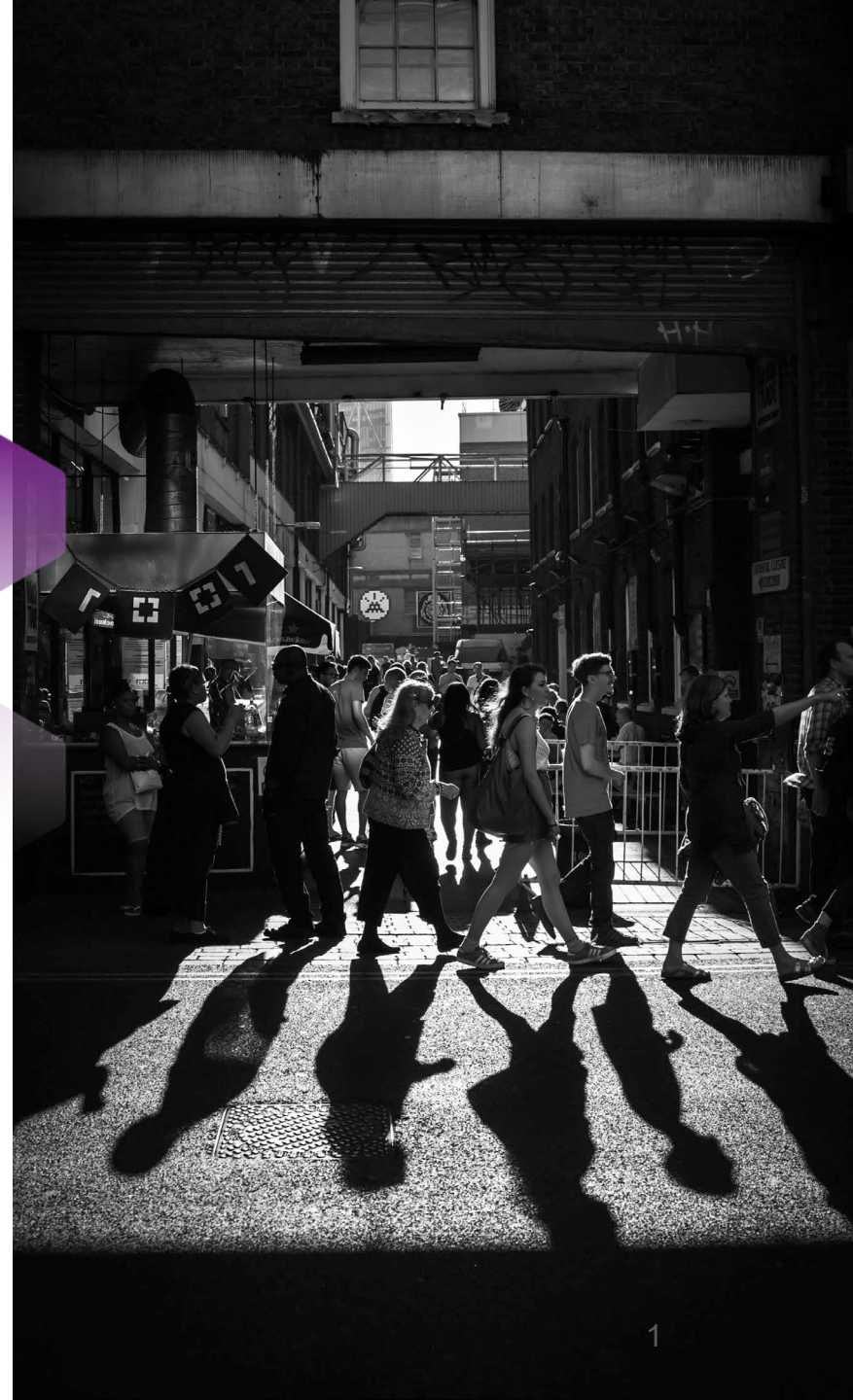


# An Introduction to the UK Data Service

5 April 2022



# Overview of the session

- Who are we?
- What is secondary data?
- What types of data do we hold?
- Interactive quiz
- Online resources
- Further help
- Questions?



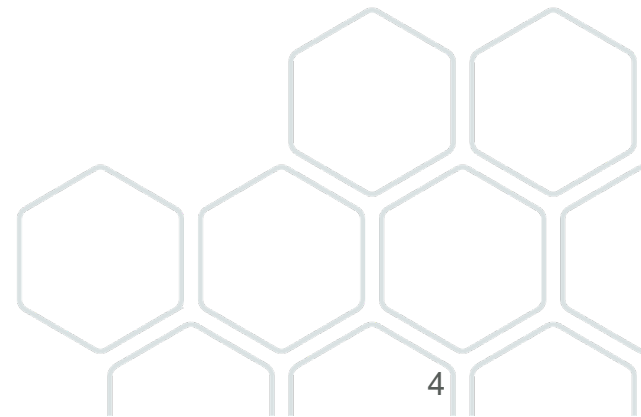
# What is the UK Data Service?

- Comprehensive resource funded by the ESRC
- Access to secondary social science data
- Data in our collections includes major UK government-sponsored surveys, cross-national surveys, longitudinal studies, UK census data, international aggregate, business data, and qualitative data
- Support, training and guidance

