

## Making the most of major Scottish & UK surveys

Professor Vernon Gayle  
University of Stirling & ISER, University of Essex

5th KnowFife Research Fair 18<sup>th</sup> November 2008



## Structure of the Workshop

- Data resources
- Datasets and surveys
- What can Local Authorities & other research organisations do with existing surveys?

2

## Data Resources

- *Paradox is that in the UK, and in Scotland, we are very rich in survey data but this is not mirrored in outputs*

3

## Data resources

- Overwhelmingly, support on Scottish survey data is provided at the national level
  - ESDS, [www.esds.ac.uk](http://www.esds.ac.uk)
  - UK Data Archive, [www.data-archive.ac.uk](http://www.data-archive.ac.uk)

4

# Longitudinal Data Analysis for Social Science Researchers

[www.longitudinal.stir.ac.uk](http://www.longitudinal.stir.ac.uk)

**Longitudinal Data Analysis for Social Science Researchers**

Welcome to the website of the 'Longitudinal Data Analysis for Social Science Researchers' project which is funded under the [ESRC Research Development Initiative](#).

These pages relate to:

- [UK Data Archive](#)
- [Workshop programme](#) (annual workshops in Stirling and London, 2006-8)

The materials are targeted as an introductory learning resource for social science researchers. They concentrate upon practical illustrations of the data management and data analysis techniques necessary to undertake quantitative longitudinal analysis with large scale secondary survey resources. Most examples contain the analysis of longitudinal micro-social surveys from the UK. In particular, the BHS. The materials are a direct development from a previous [ESRC Research Methods Programme Phase II training project](#), which ran 2003-6.

Most of the project's training resources may be accessed by following the links to the left. The ["about resources"](#) link leads to a description of the resources available.

**Project abstract**

Longitudinal data are important for many social science disciplines as such data facilitates the investigation of empirical research questions relating to social change and social stability. Such investigations are not possible with cross-sectional data. At the current time there is a shortage of social scientists with skills appropriate for longitudinal data analysis. In the UK there is an increasing number of large-scale quantitative longitudinal datasets, and currently most remain under-utilised.

This project is delivered through collaboration between the Universities of Stirling, St Andrews and Strathclyde. The project will deliver a one-day introductory seminar and a five-day workshop / seminar each year (for three years). The project will also further develop existing on-line training resour and provide support for researchers. The project is funded under the [Research Development Initiative](#).

5

# Scottish Social Survey Network

<http://www.longitudinal.stir.ac.uk/surveynetwork/>

e-mail [vernon.gayle@stir.ac.uk](mailto:vernon.gayle@stir.ac.uk) to join e-mail list



6

# Scottish Social Survey Network

<http://www.longitudinal.stir.ac.uk/surveynetwork/>

- Master Classes (2008 Stata; Panel Data Analysis; Multilevel Modelling)
- Seminars (5 seminars since May 2007)
- Next seminar Thursday 20th November 2008, Napier University, 3-5pm
- e-mail [vernon.gayle@stir.ac.uk](mailto:vernon.gayle@stir.ac.uk) to join e-mail list

7

# DAMES NODE

**DAMES Node**  
Data Management through e-Social Science  
An ESRC Research Node for the National Centre for e-Social Science

**Home Page**

- [Home Page](#)
- [About DAMES](#)
- [DAMES News](#)
- [Publications](#)
- [DAMES resources](#)
- [External links](#)
- [Groups](#) (members only)
- [Contact Us](#)
- [Feedback](#)

**Overview**

DAMES is a research Node for the [National Centre for e-Social Science](#). The Node commenced 1st February 2008.

The Node will undertake a series of activities involving case studies, provision and support of **data management** activities undertaken by social scientists. One component of DAMES is further work on services developed on a specialist set of information resources concerned with occupations – [GISCO](#).

This website is still in development but materials will be added over the lifetime of the Node. Some introductory slides on the Node are available [here](#).

