
Love Research - Love Data: getting the most out of sharing and using data

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Exeter Qestival
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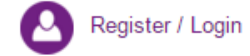
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My organisation: the UK Data Archive

- Department of the **University of Essex**
- Founded 1967 by ESRC - a '**Data Bank**' for science science
- **Over 50 years** of curating and providing access to data for research and teaching
- A Trusted Digital Repository (TDR) and accredited to ISO27001 Info Security Management standard
- **Lead partner in the national UK Data Service – with CMI, Jisc and UCL**
- Work closely with **research funders** and **key data producers /institutions**, e.g. Office for National Statistics, NHS-D, govt departments, British Library





Explore the UK's largest collection of social, economic and population data resources.

Search data

About the UK Data Service



Guides and resources

Dataset guides

Topic guides

Methods and software guides

Guides to exploring online

See more



Video tutorials

See our growing range of training videos



Some statistics about our UK Service

- **@8,000** datasets in the collection
- **@250** new datasets and new editions added each year
- **@30,000** registered users
- **@60,000** downloads worldwide per annum
- **@4000 +** user support queries per annum



Types of data held

Social survey

- One off large scale survey e.g. Health Survey for England

Longitudinal/cohort

- Detailed surveys following people over time, e.g British birth cohorts

Qualitative

- Interviews, focus groups, diaries

Aggregate data

- UK census counts/tables, country level statistics

Historical data

- Digitised databases



UK Surveys

- Data about individuals or households
- Often commissioned by the Government and conducted by the ONS or NatCen
- Large sample sizes
- Nationally-representative
- Repeated cross-sectional surveys – a new sample of people every time the survey is run
- Many surveys are repeated every year



Survey microdata

The image displays two screenshots of the IBM SPSS Statistics Data Editor interface, showing survey microdata for the file 'bsa10.sav [DataSet1]'. The top screenshot shows a partial view of the data table, and the bottom screenshot shows a more complete view of the same data table.

Top Screenshot Data:

	Househld	RSex	RAge	P2Sex	P2Age	P2Rel3	P2
1	3	1	73	2	67	1	
2	1	2	75	0	-1	0	

Bottom Screenshot Data:

	Househld	RSex	RAge	P2Sex	P2Age	P2Rel3	P2Rel2	P2
1	3	Male	73	Female	67	Partner/ sp...	Partner/sp...	Part
2	1	Female	75	No further...	No further ...	No further ...	No further ...	No fu
3	3	Male	36	Female	32	Partner/ sp...	Partner/sp...	Part
4	2	Female	56	Female	32	Son/ daug...	Son/daugh...	Son/
5	2	Male	38	Female	30	Partner/ sp...	Partner/sp...	Part
6	1	Female	34	No further...	No further ...	No further ...	No further ...	No fu
7	5	Male	39	Female	36	Partner/ sp...	Partner/sp...	Part
8	2	Male	81	Female	73	Partner/ sp...	Partner/sp...	Part

Some key topics and surveys



Employment and work

- Labour Force Survey
- Annual Population Survey
- European Working Conditions Survey



Health

- Health Survey for England
- Scottish Health Survey
- Diet and Nutrition surveys



Family Finance

- Family Resources Survey
- Living Costs and Food Survey



Crime

- Crime Survey for England and Wales
- Scottish Crime and Justice Survey



Attitudes and opinions

- British Social Attitudes Survey
- NI Life and Times Survey
- Eurobarometer
- European and World Values Surveys



Housing and the local environment

- English Housing Survey
- Living in Wales



Accessing survey data

Download

- Download datasets and documentation
- Access through a package such as SPSS, STATA or R
- Different formats: SPSS, STATA and Tab

Online access via Nesstar

- Browse variables and metadata
- Simple data analysis
- Export tables and graphs
- Download subsets of data



British Social Attitudes Survey

- annual measures of attitudinal movements
- complements large-scale government surveys that deal largely with facts and behaviour patterns, and party political attitudes data produced by the polls
- to monitor patterns of continuity and change, and examine the relative rates at which social attitudes change over time
- ~3,000 people interviewed most years since 1983
- 'core' questions, which are repeated in most years: background and classificatory questions
- modules on a range of social, economic, political and moral issues - some asked regularly, others less often



Poll

Attitudes to gender roles

Support for a traditional division of gender roles has declined over time, though substantial support remains for women having the primary caring role when children are young.