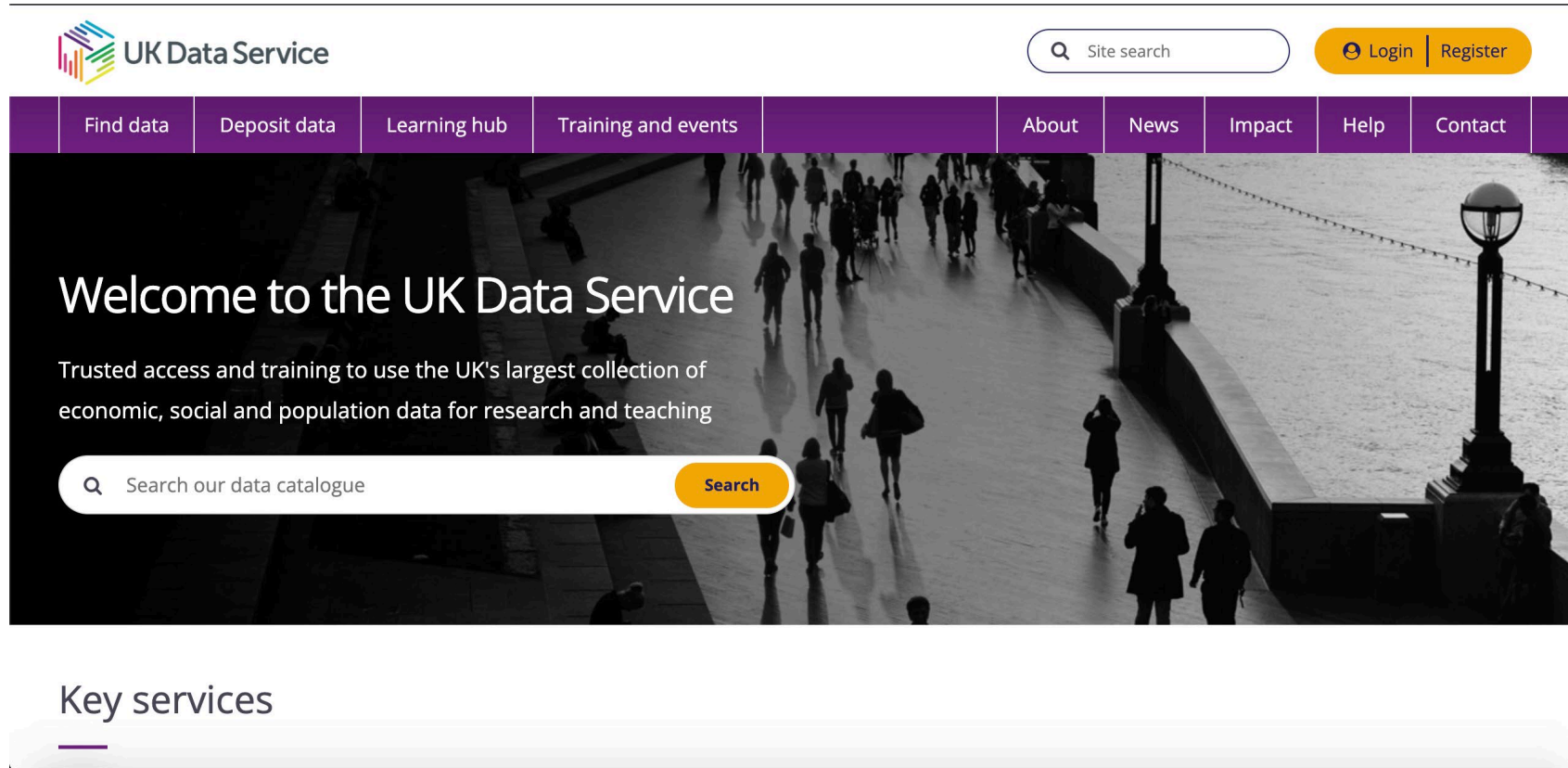


## Example – Response to COVID-19

- enabling rapid research into the economic and social impacts of the pandemic
- COVID-19 data-dive
- Researchers used the datasets we hold to investigate themes including the mental health of loneliness, inequalities and public behaviours affected policy messaging
- <https://ukdataservice.ac.uk/impact/>

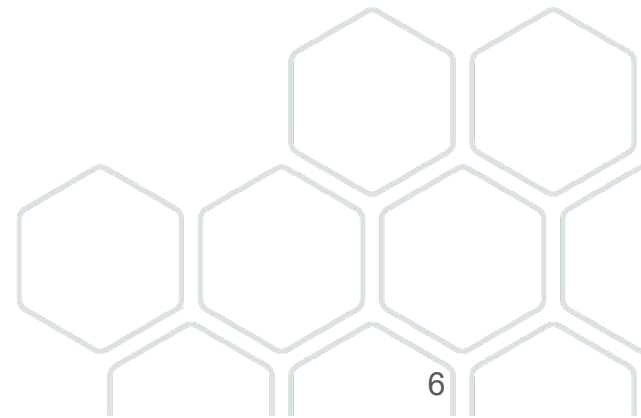


# UK Data Service Website



# Who is it for?

- Academic researchers and students
- Government analysts
- Charities and foundations
- Business consultants and data analysts
- Independent research centres and think tanks
- Independent researchers



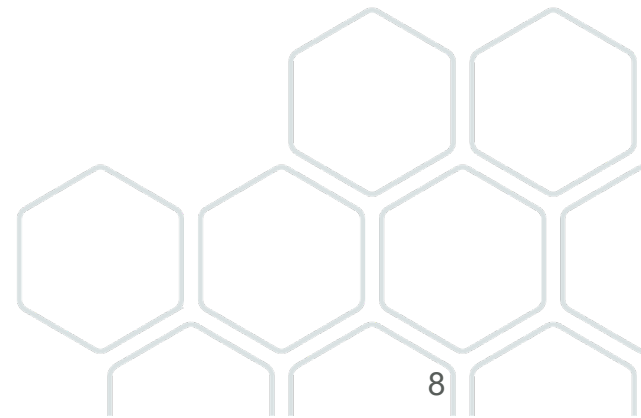
# What is secondary analysis and why do it?

- Data is collected in many ways: surveys, interviews, administrative records, business records and censuses
- Primary collection can be time-consuming, expensive and requires expertise
- reanalysis of data that has already been collected
- Usually free, large range of sources, representative, robust and transparent



# Sources of data

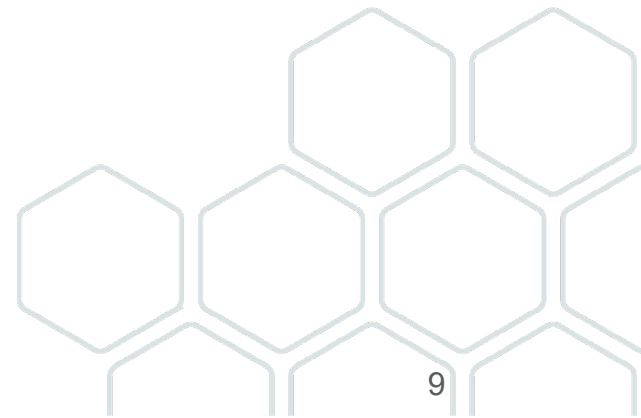
- National statistical authorities
- UK government departments
- Intergovernmental organisations
- Research institutes
- Individual researchers





# How much data do we hold?

- Over 7300 datasets
- Covering topics such as ageing, crime, economics, environment and energy, education, ethnicity, food, health, housing, information and communication, work and labour, politics and poverty
- New data all the time – covid-19



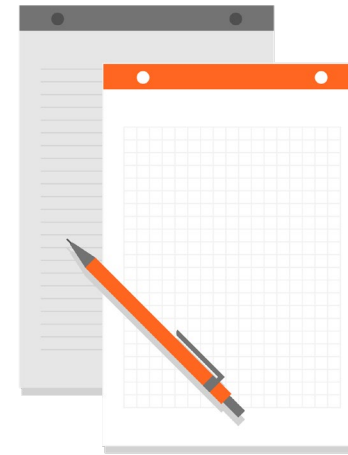
# Types of data

Survey microdata	International macrodata	Census	Qualitative/Mixed Methods
Major UK Surveys:  Cross national  Longitudinal	Multi-national aggregate databanks and survey data	Aggregate data for 1971- 2011  Microdata for 1991-2011  Flow data  Boundary data	Range of multimedia qualitative data sources  Mix of qualitative and quantitative data

