

Research Design

**Department of Sociology
Oxford University**

Hilary Term 2017

**Wednesday 10.00-11.00 Lecture; 11.00-12.00 Group A; 12.00-13.00 Group B.
Manor Road Building
Seminar Room G**

Web Site: <http://users.ox.ac.uk/~sfos0015/>

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RUBRIC

The course is concerned with the nature of empirical investigation in the social sciences. It deals with the question of how we establish systematic knowledge about the social world. The course will consider in turn the various stages of the research process, the different types of research strategies that are in use, and some general methodological problems about the conduct of inquiry. At each stage in the course we will consider examples of empirical studies that illuminate aspects of the subject under discussion.

SYLLABUS

The research process; aims of enquiry; relationship between research and theory; falsifiability; testable propositions; causality; experimental and non-experimental research designs; longitudinal studies; cross-sectional studies; validity and reliability; scale and index construction; relationships between variables; sampling.

COURSEWORK

One non-assessed paper to be submitted by Friday of Week 5 HT.

ASSESSMENT

One “critical essay” – details in the Green Book.

LECTURE SLIDES

All lecture slides will be available from my website.

TEXTBOOKS

Textbooks on research methods are almost uniformly dull and best dipped into for specific purposes or pieces of information. There is no entirely satisfactory textbook for this course. Several cover most

of the material:

(1) C. M. Judd, E. R. Smith and L. H. Kidder (1991) *Research Methods in Social Relations*, (International Edition), Fort Worth, Holt, Rinehart and Winston. ISBN 0-03-031149-7.

New editions of this book come out at regular intervals, the latest is authored by Rick H. Hoyle, Charles M. Judd and Monica J. Harris but underneath the hood the book remain much the same. My chapter references are to the sixth edition but any other edition will do just as well. Which chapters to look at should be obvious...If they are not, then you aren't trying hard enough.

A standard reference is:

(2) C. A. Moser and G. Kalton *Survey Methods in Social Investigation* (2nd edition) London, Heinemann,. ISBN 0 435 82604 2.

This is an excellent book, but it hasn't been revised since 1971 so all the examples are 40 years old. That shouldn't matter – the elementary stuff doesn't change that much - but some claim to find it off-putting. If you can put up with it then it is a reasonable alternative to (1).

(3) P. Corbetta, *Social Research Theory, Methods and Techniques*, London, Sage, ISBN: 0761972528

This is another elementary book covering much the same ground as the first two.

Also good, but somewhat more specialised and in places rather idiosyncratic is:

(4) P. Maxim (1999) *Quantitative Methods of Social Research*, New York, Oxford University Press, ISBN 0-19-511465-5.

You should note that it contains some ghastly typographical errors in quite crucial places.

Very good on conceptual issues but with little coverage of hands on practical material:

(5) G. King, R. O. Keohane and S. Verba (1994) *Designing Social Inquiry*, Princeton NJ, Princeton University Press, ISBN 0-691-03471-0.

Their general message - that there is one logic of inference in the social sciences and the rest is 'social poetry' – is a valuable restatement of an apparently controversial (in some quarters) view. At some point in the year you should read this book from cover to cover, if for no other reason than that reading it should be part of your general education. If you don't like what they say, then you should also feel an obligation to be able to state exactly what it is that you don't like.

(6) H. Brady and D. C. Collier (eds.) *Rethinking Social Inquiry: Diverse Tools, Shared Standards*, Lanham, Md, Rowman and Littlefield, ISBN: 074251126X.

This is a book of articles mainly critical of the King, Keohane and Verba. It should be read in conjunction with two short critical articles available from Neal Beck's website:

'Is Causal-Process Observation an Oxymoron' (from *Political Analysis*, 2006)
<http://www.nyu.edu/gsas/dept/politics/faculty/beck/rsi.pdf>

'Qualitative and Quantitative Methods: Can They Be Joined? (Not By Causal Process Observations!)' (Prepared for 2006 Annual Meeting of the American Political Science Association)
<http://www.nyu.edu/gsas/dept/politics/faculty/beck/apsacpo.pdf>

THREE BOOKS

There are 3 books you should read from cover to cover – say by the time you start your dissertation.

