

# An Introduction to the UK Data Service

8 November 2022



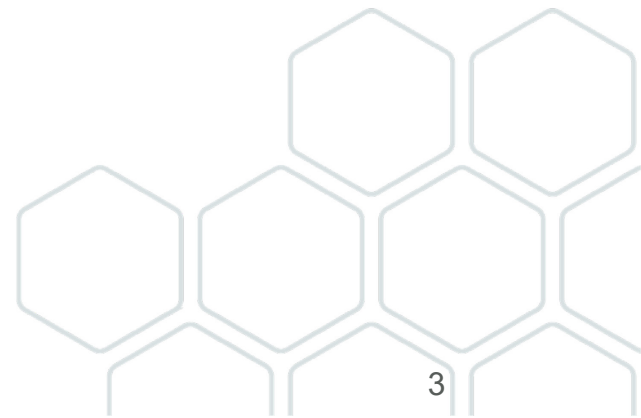
# Overview of the session

- Who are we?
- What is secondary data?
- What types of data do we hold?
- Interactive quiz.
- Useful resources.
- 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.



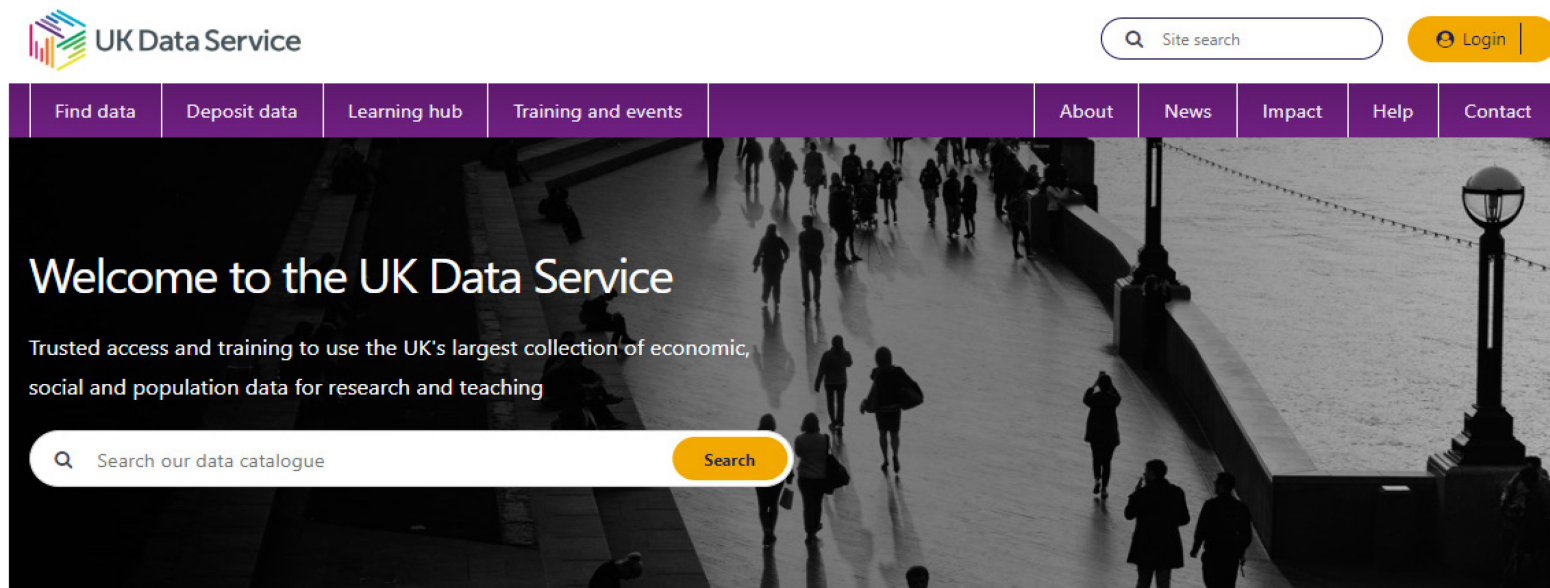
# Example – Response to COVID-19

- 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.
- [UK Data Service Impact.](#)





# UK Data Service Website



The header of the UK Data Service website features the logo on the left, a site search bar and a login button on the right, and a navigation menu with links to Find data, Deposit data, Learning hub, Training and events, About, News, Impact, Help, and Contact. Below the navigation menu is a large hero section with a background image of a busy city street. The hero section contains the text 'Welcome to the UK Data Service' and 'Trusted access and training to use the UK's largest collection of economic, social and population data for research and teaching'. A search bar with the text 'Search our data catalogue' and a 'Search' button is also present in the hero section.

UK Data Service

Site search Login

Find data Deposit data Learning hub Training and events About News Impact Help Contact

## Welcome to the UK Data Service

Trusted access and training to use the UK's largest collection of economic, social and population data for research and teaching

Search our data catalogue Search

## Key services



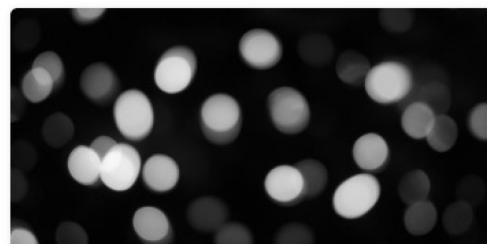
### [Essential data training resources](#)

Find all UK Data Service training and guidance in our special newsletter. Dr. Vanessa Higgins, our Service Director of User Support and Training, also [provides an overview of our training programmes](#).



### [Browse data by theme or type](#)

Ageing, COVID-19, crime, economics education, environment & energy, ethnicity, food, health housing, information & communication, labour, politics, poverty.

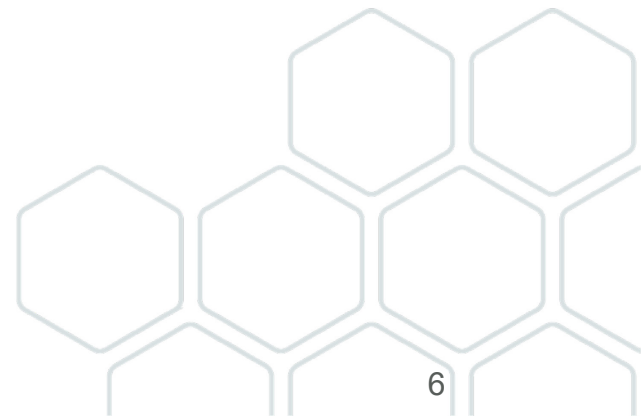


### [New Census 2021 data](#)

[View our latest news](#) on the second release of data for Northern Ireland. [Read some highlights](#) from the data for England and Wales. [Find out more](#) on the first release for Northern Ireland.