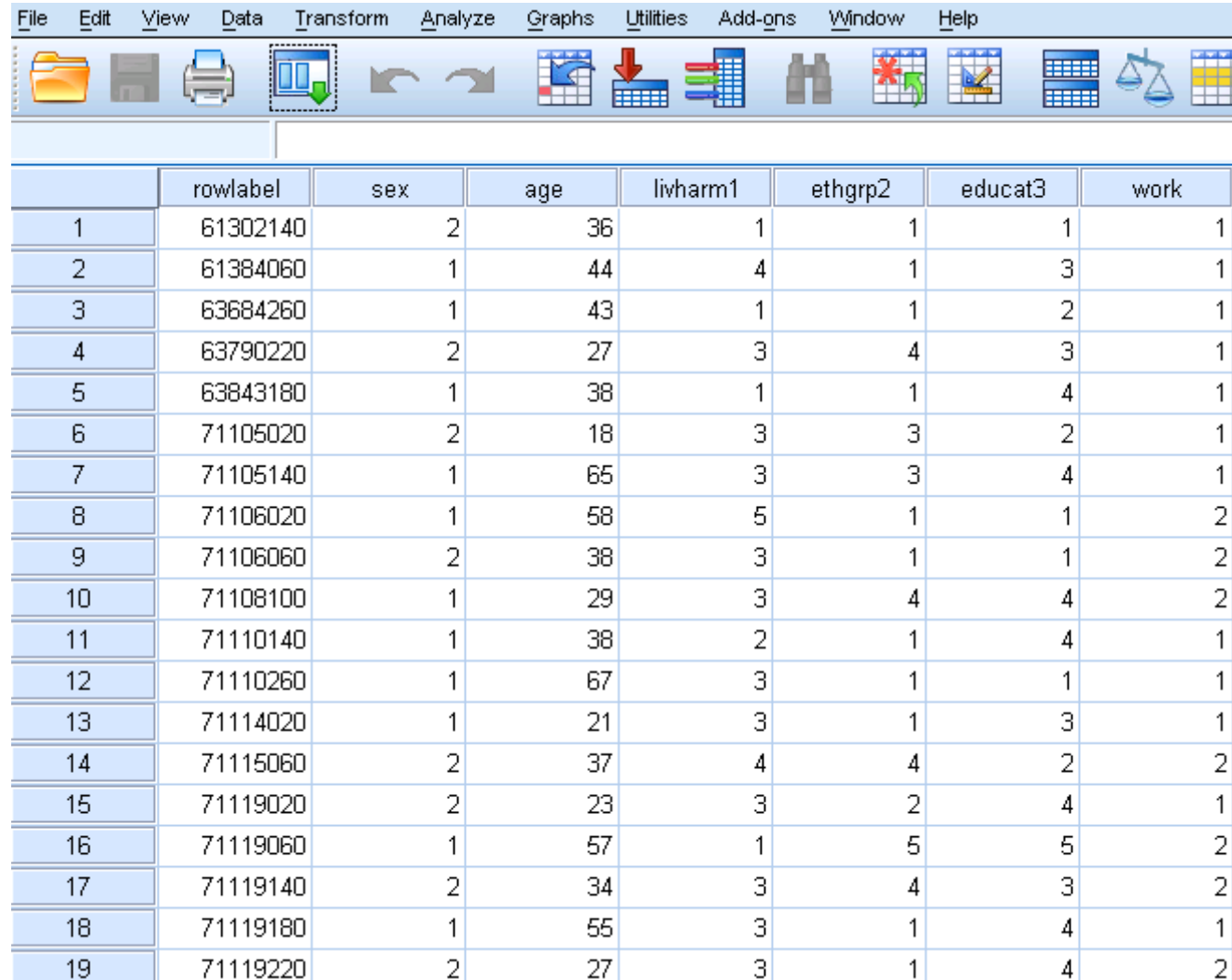
# Survey Microdata

# Survey Microdata

- Anonymised individual or household level data
- Large sample sizes
- Nationally-representative
- SPSS or Stata or R
- Flexible



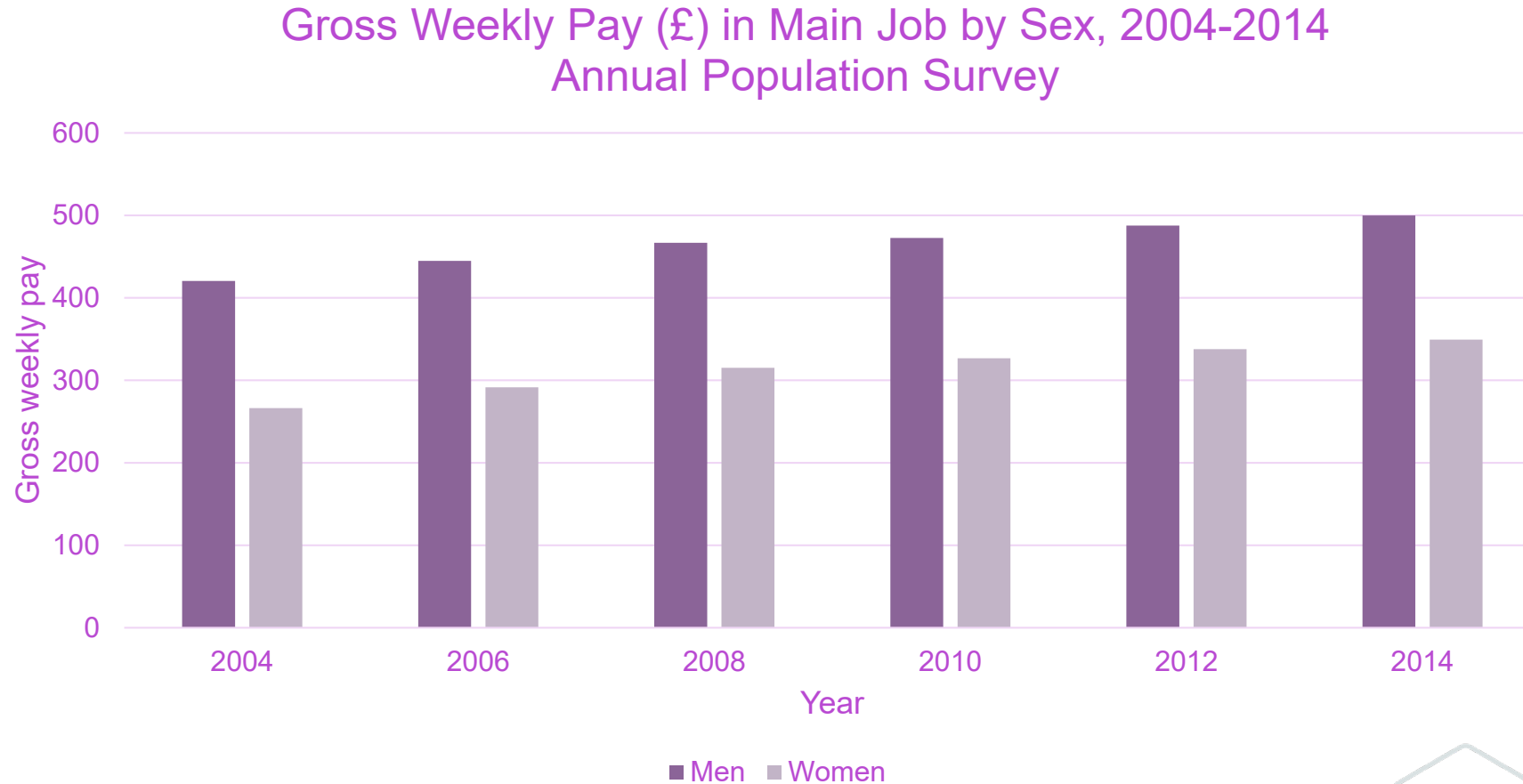
# Survey Microdata example



The image shows a screenshot of a statistical software application window. The menu bar includes File, Edit, View, Data, Transform, Analyze, Graphs, Utilities, Add-ons, Window, and Help. Below the menu bar is a toolbar with various icons for file operations, data manipulation, and analysis. The main window displays a data table with 19 rows and 8 columns. The columns are labeled: rowlabel, sex, age, livharm1, ethgrp2, educat3, and work. The data is organized into 19 rows, each representing a survey microdata record.