Maintained by Web Administrator / Email: [Web Administrator](#)

[www.dames.org.uk](http://www.dames.org.uk)

8

## PEAS

<http://www2.napier.ac.uk/depts/fhls/peas/index.htm>

NEW STUDY ON SITE  
USA News

click anywhere here to enter site

Practical Exemplars on the Analysis of Surveys

Our Aims: To help you to analyse surveys  
Profely and Easy with aKandent Software & to appreciate how experts design Affect results  
You are a member of Napier University (Scotland) and of the National Centre for Social Research & jointly funded by the ESRC  
Research Methods Programme to develop the research for survey researchers

please e-mail a note of any errors found  
to [r.m@napier.ac.uk](mailto:r.m@napier.ac.uk)

NatCen ESRC Research Methods

9

## ESRC NCRM Node

Lancaster-Warwick-Stirling  
Developing statistical modelling in the social sciences  
<http://www.ncrm.ac.uk/about/organisation/Nodes/LWS/>

ESRC National Centre for  
Research Methods

HOME | TRAINING & EVENTS | RESEARCH | NEWS | ABOUT US

Research Methods Programme

Lancaster-Warwick-Stirling node

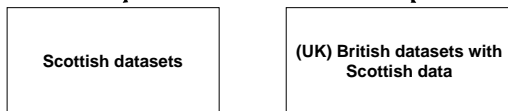
Lancaster-Warwick-Stirling node (University of Lancaster, University of Warwick and Stirling University) aims to develop and extend statistical modelling and research related to commercial and organisational data with applications in marketing, psychology, sociology and education. The data provided to researchers is primarily in the form of survey data.

- Develop and extend statistical models for complex and structured longitudinal data, and develop computational techniques, building upon existing theory and experience.
- Use and develop a range of statistical and computational methods in marketing, psychology, sociology and education and to make these available to other researchers.
- Develop software and training materials in which these models are implemented in other areas.
- Provide a programme of short courses and workshops in the broad areas of statistical modelling and advanced courses where appropriate.

The Lancaster-Warwick-Stirling node is based at the Lancaster University, the University of Warwick and the University of Stirling.

10

## Datasets



11

## Datasets

- Present

<http://www.esds.ac.uk/government/docs/ScotlandGuide.pdf>  
Lee Williamson and Reza Afkhami  
(2005; updated 2007)



Guide to data sources for Scotland

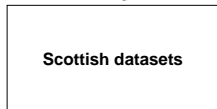


Also  
Hinds, Sproston and Taylor (2001)  
<http://www.scotland.gov.uk/Resource/Doc/156505/0042021.pdf>

and Bell, Jack and Wright (2004)

12

## Datasets



13

## Scottish Datasets

- Scottish Health Survey
- Scottish Crime Survey
- Scottish Social Attitudes Survey
- Scottish School Leavers Survey
- Scottish Household Survey
- Scottish House Conditions Survey
  
- And others...

14

### *The Scottish Longitudinal Study (SLS)*

- <http://www.lscs.ac.uk/sls/>
- Approximate sample size of 274,000
- Hattersley and Boyle (2007)  
<http://www.lscs.ac.uk/sls/LSCS%20WP%201.0.pdf>
- Demography, housing, family life, marriage, fertility, social inequality and employment

15

### *Growing Up in Scotland (GUS)*

- <http://www.cfr.ac.uk/gus/>
- Approximate sample size of 8,000 overall
- These two groups are sometime referred to as the birth cohort and the toddler cohort respectively
- At present, the intention is to launch a new birth cohort (BC2) in 2012

16

## *Growing Up in Scotland (GUS)*

- <http://www.cfr.ac.uk/gus/>
- Paul Bradshaw will deliver a paper on

'New Developments in the Growing Up in Scotland (GUS) Study',

Thursday 20th November 2008, Napier University, 3-5pm

17

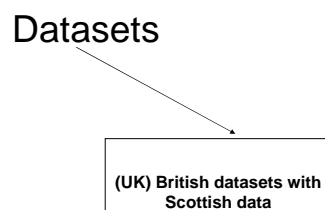
## Edinburgh Study of Youth Transitions and Crime

<http://www.law.ed.ac.uk/cls/esytc/>

Geographical example...

18

## Datasets



(UK) British datasets with Scottish data

19

## CENSUS

- <http://www.statistics.gov.uk/census/>
- <http://www.ccsr.ac.uk/sars/>

20

### *Integrated Household Survey (IHS)*

*Formerly  
The Continuous Population Survey (CPS)*

- The new ONS Integrated Household Survey (IHS) began in January 2008

21

### *The Labour Force Survey (LFS)*

- <http://www.esds.ac.uk/government/lfs/>
- The main comprehensive source of information on the labour market
- Cross-sectional analysis (e.g. for calculating an unemployment rate)
- Analysing trends by comparing points in time with cross-sectional data (e.g. unemployment in Sept 2000, Sept 2001 and Sept 2002)
- The panel element of the LFS can also be exploited for longitudinal data analysis