# 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.



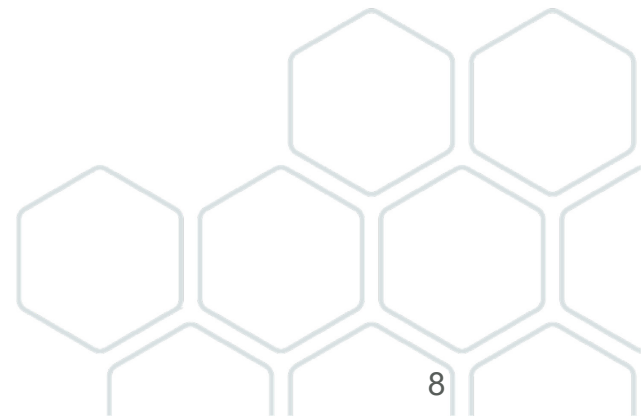
# What is secondary analysis and why do it?

- 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 existing data that has already been collected.
- Usually free, large range of sources, representative, robust, and transparent.



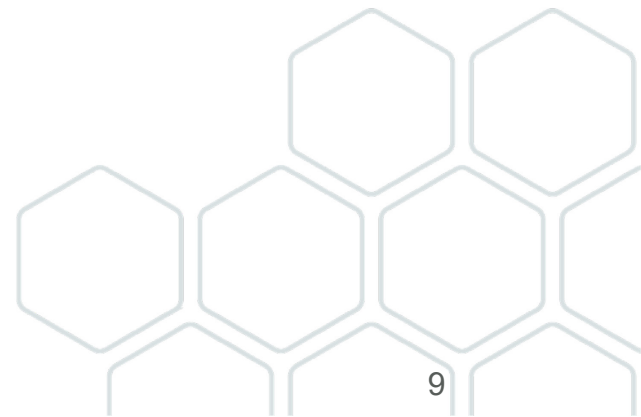
# Sources of data

- 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

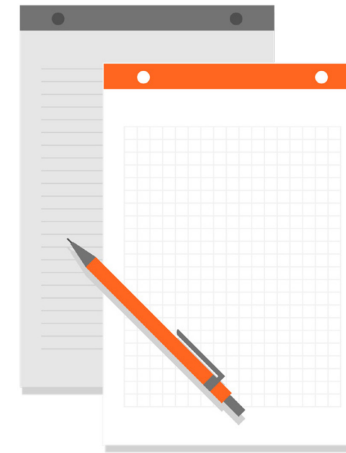
Survey microdata	International macrodata	Census	Qualitative/Mixed Methods
Major UK Surveys:  Cross national  Longitudinal	Multi-national aggregate databanks and survey data	Aggregate data for 1971- 2011  Microdata for 1991-2011  Flow data  Boundary data	Range of multimedia qualitative data sources  Mix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