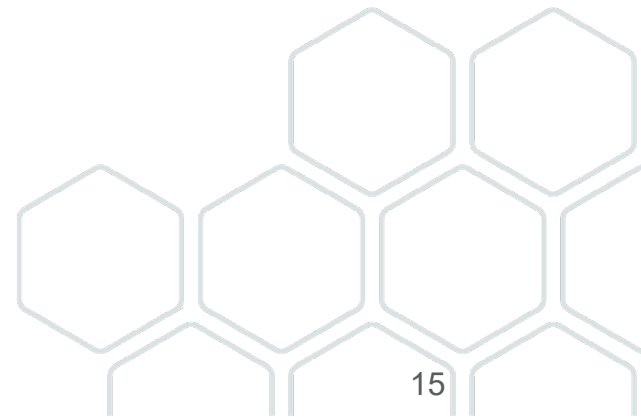
	rowlabel	sex	age	livharm1	ethgrp2	educat3	work
1	61302140	2	36	1	1	1	1
2	61384060	1	44	4	1	3	1
3	63684260	1	43	1	1	2	1
4	63790220	2	27	3	4	3	1
5	63843180	1	38	1	1	4	1
6	71105020	2	18	3	3	2	1
7	71105140	1	65	3	3	4	1
8	71106020	1	58	5	1	1	2
9	71106060	2	38	3	1	1	2
10	71108100	1	29	3	4	4	2
11	71110140	1	38	2	1	4	1
12	71110260	1	67	3	1	1	1
13	71114020	1	21	3	1	3	1
14	71115060	2	37	4	4	2	2
15	71119020	2	23	3	2	4	1
16	71119060	1	57	1	5	5	2
17	71119140	2	34	3	4	3	2
18	71119180	1	55	3	1	4	1
19	71119220	2	27	3	1	4	2

# Survey Microdata: Outputs

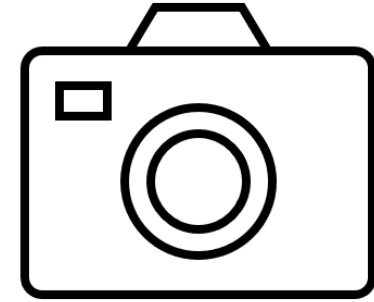


# UK Survey Microdata

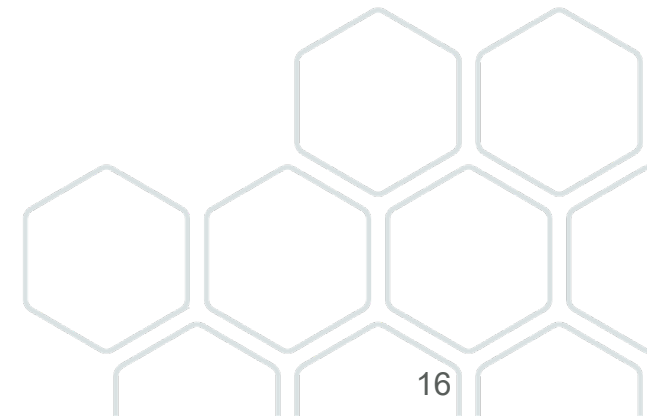
- High-quality data
- nationally representative at the UK level
- Large sample size
- Cross-sectional
- Longitudinal
  - Cohort
  - Panel



# Survey microdata example: Cross-sectional surveys



- Data for a single point in time
- Many UK surveys are repeated cross-sectional
- Similar (or same) info asked to people each time
- Can be used to compare trends over time





# Key data: Cross-sectional surveys

- Crime Survey for England and Wales (1982-)
  - information about levels of crime, public attitudes to crime and other related issues.
  - asks people about crimes they have experienced in the last year.
  - An important alternative to police records.
- British Social Attitudes Survey (1983 -)
  - Runs annually
  - Measure of public views on a range of topics such as work, equalities, welfare, health and how the country is run.

# Crime Survey for England and Wales

- Repeated cross-sectional survey
- Adults aged 16+ and also 10-15 year olds
- 35,000 households
- Victim of crime or antisocial behaviour in the previous 12 months
- Questions also cover demographic and other information e.g attitudes to police



# Longitudinal data – Panel & Cohort data

- Similar to cross-sectional as also **large, nationally representative** studies
- However one key difference - follow the **same individuals or households over time**
- Change at individual level over time
- Two main types – panel and cohort



# Panel studies

- Measurements are called waves
- Random sample of individuals
- Frequency of waves depends on study design
- Questionnaires core content remains the same, but additional questions can be asked



# Understanding Society

- Data collected from all household members
- 40,000 households, ~100,000 individuals
- Ethnic minority boost sample
- Biomarker data
- Consents to administrative data linkage
- Topics include: employment, family networks, religion, ethnicity, health, environmental behaviours and parenting and childcare.



# Cohort studies

- Measurements are called sweeps
- Individuals with a common event
- Questionnaire content is age-specific
- Tend to focus on health, social and economic circumstances



# Birth cohort studies example



- 1958 National Child Development Study
  - 17,415 people in England, Scotland and Wales
  - Development, economics, family, health and attitudes
  - Valuable data on socioeconomic circumstances, health adversity and social mobility
  - Also an important resources in the study of genetics
- Other examples include 1970 British Cohort Study and the Millennium Cohort Study



# Cross- national surveys

- Allow comparisons across different countries
- Topics include: education and income, working conditions, poverty
- Examples: European Quality of Life Survey, European Election Study, European Social Survey, European & World Values Studies, International Social Survey Programme
- Most aren't included in our catalogue but provide signpost



# International Macrodata

# International Macrodata

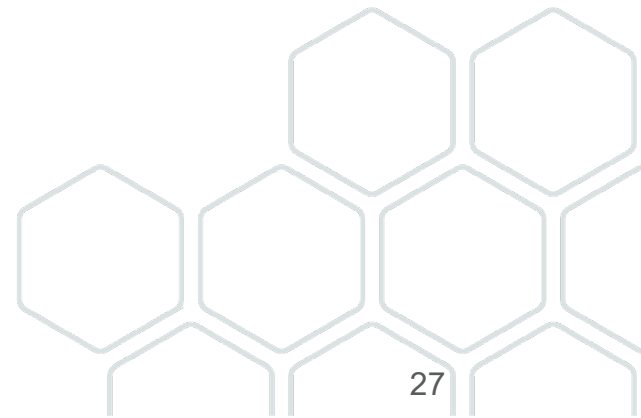
- Time series data aggregated to country/region
- Regularly updated
- International governmental organisations
- Certain access conditions



# International Macrodata themes

Databanks cover topics such as:

- Economic performance and development
- Trade, industry and markets
- Employment
- Demography, migration and health
- Governance