22

### *The Labour Force Survey (LFS)*

- Scottish LFS enhancement 23,000 households with 50,000 individuals (40,000 aged over 16)
- Quarterly LFS (January to March 2006) there were 10,738 people usually resident in Scotland in the sample

23

### *The Millennium Cohort Study (MCS)*

- [www.cls.ioe.ac.uk/mcs](http://www.cls.ioe.ac.uk/mcs)
- First national birth cohort study to be undertaken for 30 years
- Babies born at the millennium
- Information from the parents of 18,819 babies born in the UK (2,370 in Scotland)

24

## The British Household Panel Survey (BHPS)

<http://www.iser.essex.ac.uk/ulsc/bhps/>

- 1991 – present; annual interviews
- 5,000 households (10,000 adults)
  
- LIVING IN SCOTLAND
- 1999 – present (1,457 households in 1999)
- 2,405 adults gave full interview 1999
- 1,220 households in 2004
- 2,030 adults gave full interview 2004

25

## The British Household Panel Survey (BHPS)

### LIVING IN SCOTLAND

- Laurie, H. and Wright, R.E. (2000) 'The Scottish Household Panel Survey', *Scottish Journal of Political Economy*, 47, pp.337-339.
- Ermish, J. and Wright, R.E. (eds) (2005) *Changing Scotland – Evidence for the British Household Panel Survey*, Bristol, Policy



26



Understanding Society:  
the UK Household Longitudinal Study



<http://www.understandingsociety.org.uk/>

27

## UK HLS Background

- *Understanding Society* is a longitudinal study based on a household panel design
- Basic design similar to BHPS
- Target sample size of 40,000 households – largest Household Panel Survey
- Main fieldwork due to start in January 2009

28

## Importance of the Household focus

- Strength of the HPS model shown by range of studies internationally (e.g. PSID, SOEP, HILDA)
- Important for research on households and individuals
  - consumption and income, where within-household sharing of resources is important,
  - demographic change, where the household itself is often the object of study.

29

## Importance of the Household focus

- The household itself is often the object of study
  - demographic change
  - consumption
  - income
  - within-household sharing of resources

30

## Importance of the Household focus

- Can investigate family factors in decision making
- Observing multiple generations allows examination of long-term transmission processes
- Comparative analysis of sibling outcomes
- Opportunities to explore linkages outside the household

31

## Some key features of Understanding Society

- Very large sample size proposed (4,000 Scottish households)
- Representative sample of whole population (all ages)
- Multi-purpose multi-topic design to meet a wide range of disciplinary and inter-disciplinary research needs

32



## Some key features of Understanding Society

- Ethnic minority research
- Research linking social and biomedical sciences
- Innovation in data collection methods

33

## *Understanding Society Sample*

- Approx. 27,000 households - The fieldwork for this sample will commence in January 2009
- A boost ethnic minority sample, focussed on five main ethnic minority groups, comprising 4,000 households
- Incorporating the BHPS sample of approximately 8,400 households
- An Innovation Panel of 1500 households to enable methodological research (panel began in January 2008)

34

## *Understanding Society Sample*

- 40K households gives an opportunity to explore issues where other longitudinal surveys are too small
- Small subgroups, such as teenage parents or disabled people

35

## *Understanding Society Sample*

- Analysis at regional and sub-regional levels, allowing examination of the effects of geographical variation
- Large sample size allows high-resolution analysis of events in time, for example focussing on single-year age cohorts

36

## UK HLS Opportunities

- Starting again, compared with BHPS, an opportunity to review activities and see which are worthwhile to continue, which not
- Focus on new research issues
- Opportunities for mixed methods:
  - Data linkage admin, organisation, spatial
  - Bio-markers and health indicators
  - Qualitative data
  - Other non-standard data: diaries, visual, audio

37

## UK HLS Opportunities

- Use of different modes
  - e.g. web to collect data with higher frequency
  - Experiment with new technology as it is introduced
- Overall aim - to build a robust survey structure within which can experiment and innovate while minimising risk

38



*Understanding Society: the UK Household Longitudinal Study*



<http://www.understandingsociety.org.uk/>

39

## What can Local Authorities & other research organisations do with existing surveys?

- Research can do a lot
  - very wide range of topics, issues & social problems
  - researchers will tend to get further
  - large representative samples
  - wide coverage
  - temporal dimension (e.g. panel)

40

What can Local Authorities & other  
research organisations do with  
existing surveys?

- Researchers should
  - use existing training resources (often free)
  - seek out suitable training (comparatively cheap)
  - join networks (e.g. SSSN)
  - collaborate with university researchers

41