# Survey Microdata



# About Survey Microdata

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



# Survey Microdata example

File

Edit

View

Data

Transform

Analyze


Graphs


Utilities


Add-ons


Window


Help













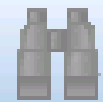





















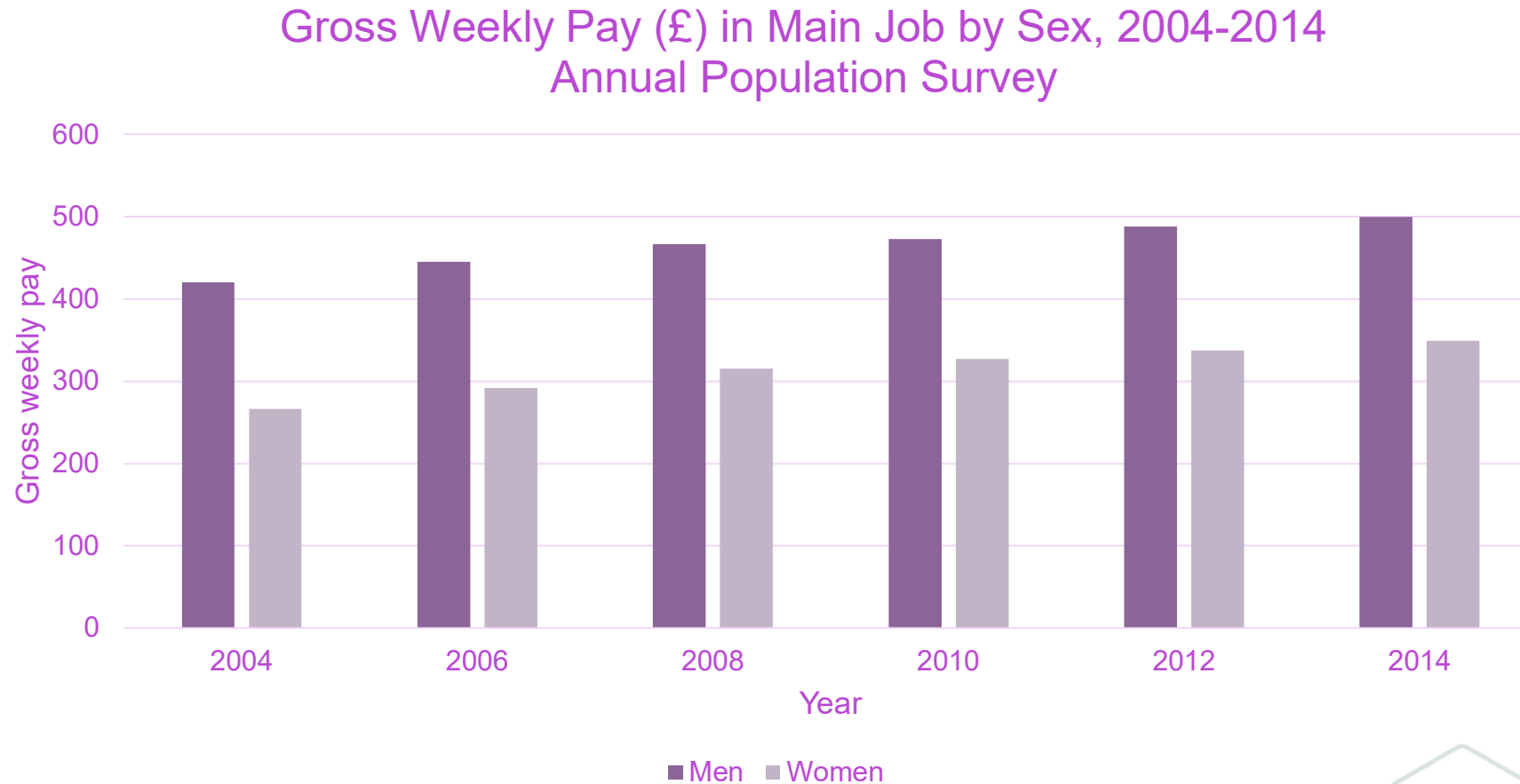






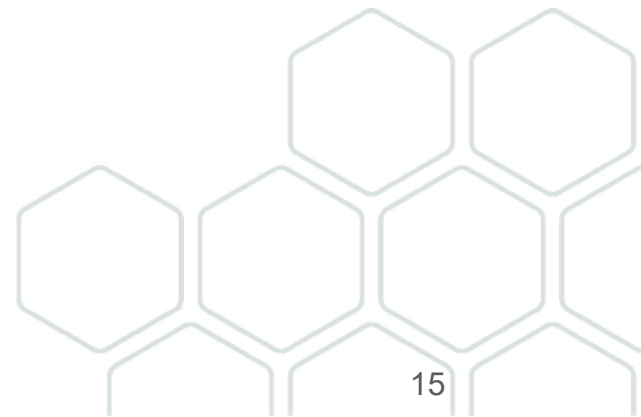
	rowlabel	sex	age	livharm1	ethgrp2	educat3	work
1	61302140	2	36	1	1	1	1
2	61384060	1	44	4	1	3	1
3	63684260	1	43	1	1	2	1
4	63790220	2	27	3	4	3	1

# Survey Microdata: Outputs



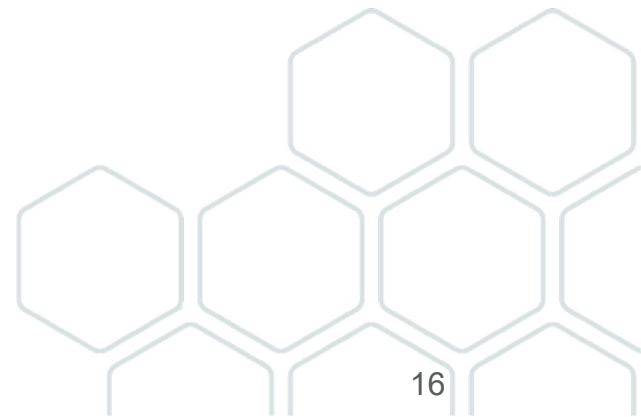
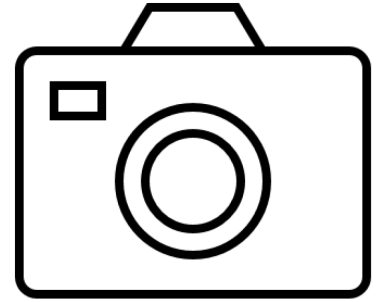
# UK Survey Microdata

- 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 of 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

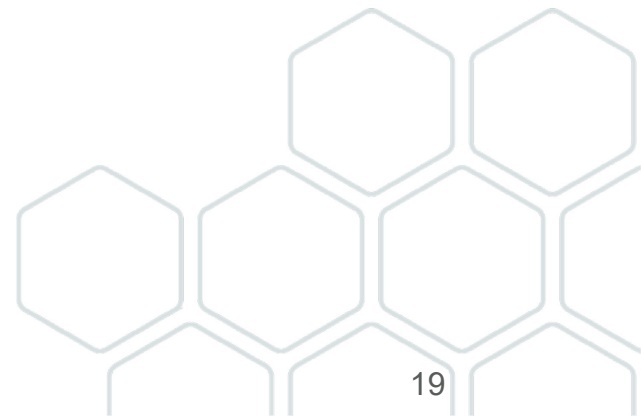
- Repeated cross-sectional survey.
- Adults aged 16+ and also 10-15 year olds.
- 35,000 households.
- Victim of crime or antisocial behaviour in the previous 12 months.
- Questions also cover demographic and other information e.g. attitudes to police.





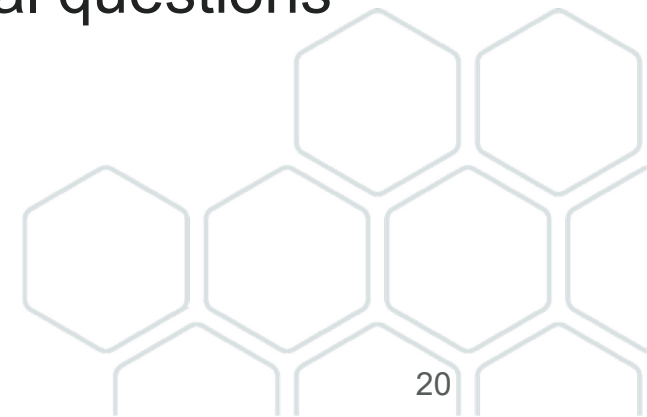
# Longitudinal data – Panel & Cohort data

- 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, around 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

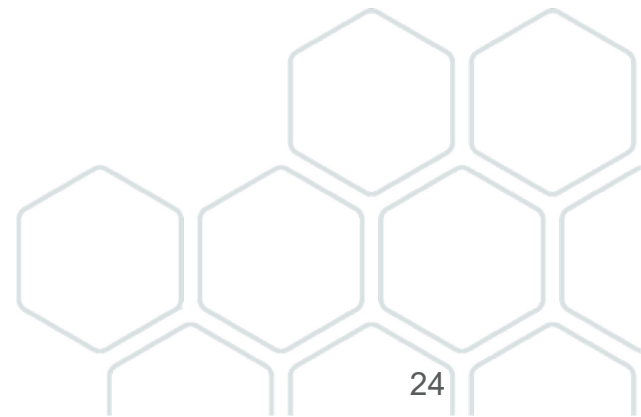


- National Child Development Study (1958-)
  - 17,415 people in England, Scotland, and Wales.
  - Development, economics, family, health, and attitudes.
  - Valuable data on socioeconomic circumstances, health adversity, and social mobility.
  - Also an important resources in the study of genetics.
- Other examples include British Cohort Study (1970-) and the Millennium Cohort Study (2000-).