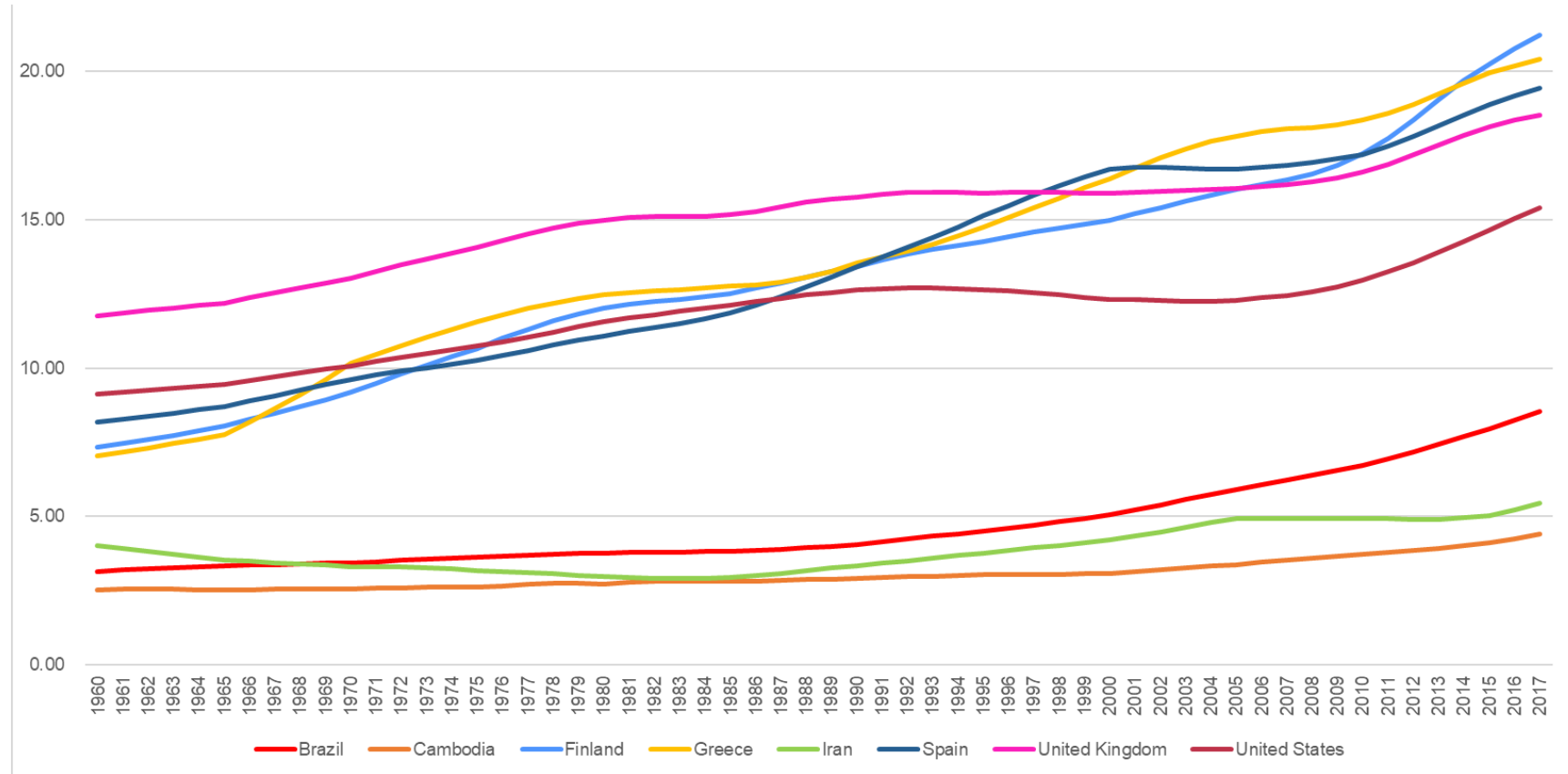


# International Macrodata: Tools

- UKDS.Stat or IMF e-library
- IMF, OECD and World Bank are available without registration
- UKDS.stat - view the data by provider
- Extract the information you require
- User guides and video tutorials available



# International Macrodata Outputs



Population ages 65 & over (% of total population) 1960 – 2017  
World Bank (October 2019): World Development Indicators

# Census Data

# UK Census Data

- 1971-2011 census data, 2021 coming soon!
- Used as baseline for other statistics
- There are 4 kinds of census data available from the UKDS:
  - Aggregate
  - Boundary
  - Flow
  - Microdata
- Different data have different access requirements

# Census Aggregate Data

- counts of individuals, households or families with particular characteristics (or combinations of characteristics) in specific geographic areas or zones
- For example: numbers of people who are aged over 50 and are unemployed within each of the wards in the district of Greater Manchester
- Characteristics include a wide range of demographics or socio-economic themes





# Census tools- InFuse

UK Data Service  
Census Support



## InFuse: 2011 Census data



Steps: **1** 2 3 4

[Start Again](#)

### Topics

[+ Show Guidance](#)

#### Filters

[Clear filters](#)

Showing 90 topic combinations

Page 1 of 6

[First](#) < [1](#) [2](#) [3](#) > [Last](#)

#### Topics

- ☐ Accommodation type
- ☐ Adult lifestage (alternative adult definition)
- ☐ Adults in household, number of
- ☐ Age
- ☐ Age of arrival in the UK
- ☐ Age of children
- ☐ Age of household reference person
- ☐ Age of schoolchildren and

• Accommodation type

Select

• Age  
• Dependent children  
• Family status  
• Sex

Select

• Age  
• Economic activity  
• Industry

Select

• Age  
• Economic activity

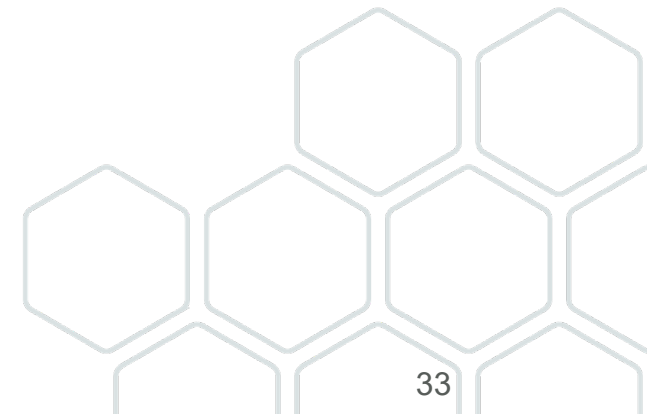
Select

• Accommodation type  
• Usual resident population

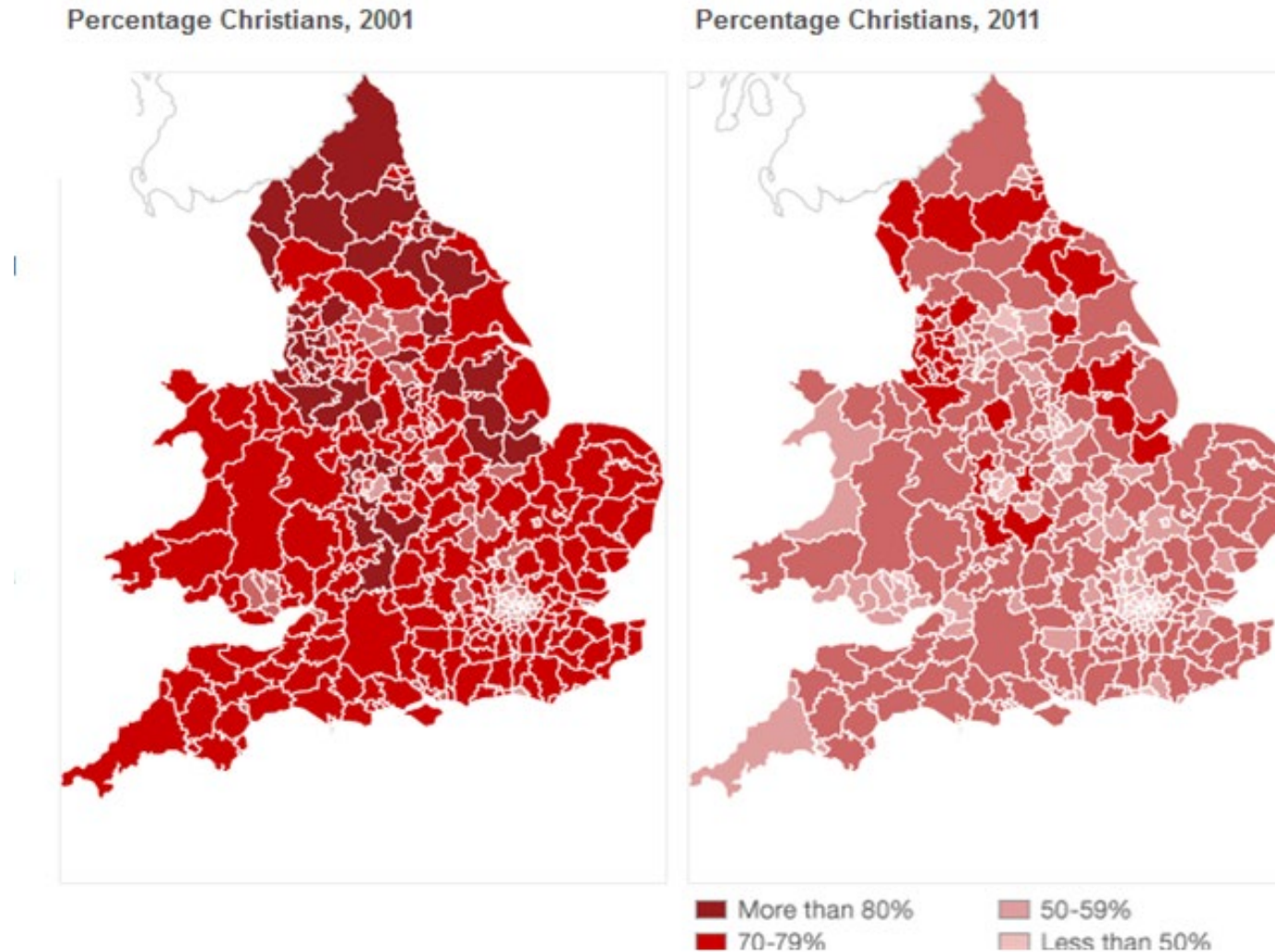
• Age  
• Economic activity  
• Hours worked  
• Sex

