step change' agenda were successful.

#### Methods Centre's Phase II nodes in 2008-11

- ADMIN Administrative data: Methods, Inference
   & Network at the Institute of Education
- BIAS II Bayesian methods for integrated bias modelling and analysis of multiple data sources in observational studies at the Imperial College
- Lancaster-Warwick-Stirling node Developing statistical modelling in the social sciences at the universities of Lancaster, Warwick and Stirling
- LEMMA II Structures for building, learning, applying and computing statistical models at the University of Bristol
- QUIC Qualitative Innovations in CAQDAS at the University of Surrey
- Realities Real life methods for researching relationalities at the University of Manchester
- SIMIAN Simulation Innovation at the University of Surrey

## Strategic research

Running alongside these research projects located in the nodes is the programme of research undertaken and co-ordinated by the hub, which includes on-going research into the UK social science community's research and training needs, as well as research into the place of interdisciplinarity in advances in social scientific understanding and into the processes by which methodological innovation comes about.

These projects reflect the important role of the hub in integrating the various parts of the Methods Centre, which is made up of hub and node teams with disciplinary profiles that between them span anthropology, biostatistics and epidemiology, computer science, criminology and socio-legal studies, demography, economics, education, engineering, geography and environmental studies, mathematics, philosophy, political science, psychology, social policy, social statistics, social work studies, and sociology.

## Moving forwards

The methodological orientations of the research teams across the Centre also reflect the diversity of the social sciences, and the potential for innovation to occur when previously separate methodological traditions are brought together is another exciting aspect of the Methods Centre.

The Methods Centre has an annual meeting, which is designed to help to realise the potential of the Centre to be greater than the sum of its individual parts. Bringing together teams who are working on distinct research projects is a fascinating way of discovering shared interests and common challenges, for example in relation to generalisability, missing data, and contextual effects. Discussions at these meetings are a rich source of ideas about how people in different parts of the Methods Centre might develop collaboration, and a series of collaborative projects promises to take this agenda further.

#### **Collaborative projects within the Methods Centre**

- International perspective on innovations in social research methods
- Developing good practice in visual ethics
- Experimenting in empirical methodology
- Methods, tools and data used in measuring segregation
- Adapting econometric causal effect estimators to the public health arena
- The grammar of the reporting of qualitative research
- Shaping the next generation of CAQDAS tools

Collaboration is not limited to activities involving only members of the National Centre for Research Methods. The Methods Centre's mission of promoting a step change in social science research methods capacity in the UK is complementary to the agendas of a wide range of other organizations.

## **Examples of collaborative projects with organisations external to the Methods Centre**

- Modelling biases in survey non-response, with Simon Fraser University and University of British Columbia (Canada)
- Spatio-temporal Modelling of Small Area Data to estimate social changes in space and time, with ONS and Cambridge University
- Generalised Evidence Synthesis for Longitudinal Data, with Oregon State University (US)
- Combining individual and aggregate data to analyse electoral behaviour, with Oxford University
- Reciprocal effects of child behaviour, parental depression, marital status and family type, with University of Toronto (canada) and University of Rochester (US)
- Developing metaphor analysis in research methods, analysis, dissemination and training, with Open University

## Research into methods benefitting a wide audience

The users of the Methods Centre's programme of research are and will continue to be a diverse group. Most of the research projects focus on innovative methodological development within the context of substantive research problems, a characteristic that immediately generates two types of audience, those with an interest in the methodological tools being developed, and those with an interest in the substantive results produced. These audiences include substantial numbers of researchers and users of research in the academic sector, but they also include researchers and users of research in government, the third sector, and market research.

The value of research findings is enhanced by confidence in the rigour of the methodology employed in generating and analysing data; conversely, it is undermined where the methods by which research findings have been generated are brought into question. In Phase II the Methods Centre's mission will continue to be to enhance the methodological bases of UK social science, and thereby to promote and sustain confidence in the research findings of UK social scientists.





## Building capacity in research methods



Research capacity building within the social science community is a key aim of the National Centre for Research Methods. Training and capacity building (TCB)comprises 30% of the Methods Centre's funding and as a result the Centre has been able to offer a range of pre-existing and well-established workshops, seminars and short courses, in addition to newly developed training that stems directly

from the advanced research methodology being used within the Centre's research groups.

The Methods Centre is an advocate for greater cooperation and coordination nationally in building research methods capacity within the social sciences and seeks to become a national focal point for training and development in research methods, promoting its own provision and signposting other opportunities to learn about social science research methodology.

## Diversifying the Methods Centre's TCB programme

One of the aims of the Methods Centre is to become a first port of call for information on social science research methods activities and resources. In 2009 the Centre will extend its mapping of the training provision for social science research methods in the UK, which will then feed into the development of the Centre's online resources.

The Methods Centre continues to promote researchers' training and development through outreach activities such as its own Research Methods Festivals and annual Summer Schools, as well as at learned society conferences and other fora.

Integrating the Courses in Applied Social Surveys (CASS) project marks a key step in developing the Methods Centre as a national portal for research methods training in the social sciences. CASS complements the Centre's training activities, often providing preparation for the more advanced courses that are at the core of the Methods Centre's training programme.

### **Evidence-based TCB programme**

The Methods Centre is committed to tailoring training to the needs of the social science research community, and has an ongoing training needs assessment programme. The Centre has already reported the findings of two needs assessment exercises within this programme: one addressing the UK academic social science researchers' training needs, and one addressing the UK professional social researches' training needs. Further needs assessments are planned for the period of 2009-2014.