# 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 are not included in our catalogue, but are signposted.

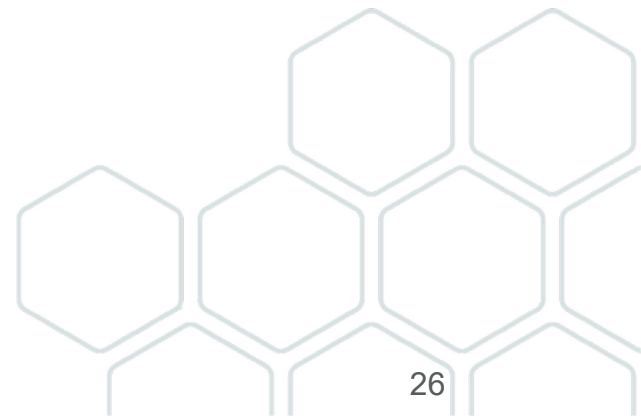


# International Macrodata



# About International Macrodata

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



# International Macrodata themes

Databanks cover topics such as:

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

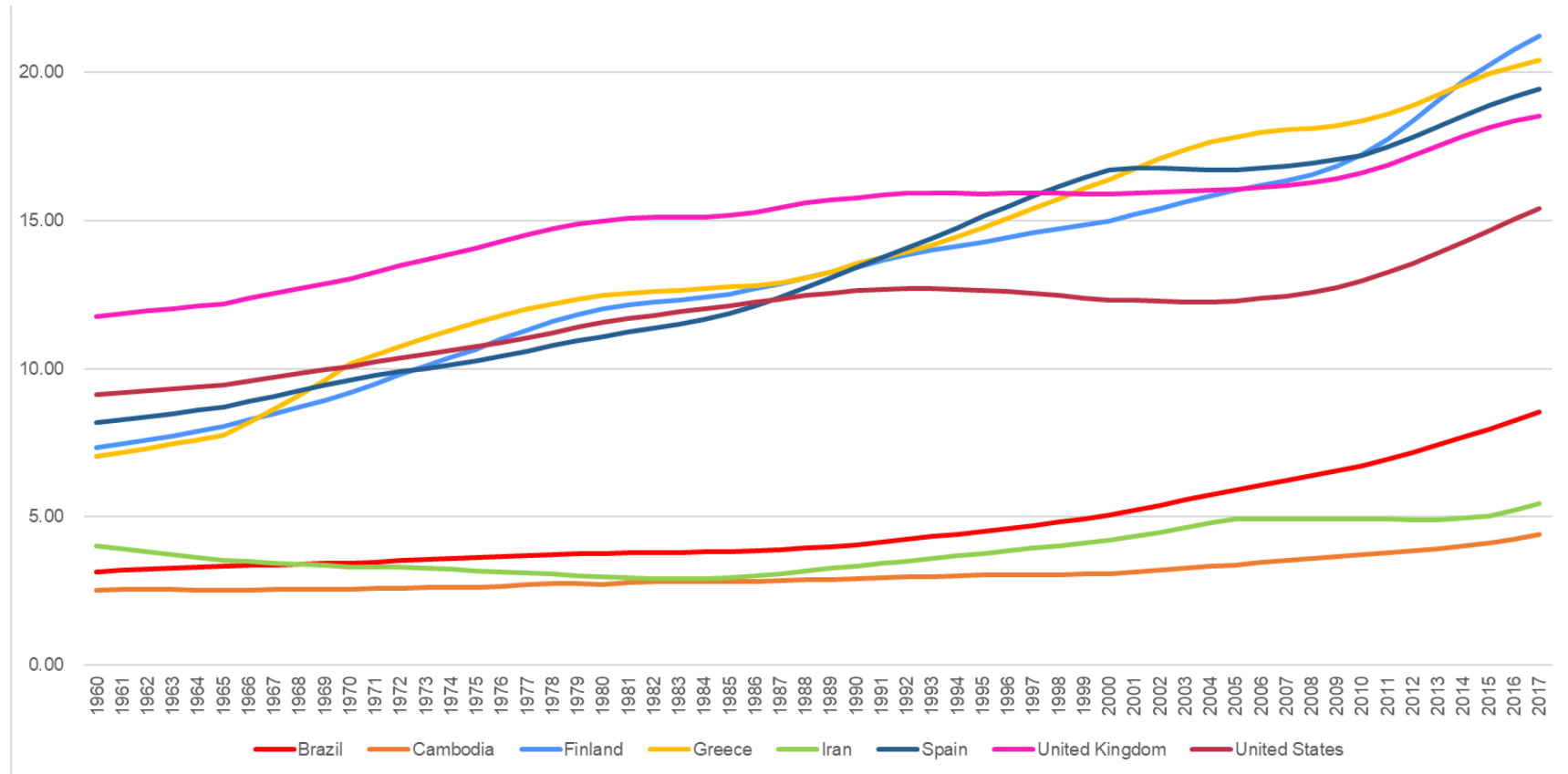


# International Macrodata: Tools

- [UKDS.Stat](#) or IMF e-library.
- The International Monetary Fund, Organisation for Economic Cooperation and Development, 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

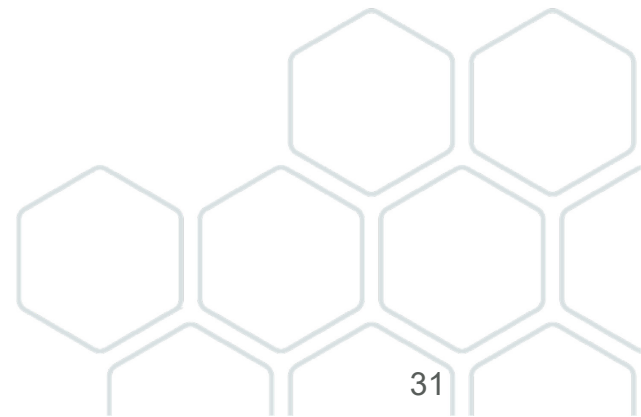


Population ages 65 & over (% of total population) 1960 – 2017  
World Bank (October 2019): World Development Indicators