• Age  
• Economic activity  
• Occupation  
• Sex

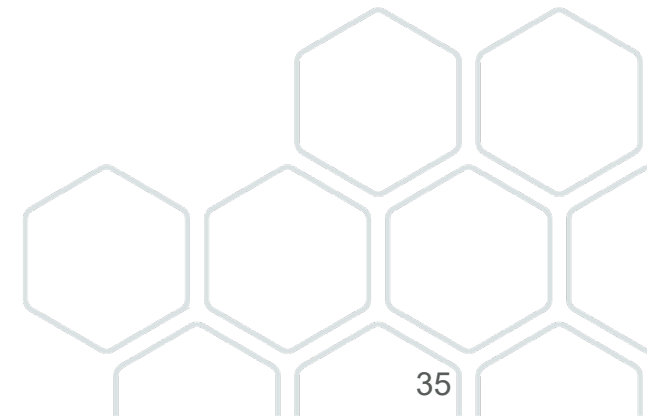
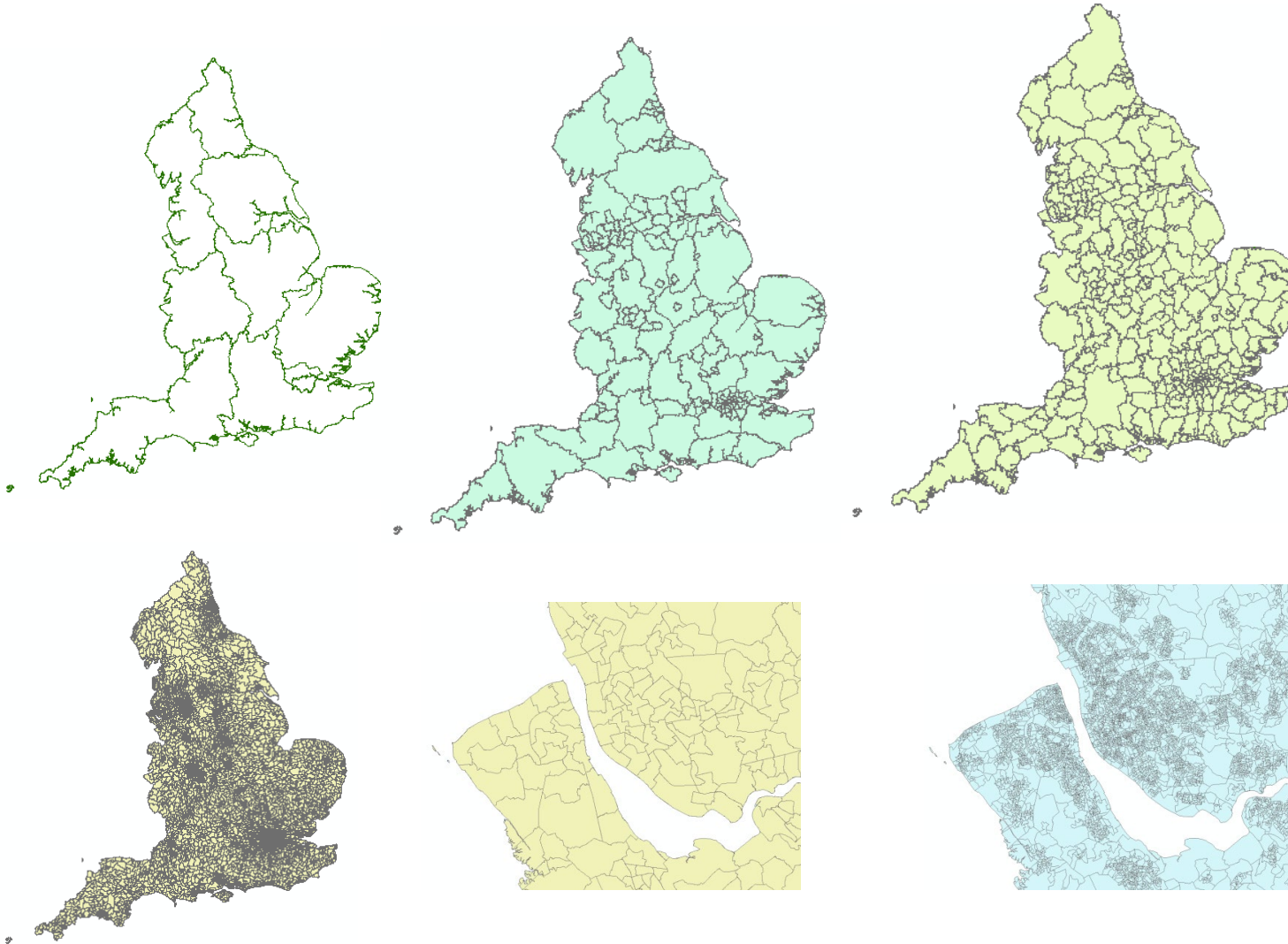
• Age  
• Qualification, highest level of



# Census data Output: Religion



# Census Boundary data



# Census tools: Boundary data

Easy Download

Boundary Data Selector

Postcode Directory

Postcode Data Selector

What and Where?