#### **Future TCB assessments by the Methods Centre**

- Mapping of the UK research methods training provision in 2009
- Research methods needs assessment in 2010
- Assesment of the Methods Centre's TCB programme impact in 2009, 2011 and 2013

The Methods Centre has strengthened its strategic capability through the formation of a training and capacity building strategy group, whose members are drawn from the Centre and from partner organisations. The subgroup steers and informs the development of a training and capacity building strategy across the Centre. The subgroup also reviews and evaluates the progress of the strategy.

The Methods Centre will seek to build capacity through enhanced provision aimed at those who teach research methods, in a 'training the trainers' initiative. The Centre's website will also be extended with a providers space containing resources to help plan, deliver and promote research methods training and capacity building and there are plans to develop a network for trainers within HEIs through which they can meet and share good practice, both on-line and face-to-face.

## Future

## Looking to the future

There is a natural tendency in looking to the future that leads one to place an emphasis on change and to dwell on how things will be done differently in the future. While there is indeed much that will be new in the second five years of the Methods Centre's funding, there will also be a great deal of continuity with the highly successful range of activities and events that have characterised our first five years. Four of our Phase I nodes are continuing their work into Phase II and, although personnel and research focus inevitably shift to some degree, the continuity that the Phase I nodes bring to the Methods Centre in its second five years of funding will be invaluable.

We will continue our annual commissioning of Networks of Methodological Innovation to support the development of new and innovative methodologies and plans are already being put in place for the Autumn School for researchers in 2009 and the fourth Research Methods Festival at its now traditional home at St. Catherine's college, Oxford in 2010. We will be up-dating and undertaking new reviews of methodological research and training needs to inform ESRC's and our own strategic decision-making and will continue to commission methodological briefings and reviews from methods experts in the UK, that will be freely available to researchers throughout the world, via the NCRM website.

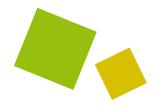
Joining the Methods Centre in its second phase are three genuinely world-leading centres of methodological expertise, based at the University of Surrey and the Institute of Education. The new nodes, SIMIAN, Admin, and QUIC, add exciting new dimensions to the Methods Centre's portfolio of research and training activities, which will serve to fill gaps previously identified by the consultations and reviews conducted in the Methods Centre's first years. In phase two of NCRM we also welcome the popular and longstanding CASS programme of survey methods courses as a formal part of the NCRM Hub at Southampton.

NCRM is not, of course, the sole focus of methodological activity in the UK and the wider world and a key aim in our second phase of funding is to strengthen links and to coordinate activities with other methodological centres of excellence, both in the UK and overseas. To that end we have drawn up formal links with a number of affiliated centres and resources and will be hosting the first of a series of annual meetings between these partners in the summer of 2009.

Another exciting new aspect of the Methods Centre's programme of work in the coming five years is the development of a research strand within the Hub which will focus on the important and wide-ranging questions of methodological innovation and interdisciplinarity. We will also be developing a more coordinated and strategic approach to our training and capacity building activities, drawing on the range of approaches developed by the Phase I nodes and best-practice wherever it is found.

From a personal perspective, the most significant change in the Methods Centre's second five years will be my assuming the Directorship from Chris Skinner in September 2009. Following Chris' expert stewardship of the Methods Centre is certainly a challenging task but one that I am very much looking forward to. We are very fortunate that Chris will be staying on in a co-Director role in the second phase of NCRM's funding and I am sure that everyone involved with the Methods Centre and the wider research community in the UK will join me in thanking Chris for his inspiration, insight, hard work and enthusiasm over the past five years.

Professor Patrick Sturgis Co-director of the National Centre for Research Methods



## Advisory Committee in 2009

Professor Jacqueline Scott (Chair)
Faculty of Social and Political Sciences
University of Cambridge

Professor Julia Brannen
Thomas Coram Research Unit
Institute of Education, University of London

Professor Andrew Chesher ESRC Centre for Microdata Methods and Practice University College London

Dr Louise Corti UK Data Archive University of Essex

Professor Angela Dale Centre for Census and Survey Research University of Manchester

Professor Peter Elias Warwick Institute for Employment Research University of Warwick

Mr Bob Erens Survey Methods Unit National Centre for Social Research

Professor Robert Groves Survey Research Center University of Michigan

Professor Peter Halfpenny, ESRC National Centre for e-Social Science University of Manchester

Professor Lynn Jamieson School of Social and Political Studies University of Edinburgh

Dr Frank Nolan Census and Social Methodology Office for National Statistics Professor Andrew Pollard ESRC Teaching and Learning Research Programme Institute of Education, University of London

Professor Stephen Pudney Institute for Social and Economic Research University of Essex

Ms. Ceridwen Roberts
Department of Social Policy and Social Work
University of Oxford

Professor Gillian Robinson INCORE and ARK University of Ulster

Mr Patten Smith Research Methods Ipsos MORI

Professor John Stillwell ESRC UPTAP Initiative University of Leeds

Professor Mike Wallace Public Management Cardiff Business School

Professor Paul Wiles Chief Government Social Researcher Home Office The National Centre for Research Methods (NCRM) was established in 2004 to provide 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.

The Methods Centre 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. The Centre brings together researchers with a wide range of research methods expertise, at the frontiers of developments in research methodology. It acts as a strategic focal point for developments in research, training and capacity building related to research methods, both at the national level and cutting across social science disciplines.

This publication is available online at http://eprints.ncrm.ac.uk

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