# Census Data

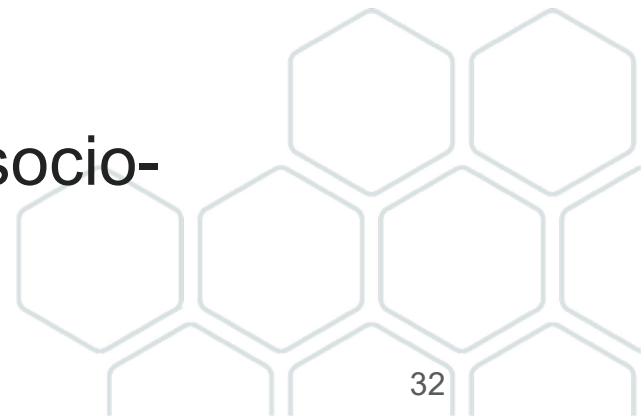
# UK Census Data

- 1971-2011 census data, 2021 released soon. More information: [Census 2021: What to expect and when.](#)
- 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

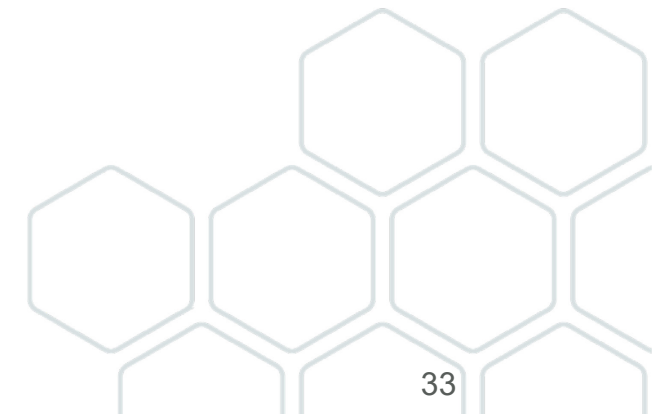
Select

• Accommodation type  
• Usual resident population

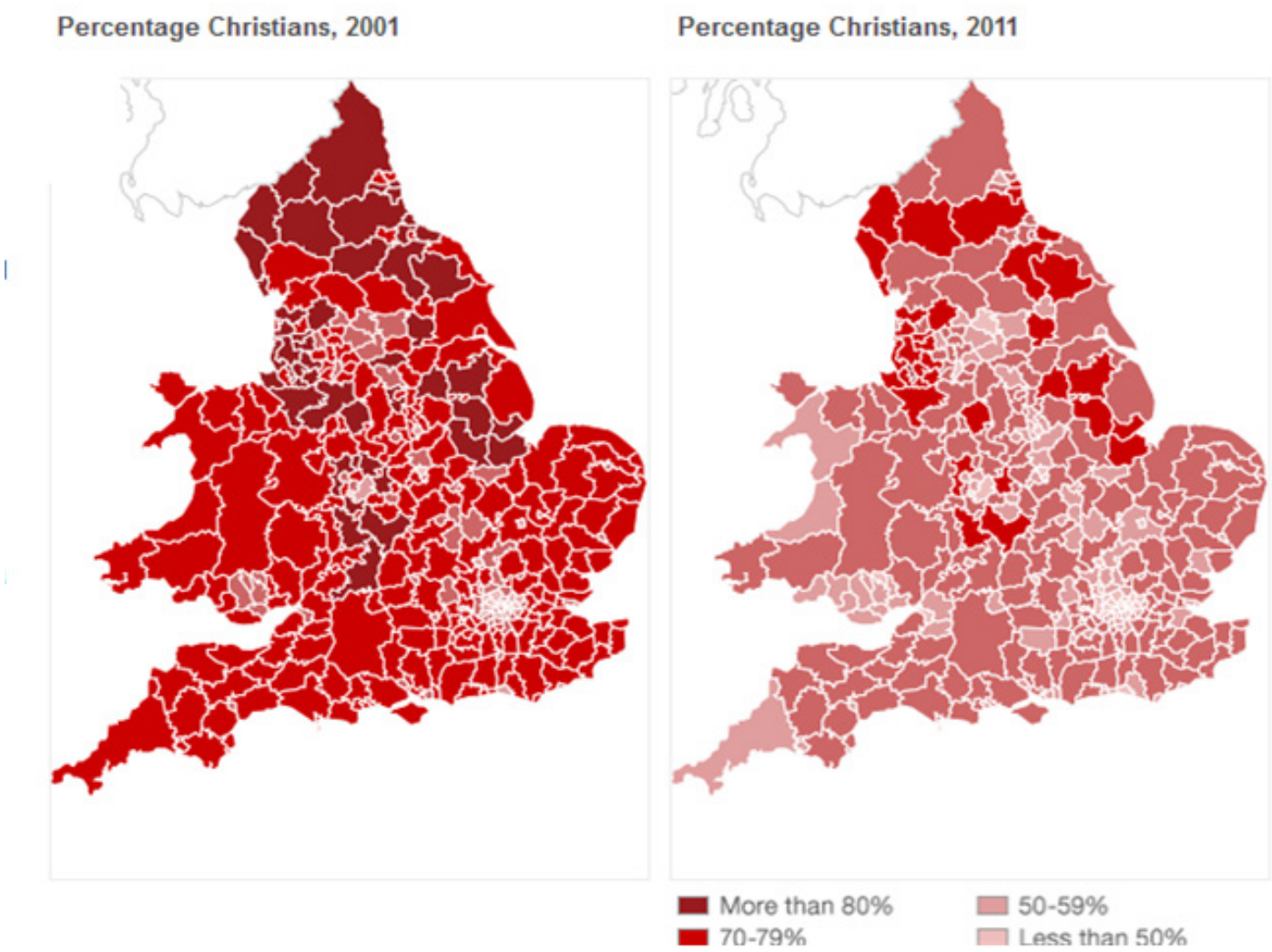
• Age  
• Economic activity  
• Hours worked  
• Sex