G. King, R. O. Keohane and S. Verba (1994) *Designing Social Inquiry*, Princeton NJ, Princeton University Press.

Stephen L. Morgan and Christopher Winship (2007) *Counterfactuals and Causal Inference*, Cambridge, Cambridge University Press.

Stanley Lieberson (1985) *Making it Count*, Berkeley, University of California Press.

The first two you should buy to have as part of your own library. If you are at all serious about social science you will want these as reference books for you will find yourself coming back to them time and time again. If you can put your hand on your heart and swear that you really understand everything contained in these books then I don't have much to teach you and you are excused!

ABOUT OTHER BOOKS

There are thousands of research methods books. It's impossible to have more than a passing acquaintance with a few. My guess is that many are too superficial for this course and a handful are too specialised. If a book doesn't appear above it shouldn't be taken to mean that it is no good. It probably just means I haven't read or am not even aware of it.

ADVICE

It's easy not to get much out of this course. Just come to lectures, file away copies of the slides and do the absolute minimum of reading. Never think about the issues raised, relate them to material in other courses or talk to your colleagues about them. Sit silently in the seminars and wait passively for enlightenment. That should do the trick. Also good is to assume that you know it all already: that creates a pretty effective block on learning. Every year at least one person complains to me that the material in this course is too elementary, (and more than one complains that it is too hard), beneath their dignity to bother about and so forth. I can tell you that the correlation between claiming to know it all already and making the most absurd errors of logic, either in the assessment exercise or in your dissertation is, if anything, positive. That should give you food for thought.

If you want to get something out of the course you need to engage with the material. If every week you are not reading (not skimming) several textbook chapters and 3-4 articles then you are not

making enough effort and there is no reason for me to take you very seriously. It's really as simple as that.

Lecture Reading

Michaelmas Term

* Recommended

Lecture 1. Doing Social Science

What's so special about social science?

*E. Barker (1993) 'The Scientific Study of Religion? You must be joking!' *Journal for the Scientific Study of Religion*

L. Epstein and G. King (2002) 'The Rules of Inference' *The University of Chicago Law Review*, 69, 1, 1-133.

Howson, C. and P. Urbach (1993) *Scientific Reasoning* 2nd ed., Ch. 1.

C. M. Judd et al. (1991) *Research Methods in Social Relations*, Chs. 1, 2.

*G. King et al. (1994) *Designing Social Inquiry*, Chs. 1, 2.

S Lieberson (1992) 'Einstein, Renoir and Greely: Some Thoughts About Evidence in Sociology', *American Sociological Review*, 57, 1-15.

*S. Lieberson and F. B. Lynn (2002) 'Barking Up the Wrong Branch: Scientific Alternatives to the Current Model of Sociological Science'. *Annual Review of Sociology*, 28: 1-19.

P. S. Maxim (1999) *Quantitative Research Methods in the Social Sciences*, Chs. 1, 2.

R. K. Merton (1959) 'Notes on Problem Finding in Sociology' in R. K. Merton. L. Broom and I. Cottrell (1959) *Sociology Today: Problems and Prospects*, New York, Basic Books.

*B. Magee (1978) *Popper*, London, Fontana, Chs. 2-5.

Popper, K. (1963) 'Science: Conjectures and Refutations' in Popper, K. (1963) *Conjectures and Refutations: The Growth of Scientific Knowledge*.

Popper, K. (1963) 'Three views concerning human knowledge' in Popper, K. (1963) op. cit.

Popper, K. (1972) 'Conjectural Knowledge: My Solution to the Problem of Induction' in Popper, K. (1972) *Objective Knowledge: An Evolutionary Approach*.

*P. Urbach (1974) 'Progress and Degeneration in the "IQ Debate" Part I' *British Journal for the Philosophy of Science*, 25, 99-135. Also Part II in the same journal, 25, 3, 235-259.

Many of the issues that I do little more than mention are discussed at more length in a wonderful series of lectures by the American psychologist Paul Meehl captured on video and available for you to view at <http://www.psych.umn.edu/meehlvideos.php>. You can learn a lot by watching them.

Lecture 2, 3, 4. Causality, randomised experiments, observational data

What is special about experimental designs? Why are they so difficult to achieve? What relevance do they have for social science? What do I do if I can't do an experiment? How does research design constrain the questions I can answer? What should I observe?

C.M. Judd et al. (1991) *op cit.*, Chs. 4, 5, 8, 14, 16, 17.