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Poll answer

Attitudes to gender roles

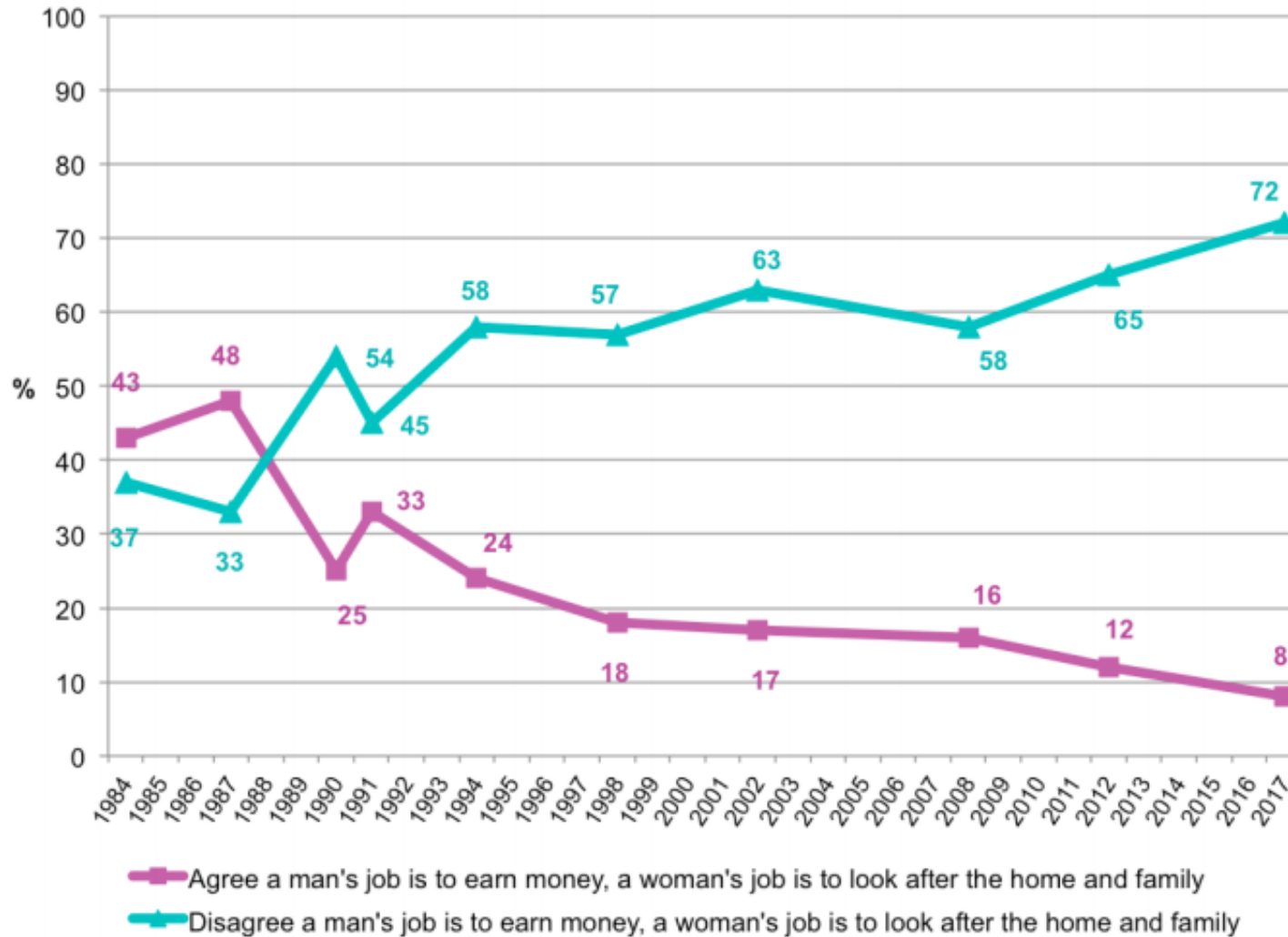
Support for a traditional division of gender roles has declined over time, though substantial support remains for women having the primary caring role when children are young.