• Age  
• Economic activity  
• Occupation  
• Sex

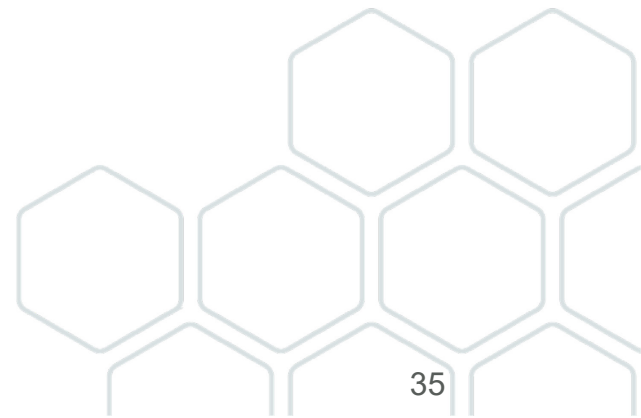
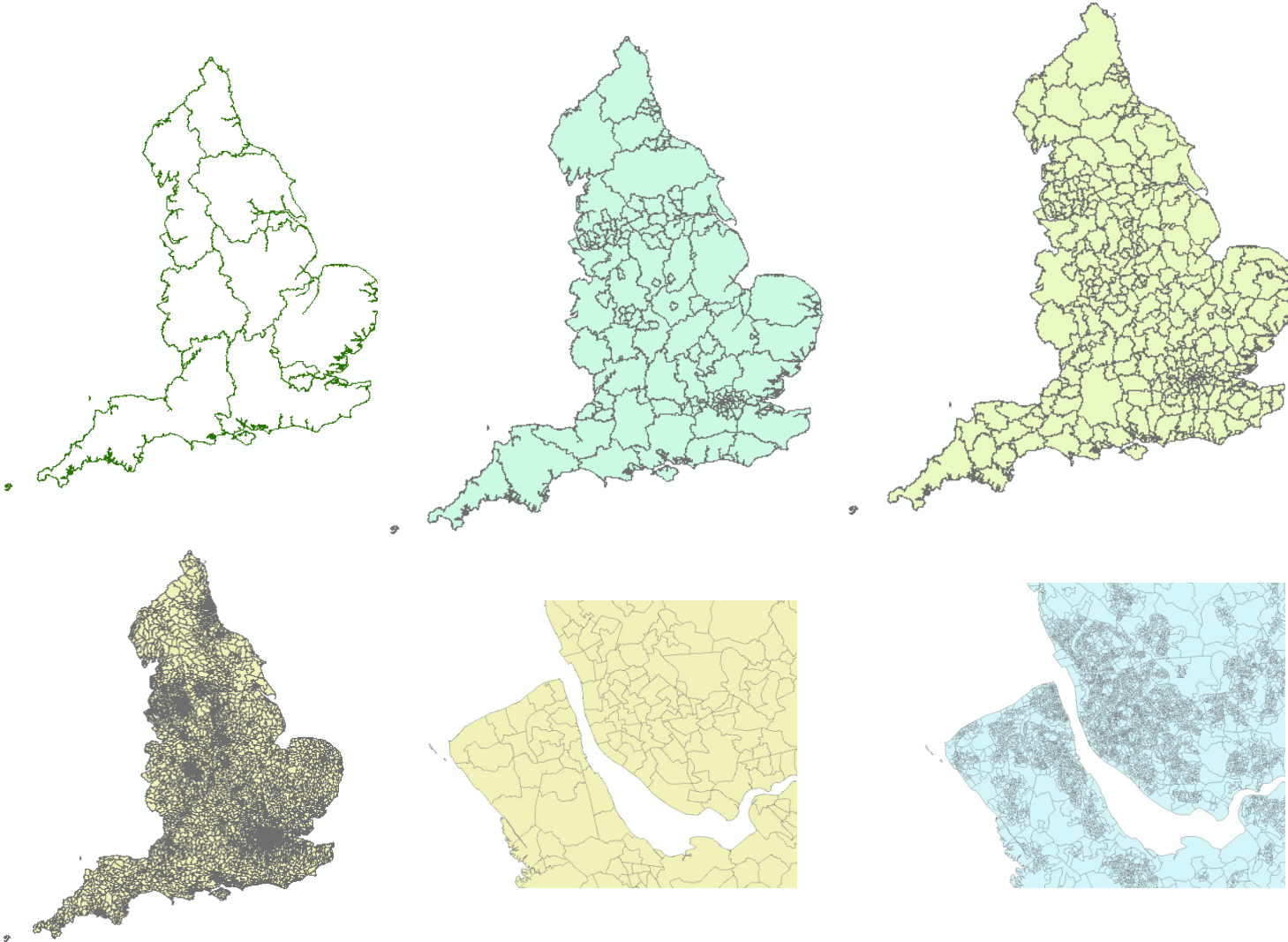
• Age  
• Qualification, highest level of



# 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:

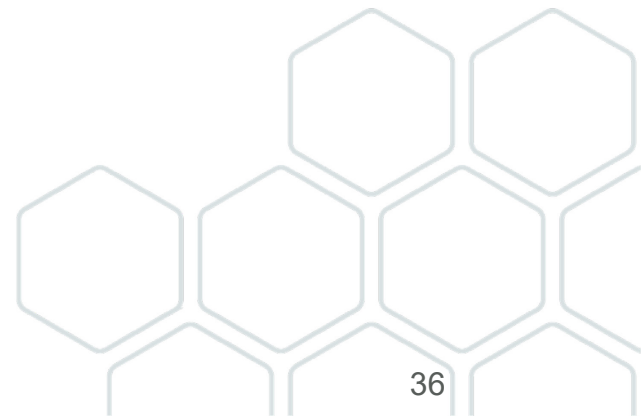
List Areas

Expand Selection

Previous List

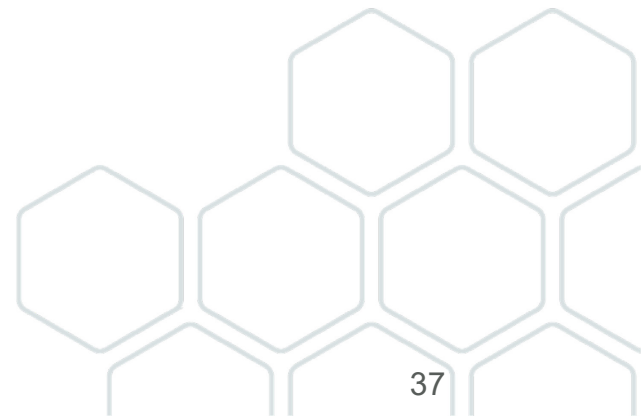
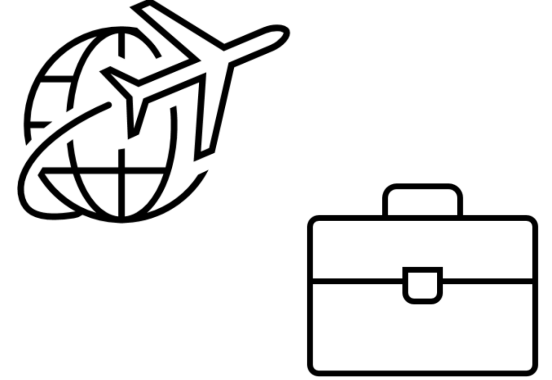
Search Summary:	
Data Format:	SHAPE
Archive Method:	Zip