Format

For help with using the Boundary Data Selector interface, see:

How to use Boundary Data Selector

Select:

Country

Geography

Dates

Find

Boundaries

Area(s) of Interest:

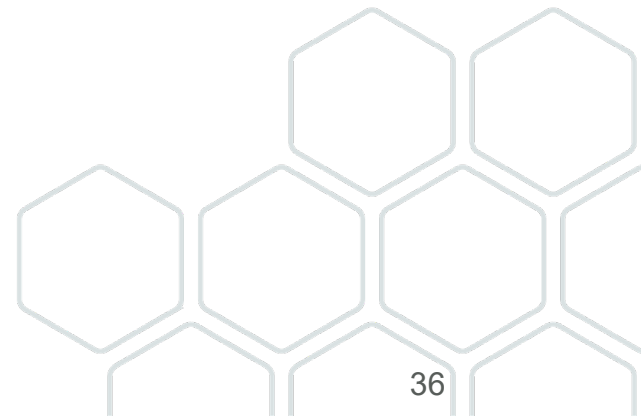
List Areas

Expand Selection

Previous List

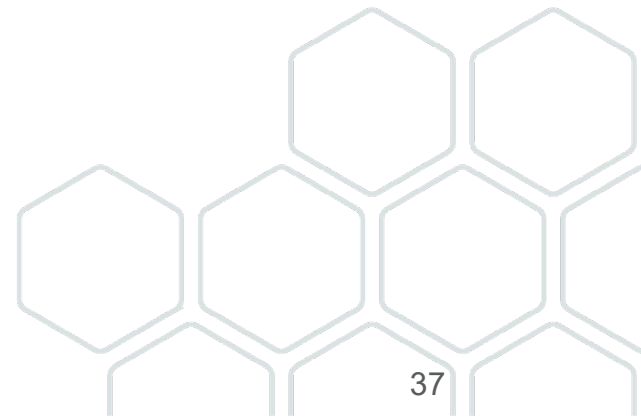
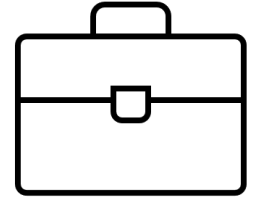
Search Summary:	
Data Format:	SHAPE
Archive Method:	Zip

Extract Boundary Data



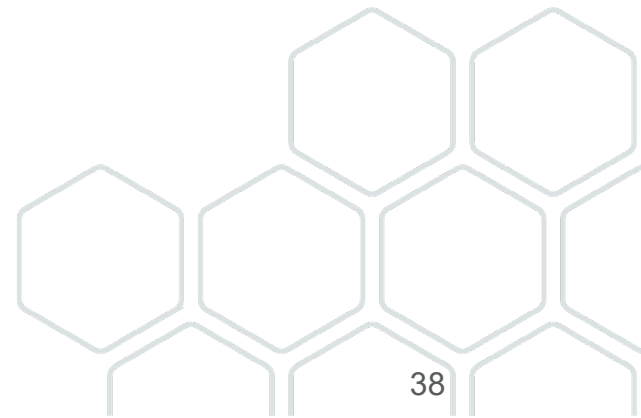
# Census Flow data

- Flows of people between places – there is an origin and destination
- Two main types: commuting and migration
- Data available through the WICID tool



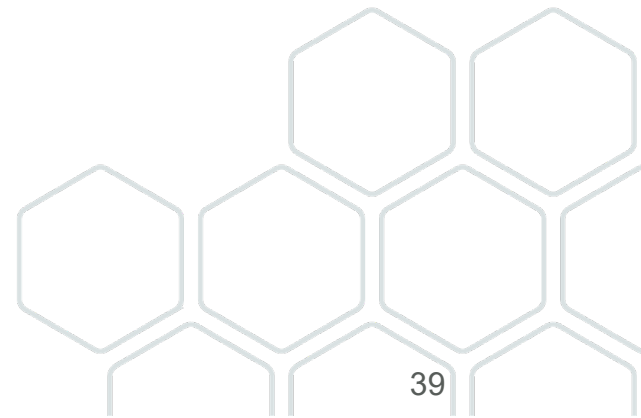
# Census Microdata

- Anonymised individual level records
- Flexible
- Samples of 1% – 5%
- Lots of topics



# Census Microdata Topics

- Demographic
- Migration
- Education
- Employment
- Family and Fertility
- Social Conditions
- Language
- Social Conditions
- Household Characteristics
- Social Class and Income
- Geographic information



# Qualitative/Mixed Methods data



# Qualitative/Mixed Methods

- non-numeric information, such as interview transcripts, diaries, anthropological field notes, answers to open-ended survey questions, audio-visual recordings and images.
- Can be searched in the catalogue or accessed through QualiBank



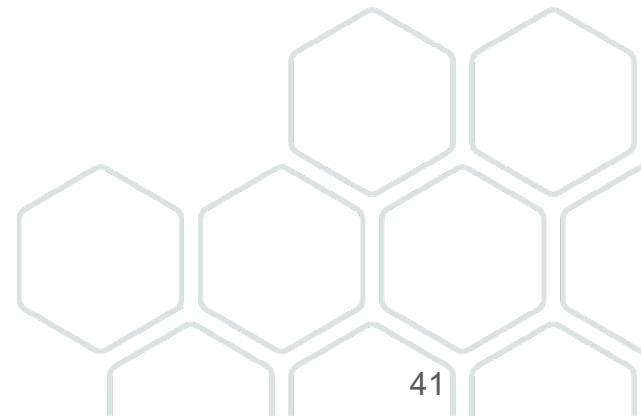
Essay by 132

SN4867 School Leavers Study, 1978

**Sex:** Female. **Age group:** 16-24. **Socio-economic status:** Not

... involved with the nursery nursery school I did child minding. W  
house. My husband retired through **ill health** and died shortly af

...



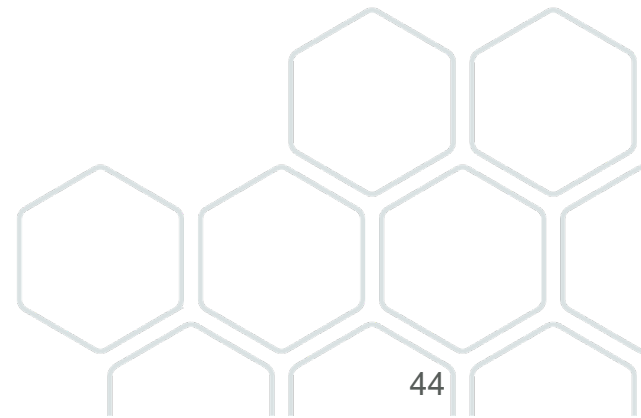
# Mentimeter quiz

- Go to [www.menti.com](https://www.menti.com) on a second device or in another window
- Join with the code: 8711 7016


# How to register with the UK Data Service

# Registering with the UK Data Service

- UK HE/FE- register through institution
- If not, apply for a username



# Registering on the website

 UK Data Service

Login | Register

[Find data](#) [Deposit data](#) [Learning hub](#) [Training and events](#) [About](#) [News](#) [Impact](#) [Help](#) [Contact](#)

## Help

If you are in the UK and your organisation is part of the UK Access Management Federation (UKAMF) and on this [list of federation members](#), you can use the username and password issued to you by your organisation to register with the UK Data Service.

If you are not in the UK, or your organisation is not on the list of federation members, [request a username](#).

## Login

Select your organisation to continue:

Continue

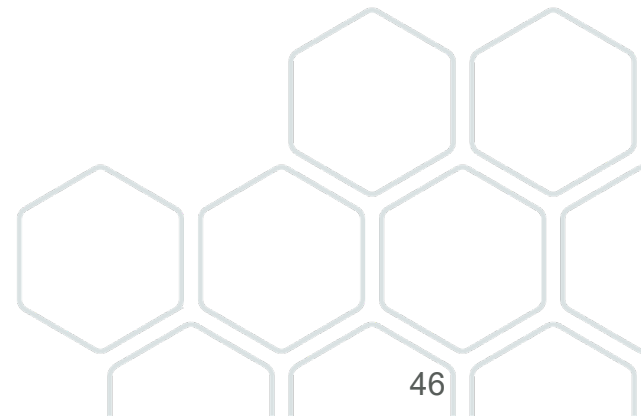
If you have a username beginning 'ukd', [use this link to login](#).

If you are a Secure Lab user, [login to Secure Lab](#).