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Views on traditional gender roles, 1984-2017



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BSA 2017 report 'British Social Attitudes 35', published by NatCen

http://www.bsa.natcen.ac.uk/media/39284/bsa35_full-report.pdf

Eurobarometer

- The longest running regular cross-national and cross-temporal opinion poll program
- Monitors social and political attitudes
- Run since early 1970s, Individual level data with face to face interviews with individuals in each of the EU countries
- More information about the series:
[Eurobarometer Survey Series](#) web pages
- Access via the Data Archive for the Social Sciences (GESIS) in Germany



ESRC birth/cohort & longitudinal studies

- National Child Development Study (NCDS): 1958+
- 1970 British Cohort Study (BCS): 1970+
- English Longitudinal Study of Ageing (ELSA): 2002
- Millennium Cohort Study (MCS): 2000+
- Longitudinal Study of Young People in England (LSYPE)/Next Steps: 2004+
- British Household Panel Survey (BHPS): 1991-2009
- Understanding Society /United Kingdom Household Longitudinal Study (UKHLS): 2009+
- Growing Up in Scotland (GUS)
- MRC Whitehall II coming soon



New forms of data coming

Big data

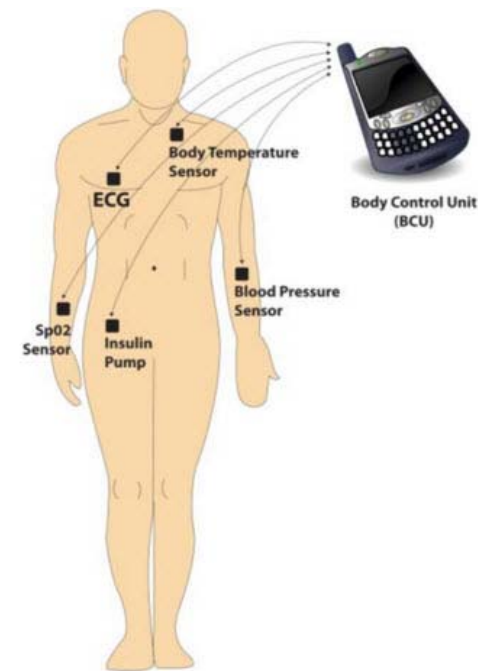
Administrative records, actigraphy, smart meters, pollution, BAN etc.



Data Type	Data Abstracted From Hospital Records
Demographic characteristics	Age
Epidemiologic outcomes	Death-on-arrival Early death (<4 h after blast in ED or hospital) Late death (≥4 h after blast) Injury types Injury locations
Resource utilization	Sought emergency care at ED from scene Transported to ED by EMS from scene Transferred from ED to other hospital Transferred from other hospital to ED Discharged home from ED Admitted to hospital Received operative care Types of operations received Received critical care (admitted to ICU)
Time course of emergency needs	Time interval to ED arrival (min) Time and date of death

ED, emergency department; EMS, emergency medical services; ICU, intensive care unit.

https://www.researchgate.net/figure/Data-Abstracted-From-Hospital-Records_tbl1_7663074



<https://www.elprocus.com/ban-body-area-network/>

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Tip 1: Survey documentation

- Questionnaires, user guides, technical reports, details of derived variables
- Key to understanding the data.
Tells you about...
 - The questions that were asked
 - Who answer the questions
 - How the survey was conducted
 - Any changes to the raw data
- Freely available on our website