Extract Boundary Data



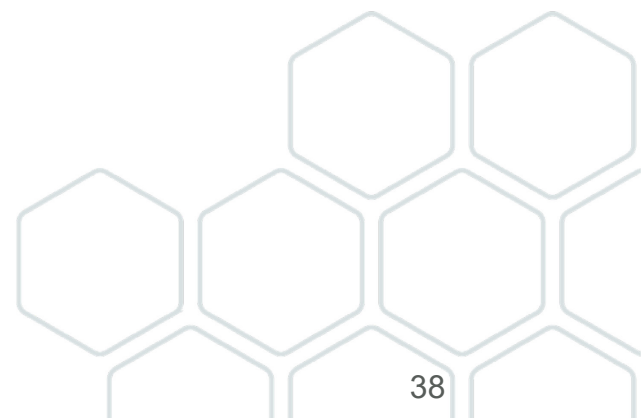
# Census Flow data

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



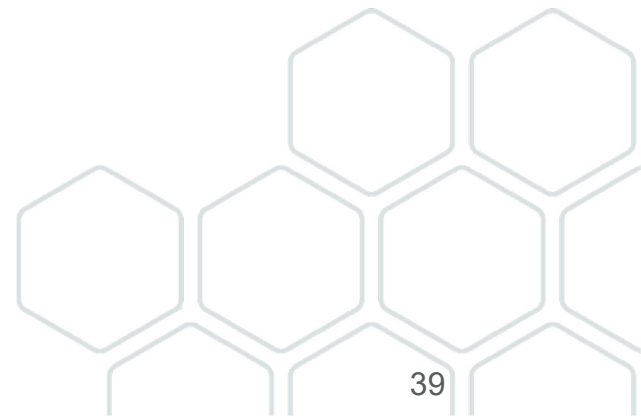
# Census Microdata

- 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](#).

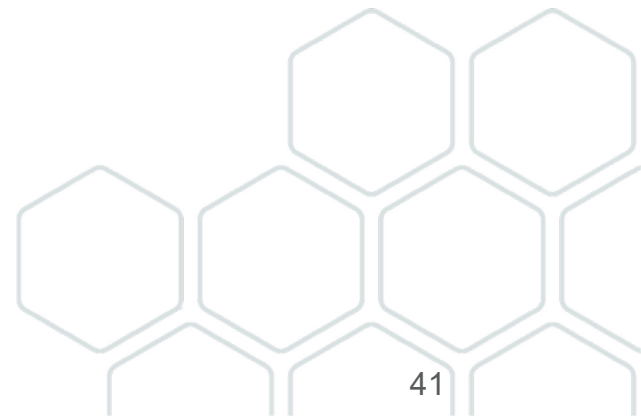


[Essay by 132](#)

SN4867 School Leavers Study, 1978

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

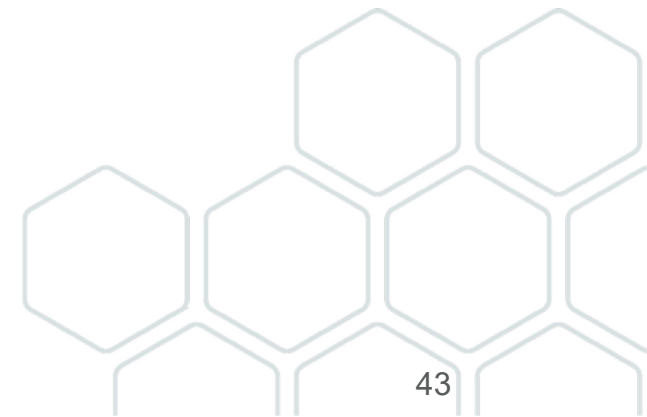
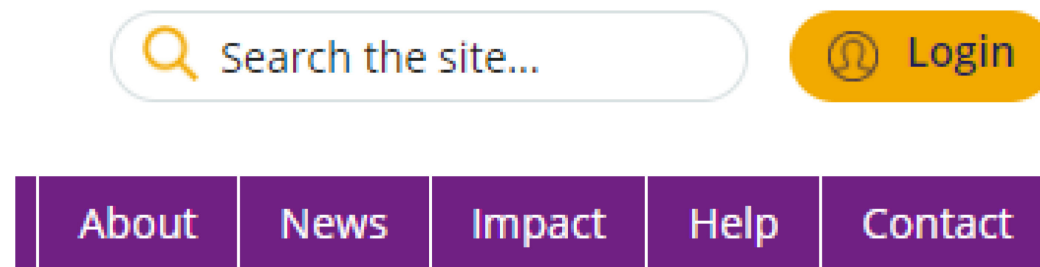
... involved with the nursery nursery school I did child minding. W  
house. My husband retired through ill health and died shortly af  
...



# How to register with the UK Data Service

# Registering with the UK Data Service

- UK Higher education/Further education- [sign in through your institution](#)
- If not, [request a username](#)



# Registering on the website

Find data	Deposit data	Learning hub	Training and events		About	News	Impact	Help	Contact
-----------	--------------	--------------	---------------------	--	-------	------	--------	------	---------

## Login

If you are at a UK college or university, it's likely you can sign-in using your username/password for your college or university. Start typing your organisation name below:

You previously selected: [University of Essex](#)

Start typing the name of your organisation...

**Continue:** you will be redirected to your organisation's website to sign-in

☒ My organisation is not listed.