C. Moser and G. Kalton (1971) *op cit.* Ch. 9, 17

G. King et al. (1994) *op cit.*, Ch. 3, 5.

P. S. Maxim (1999) *op cit.*, Chs. 3, 8.

****Morgan & Winship (2007) *op cit.*, Chs. 1, 2, 3 (These are probably the most important things you can read for this course. Read them, then read them again and again...until you understand).

R. A. Berk (1983) 'An Introduction to Sample Selection Bias in Sociological Data', *American Sociological Review*, 48, 386-398.

Bullock, J. G., Green, D. P. and S. E. Ha (2010) 'Yes, but what's the mechanism? (Don't expect an easy answer). *Journal of Personality and Social Psychology*, 98, 550-558.

K. A.. Bollen (1993) 'Macrocomparative Research Methods', *Annual Review of Sociology*, 19, 321-51.

K. A. Bollen (2012) 'Instrumental variables in sociology and the social sciences' *Annual Review of Sociology*, 38.

D. T. Cambell and J. C. Stanley (1963) *Experimental and quasi-experimental designs for research*, Boston, Houghton Mifflin.

T. D. Cook (2008) "'Waiting for life to arrive": A history of the regression discontinuity design in Psychology, Statistics and Economics' *Journal of Econometrics*, 142, 2, 636-654.

T. D. Cook, W. R. Shadish and V. C. Wong (2008) 'Three conditions under which experiments and observational studies produce comparable causal estimates: New findings from within-study comparisons'. *Journal of Policy Analysis and Management*, 27, 4, 724-750.

T. D. Cook and D. T. Cambell (1979) *Quasi-experimentation: Design and analysis issues for field settings*, Boston, Houghton Mifflin Co, Chs. 1, 2, 8.

- J. Cohen (1994) 'The earth is round (p. < .05)' *American Psychologist*, 49, 12: 997-1003.
- *D. R. Cox and N. Wermuth (2001) 'Some Statistical Aspects of Causality', *European Sociological Review*, 17, 1, 65-74.
- R. M. Dawes, D. Faust and P. E. Meehl (1989) 'Clinical versus actuarial judgment' *Science*, 243, 1668-1774.
- T. Dunning and D. Freedman (2007) 'Modeling selection effects' in W. Outhwaite and S. P. Turner (2007) *The SAGE handbook of social science methodology*. Downloadable at: <http://www.thaddunning.com/wp-content/uploads/2009/12/select.pdf>
- Dunning, T. (2008). "Improving Causal Inference Strengths and Limitations of Natural Experiments." *Political Research Quarterly* 61(2):282–293.
- T. Dunning (2009) 'Instrumental Variables' Downloadable at: http://www.thaddunning.com/wp-content/uploads/2009/12/Dunning_IEPS_InstrumentalVariables2.pdf
- *D. A. Freedman (1991) 'Statistical Models and Shoe Leather' *Sociological Methods* 21: 291-313.
- M. Gangl (2010) 'Causal Inference in Sociological Research' *Annual Review of Sociology*
- D. P. Green, S. E. Ha and J. G. Bullock (2010) 'Enough already about "black box" experiments: Studying mediation is more difficult than most scholars suppose' *The Annals of the American Academy of Political and Social Science*, 628.
- **J. J. Heckman and J. A. Smith (1995) 'Assessing the Case for Social Experiments', *Journal of Economic Perspectives*, 9, 2, 85-110.
- *J. J. Heckman, (1992). 'Randomization and Social Policy Evaluation' in *Evaluating Welfare and Training Programs*, edited by C. Manski and I. Garfinkel. Cambridge, MA: Harvard University Press. pp. 201-230. Downloadable at: <http://jenni.uchicago.edu/discussion/discussion.html>
- J. J. Heckman (2005) 'The scientific model of causality' *Sociological Methodology*, 35, 1, 1-97.
- **P. W. Holland (1986) 'Statistics and Causal Inference', *Journal of the American Statistical Association*, 81, 396, 945-960
- *S. Lieberman (1985) *Making it Count: The Improvement of Social Research and Theory*, Berkeley, University of California Press.
- S. Lieberman (1991) 'Small N's and Big Conclusions: An Examination of the Reasoning in Comparative Studies Based on a Small Number of Cases', *Social Forces*, 70, 2, 307-320.
- *M. M Marini and B. Singer (1988) 'Causality in the Social Sciences' *Sociological Methodology*, 18, 347-409.
- H. W. Riecken and R. F. Boruch (1978) 'Social Experiments', *Annual Review of Sociology*, 4, 511-

32.