# Searching for data

Finding and accessing data from the UK  
Data Service workshop

11<sup>th</sup> April 2022 – 10am

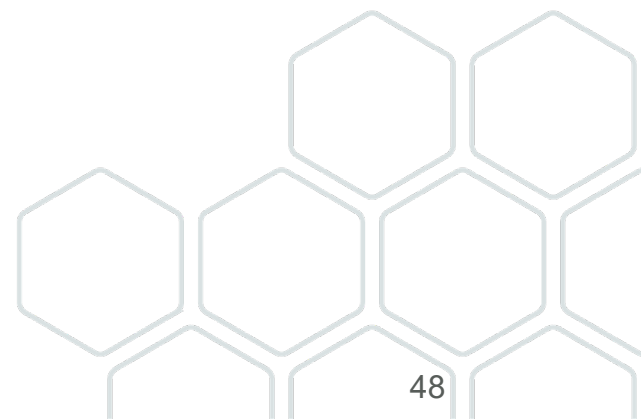


# Useful resources and further help

# Advice for new users

We have webpages for new users about:

- How to register and access data
- How to find data with our search tools
- What kinds of data we hold
- How to contact us





# Help pages

Home > Help

## Help

### Registration

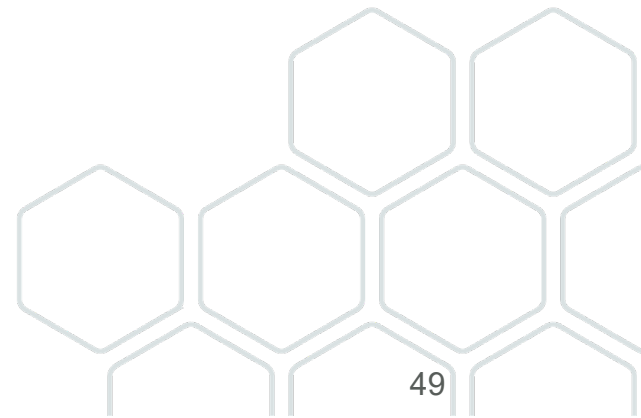
- [Registration and login FAQs >](#)
- [How to register if you are not a UK academic user >](#)
- [How to register if you are a UK academic user >](#)

### Advice for new users

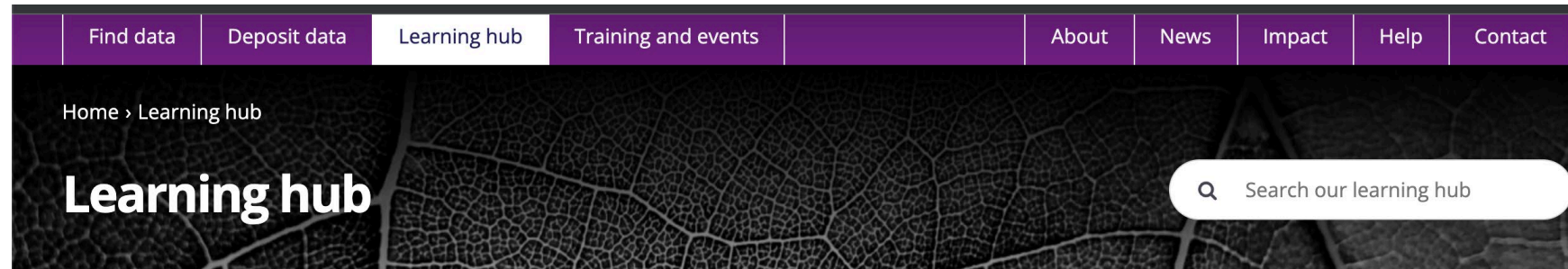
- [Data documentation >](#)
- [Reasons to cite data correctly >](#)
- [FAQs for new users >](#)
- [Tips to search the data catalogue >](#)

### How to get data and access information

### SecureLab



# Resources for using data



## Enhance your data skills and teaching

### New to using data

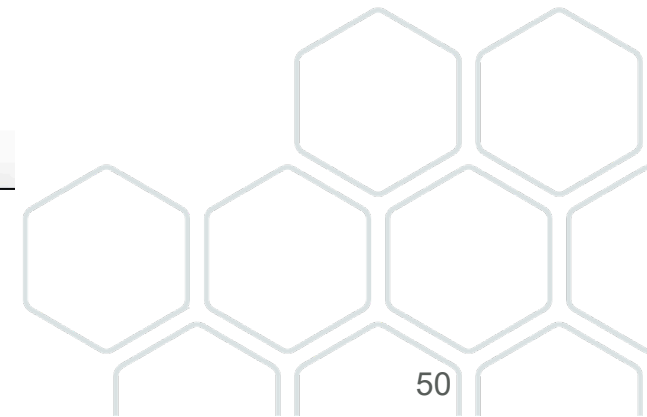
Best practice and training for researchers new to accessing and using data in our collection. Includes advice and tools to correctly cite data; student-specific information on our Dissertation Award for undergraduates; and more.

### Data skills modules


There is a wealth of data available for reuse in research and reports. These free, interactive video tutorials are designed for anyone who wants to start using secondary data. They show you how to get started with finding good quality data, understanding it and starting your analyses.

### Survey data

Survey data, including data from long-running surveys, series and longitudinal studies, are a major part of social science research. Learn how to use survey and longitudinal data through training resources including videos, on-demand webinars and written guides.



# Helpdesk

 UK Data Service

[Login](#) | [Register](#)

[Find data](#) | [Deposit data](#) | [Learning hub](#) | [Training and events](#) | [About](#) | [News](#) | [Impact](#) | [Help](#) | [Contact](#)

Home » [Contact](#)

## Contact us

### Frequently asked

Our website has been designed to enable you to access the information you require in the most straightforward way. Please check the information below and the Help section which answers frequent questions.

[How do I access the data? >](#)

[I'm looking for a specific type of data, how do I find it? >](#)

[I'm looking for ready-made statistics, do you have these? >](#)

[I'm having trouble logging in/I need to reset my password](#)

[I'm having trouble logging into SecureLab >](#)

[My account has expired, how do I renew it? >](#)

[Can I access secure data from outside the UK? >](#)

[Are your data free to access? >](#)

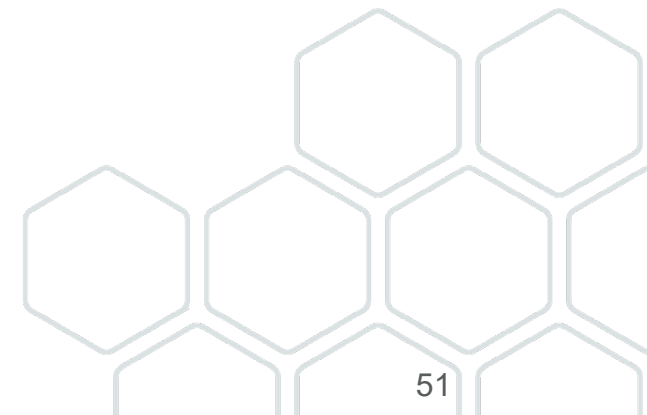
[Do I have to pay to access data for commercial use? >](#)

[I'm researching my family history, can you help? >](#)

### Contact our helpdesk

If you are still unable to find what you need, please contact our helpdesk with your specific query.

[Get in touch >](#)



Task: explore the website  
<https://ukdataservice.ac.uk/>

Any questions?

# Thank you

<https://ukdataservice.ac.uk/contact/get-in-touch/>

[help@ukdataservice.ac.uk](mailto:help@ukdataservice.ac.uk)

<https://twitter.com/ukdataservice>