## Registration

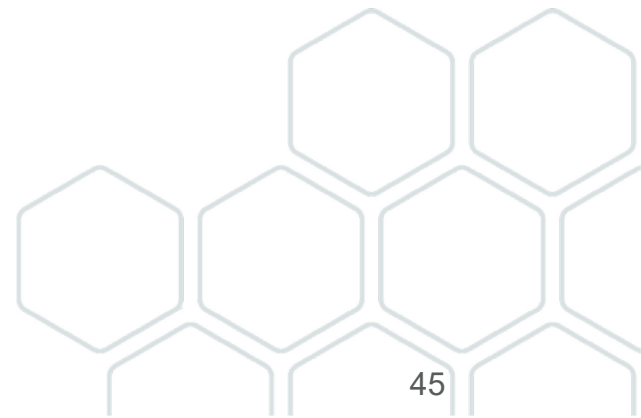
If you can't find your organisation in the list above you will need to [request a username](#) and then [sign-in here](#).

Requests for usernames are manually verified and can take up to 5 working days to process.

# Searching for data

Finding and accessing data from the UK Data Service workshop

10<sup>th</sup> November 2022 – 10am

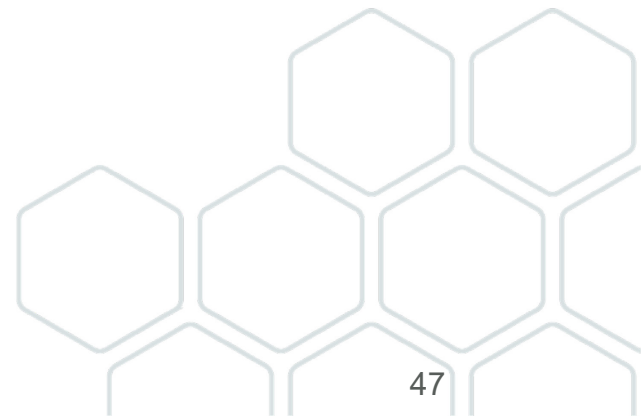


## Useful resources

# Advice for new users

We have webpages for new users about:

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



## Help pages

### 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

[Which categories of data are most suitable for me >](#)

[What download and data formats are available >](#)

[What data can I get? >](#)

[How to download and order your data >](#)

[Types of data access >](#)

[How can I use data from the UK Data Service for my project? >](#)

[FAQs about how to get data and our access policy >](#)

[Can I request specific variables or subsets of data >](#)

### SecureLab

[How do I apply to use UKDS SecureLab? >](#)

[Output release checklist for researchers >](#)

[What is the UK Data Service SecureLab? >](#)

[Who can apply to access SecureLab? >](#)

[COVID-19: Application changes to SecureLab during the pandemic >](#)

[General SecureLab FAQs >](#)

[Project roles and different requirements >](#)

[Training requirements to access SecureLab >](#)

[Changes to your project after approval >](#)

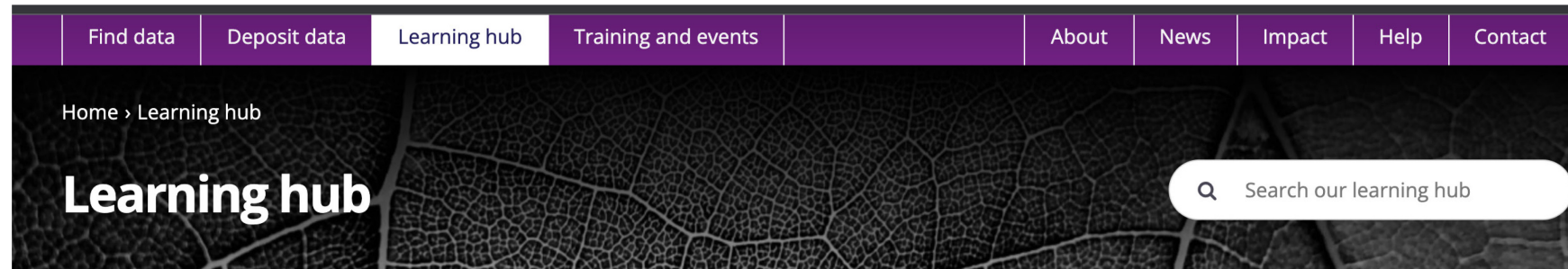
[Completing the Secure Access User Agreement >](#)

[SecureLab application turnaround times >](#)





# Resources for using data



## Enhance your data skills and teaching

### New to using data

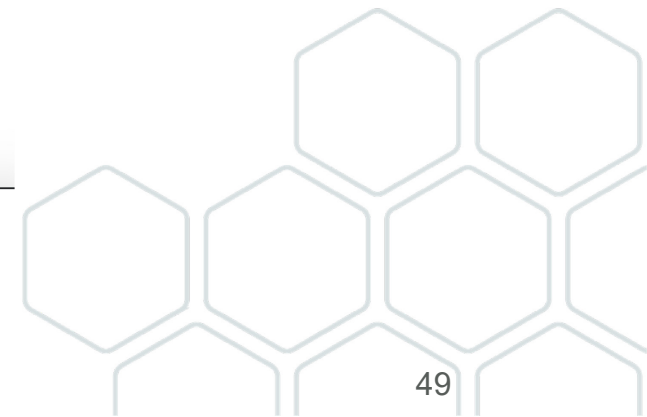
Best practice and training for researchers new to accessing and using data in our collection. Includes advice and tools to correctly cite data; student-specific information on our Dissertation Award for undergraduates; and more.

### 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

[Home](#) > [Contact](#)

## Contact us

### Find answers quicker online

The quickest and easiest way to answer your general query is to [visit our Help section](#).

Whether you want to know [how to register](#) or [how to access our data catalogue](#), [how and who can apply to use UKDS SecureLab](#), more [data skills training and teaching](#) or other resources, they are on this website.

If you are new to our service, try searching [new to using data](#) or take a look at our [FAQs section](#).

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

[Visit our Help section](#) >

### Technical issues

The best way to get IT help is to complete our [technical help form](#) if you have any issues with the website, accessing UKDS SecureLab or ReShare.

### Get in touch

If you are unable to find what you need on our website, please complete this [helpdesk form](#). We aim to get back to you within five working days of receiving your completed form.

Task:

Explore the website

<https://ukdataservice.ac.uk/>



# Thank you

[UK Data Service: Get in Touch](#)

[Email](#)

[Twitter](#)

[Newsletter](#)