A. J. Sovey and D. P. Green (2011) 'Instrumental variable estimation in political science: a reader's guide', *American Journal of Political Science*, 55, 188-200.

W. R. Shadish, M. H. Clark and Steiner, P. M. (2008) 'Can nonrandomized experiments yield accurate answers? A randomized experiment comparing random and non-random assignments' *Journal of the American Statistical Association*, 103, 484, 1334-1357.

*B. Singer and M. M. Marini (1987) 'Advancing Social Research: An Essay Based on Stanley Lieberson's Making it Count', *Sociological Methodology*, 17, 373-391.

C. Winship and R. D. Mare (1992) 'Models for Sample Selection Bias', *Annual Review of Sociology*, 18, 327-50.

*C. Winship and S. L. Morgan (1999) 'The Estimation of Causal Effects from Observational Data', *Annual Review of Sociology*, 25: 659-706.

Lecture 5. Measurement, Validity and Reliability.

How would I know an elephant if I saw one? How would I know whether I have seen the same elephant twice?

C. M. Judd et al. (1991) Ch. 3.

P. S. Maxim (1999) *op cit.*, Chs. 9, 10.

*E. G. Carmines and R. A. Zeller (1979) *Reliability and Validity Assessment*, Beverley Hills Ca., Sage.

R. A. Zeller and E. G. Carmines (1980) *Measurement in the Social Sciences: The Link Between Theory and Data*, Cambridge, CUP.

*R. Adcock and D. Collier (2001) 'Measurement Validity: A Shared Standard for Qualitative and Quantitative Research', *American Political Science Review*, 95, 3, 529-546.

*W. M. Mason, J. S. House and S. S. Martin (1985) 'On the Dimensions of Political Alienation in America', *Sociological Methodology*, 15, 111-151.

D. J. Batholomew and K. F. Schuessler (1991) 'Reliability of Attitude Scores Based on a Latent Trait Model', *Sociological Methodology*, 21, 97-123.

Lecture 6. Scales, Scaling and Indices

Why use attitude scales? What kind of scaling model should I use? What is the difference between a scale and an index?

*C.M. Judd et al. (1991) Ch. 7.

P. S. Maxim (1999) *op cit.*, Ch. 11.

C. Moser and G. Kalton (1971) *op cit.* Ch. 14.

A.N. Oppenheim (1992) *Questionnaire Design, Interviewing and Attitude Measurement* (2nd ed), London, Pinter Publishers. Chs. 9-13 (or 5-6 in 1st ed.).

**G. King; C. J.L. Murray; J. A. Salomon; and A. Tandon. 'Enhancing the Validity and Cross-cultural Comparability of Measurement in Survey Research,' *American Political Science Review*, Vol. 97, No. 4 (December, 2003), 567-584; reprinted, with printing errors corrected, Vol. 98, No. 1 (February, 2004): 191-207.

Lecture 7 What's in a question?

C.M. Judd et al. (1991) Chs. 10, 11.

C. Moser and G. Kalton (1971) *op cit.* Chs. 11, 13.

S.L. Payne (1951) *The Art of Asking Questions*, Princeton, NJ, Princeton University Press.

S. Sudman and N. M. Bradburn (1982) *Asking questions: A practical guide to questionnaire design*, San Francisco, Jossey Bass.

J. M. Converse and S. Presser. (1986) *Survey Questions: Handcrafting the standardized questionnaire*, Beverley Hills, Sage.

W. Foddy (1993) *Constructing questions for interviews and questionnaires*, Cambridge, CUP.

H. Schuman and S. Presser (1981) *Questions and Answers in Attitude Surveys*, San Diego, Cal., Academic Press.

**N. C. Schaeffer and S. Presser (2003) 'The Science of Asking Questions' *Annual Review of Sociology*, 29. 65-88.

Lecture 8 Determining what to observe.

C.M. Judd et al. (1991) Ch. 6.

C. Moser and G. Kalton (1971) *op cit.* Chs. 3, 4.

G. King et al. (1994) Chs. 4, 6