Tip 2: Survey weights

- Often needed with survey data
- Variables in the dataset
- Make the sample data better represent the population
- Easy to use in statistics packages
- Details will be in the survey documentation



See our guides: 'What is weighting?' , 'An introduction to using weights in social surveys (Video)' & 'How to use weights in Nesstar (Video)'



Access conditions

Data Type	Access conditions
Open access <i>Small number of teaching datasets</i>	Open access
End User Licence <i>Most research datasets</i>	Requires registration and user name and password UK academics and students login using their institutional username and password
Special Licence <i>Most survey microdata with lower level geography</i>	Restricted to 'Approved Researchers' under the Statistics and Registration Act
Secure access	Restricted to 'Approved Researchers' and access limited through a physical or virtual environment



Fives Safes Framework

Fives Safes enables **safe access to data** that meet the needs of **data protection** yet fulfils the demands for open science and transparency

- **Safe data** - treat data to protect confidentiality
- **Safe people** - educate researchers to use data safely
- **Safe projects** - research projects for 'public good'
- **Safe settings** – Secure Lab environment for personal data
- **Safe outputs** – Secure Lab projects outputs screened

[5 Safes Animation](#)



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Five Safes



	Safe Data	Safe People	Safe Projects	Safe Settings	Safe Outputs
Open data	✓	✗	✗	✗	✗
Personal data	✗	✓	✓	✓	✓
Linked data (survey + admin)	✗	✓	✓	✓	✓
Data with 'minimal' risk	?	✓	✓	✓	✓



Other resources and support

Webinars & Workshops

- See events pages

Guides & Video tutorials

- Topic
- Dataset
- Methods and software

Helpdesk

- Individual support by e-mail

Case studies

- How others used the data



Case studies of re-use

Business & Economy



[The class ceiling: Social mobility and why it pays to be privileged](#)

[Labour market mismatch and the UK productivity puzzle](#)

[UK trade in goods and productivity: New findings](#)

[See more](#)

Environment & Sustainability



[Tracking progress on health and climate change: Creating health and climate change indicators for The Lancet Countdown](#)

[Sick and stuck at home? Does living with health challenges influence people's energy use?](#)

[Do higher energy prices affect international trade?](#)

[See more](#)

Health & Wellbeing

[Effect of a Low-Intensity PSA-Based Screening Intervention on Prostate Cancer Mortality](#)

[Assessing progress in protecting non-smokers from secondhand smoke](#)

[Mothers in harsh environments have lower breastfeeding chances in the UK's Millennium Cohort Study and the Born in Bradford study](#)

[See more](#)



Data Skills Modules

- Audience: beginners
- 3 modules (each 2 hours long)
- Multi-media & interactive, videos/slides, quizzes
- Open source software (and SPSS)

The image displays three vertically stacked screenshots of course landing pages. Each page features a header with the course title and unit information, a central graphic of colorful vertical bars, and a brief description of the unit's content. The top page is for 'Surveys', the middle for 'Longitudinal data', and the bottom for 'Aggregate data'. The bottom page also includes the 'UK Data Service' logo and a 'NEXT >' button.

Surveys
Unit 1: What are survey data?
This unit will explore survey data.

Longitudinal data
Unit 1: What are longitudinal data?
This unit will explore longitudinal data. You will look at what the data are, some key concepts relating to survey data and how to find

Aggregate data
Unit 1: What are aggregate data?
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NEXT >

Content - example

SURVEY DATA MODULE

Unit 1: [What are survey data?](#)

Unit 2: [Use cases](#)

Unit 3: [Exploring data](#)

Unit 4: [Looking at characteristics with graphs and charts](#)

Unit 5: [Looking at two variables to understand patterns](#)

Unit 6: [Considering the impact of sampling on your results](#)



Acknowledgements

- Thanks to Sarah King Hele and Vanessa Higgins, CMI Manchester with slides



Keep connected

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