

# An Introduction to the UK Data Service

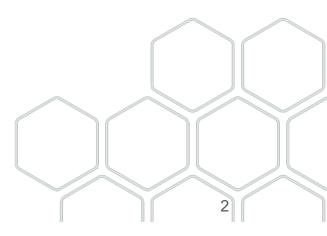
Emily Durrant
Data Access and Use Assistant
5th October 2021





#### Overview

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



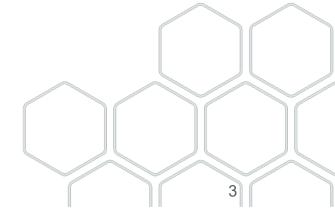
#### What is the UK Data Service?

Comprehensive resource funded by the ESRC

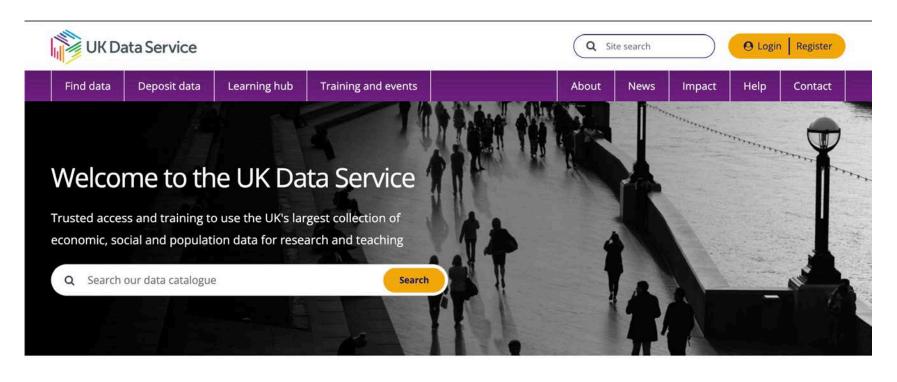
Access to secondary social science data

The UK Data Archive is the lead organisation

Support, training and guidance



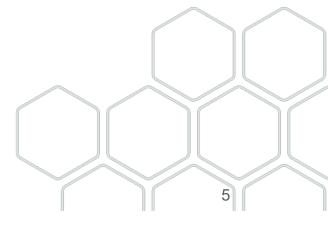
#### **UK Data Service Website**



Key services

#### 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 data?

 Facts and statistics collected together for reference or analysis

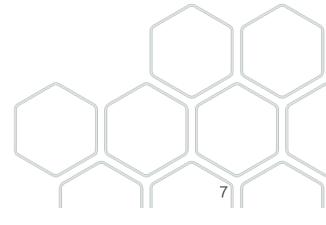
Distinct pieces of information

 Surveys, administrative records, business records, censuses

## How do you get data?

- Primary data collection?
- Advantages of secondary data collection

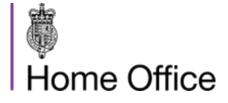




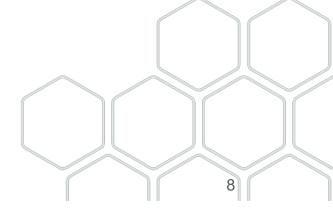
#### Sources of data

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









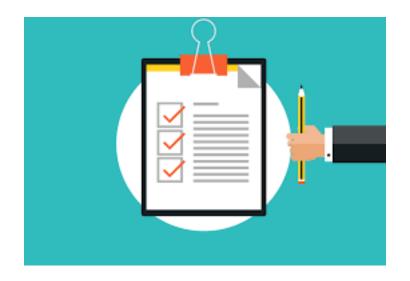
## Types of data

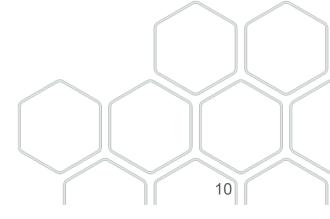
Survey microdata	International microdata	Census	Qualitative/Mixed Methods
Major UK Surveys  Cross national	Multi-national aggregate databanks and	Aggregate data for 1971- 2011	Range of multimedia qualitative data
Longitudinal	survey data	Microdata for 1991- 2011	sources
			Mix of qualitative and quantitative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

#### Microdata vs Macrodata

- Microdata
  - Data at the individual level
  - Collected through surveys

- Macrodata aggregate data
  - Region or country level
  - Aggregated counts





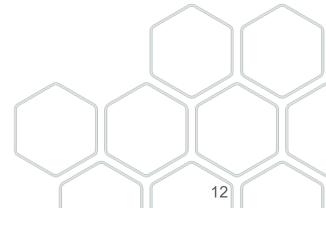


## Survey Microdata



## Survey Microdata

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

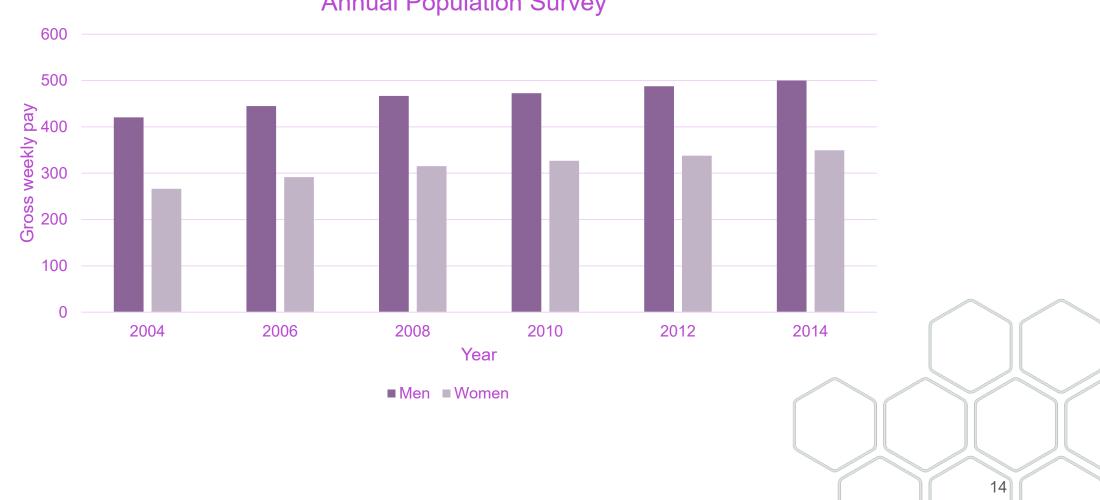


## Survey Microdata example

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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

Gross Weekly Pay (£) in Main Job by Sex, 2004-2014 Annual Population Survey



## Cross-sectional surveys

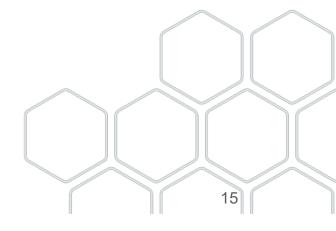
Many repeated annually

Different people interviewed

Snapshot at a specific time point

Covers- health, work, crime





## Key data: Cross-sectional surveys

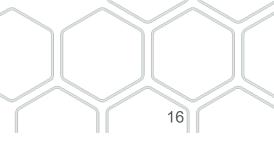
Labour Force Survey (1975-)

Annual Population Survey (2004-)

• Family Expenditure Survey (1961-2001)

Crime Survey for England and Wales (1982-)

British Social Attitudes Survey (1983 -)



## Labour Force Survey

Annually then quarterly

International definitions of employment, unemployment & economic inactivity

• Informs social, economic & employment policies

Topics include: occupation, training, working hours

## Longitudinal data – Panel & Cohort data

Similar to cross-sectional surveys

- One key difference!
  - Use the same individuals
  - Change over time
  - Temporal order of events studied



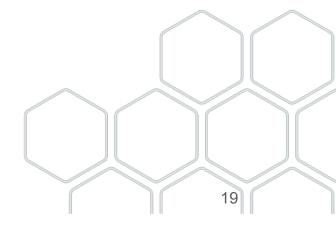
#### Panel studies

Measurements are called waves

Random sample of individuals

Questionnaires core content remains the same

Additional questions can be asked



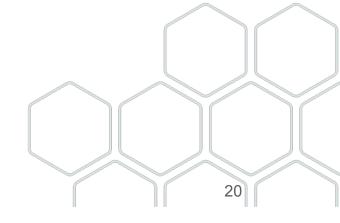
## **Understanding Society**

40,000 households

Data collected from all household members

Employment; family networks; religion, ethnicity, health

Consents to administrative data linkage



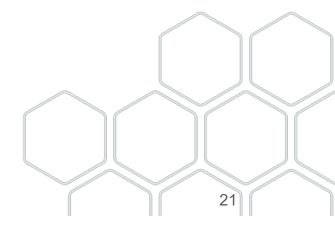
#### Cohort studies

Individuals with a common event

Measurements are called sweeps

Examine generational change

Questionnaire content is age-specific



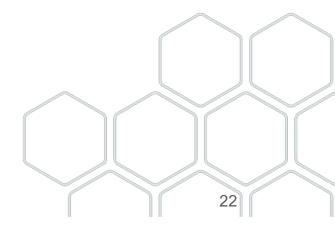
## Birth cohort studies- sweeps

- 1958 National Child Development Study
- 1970 British Cohort Study
- Millennium Cohort Study









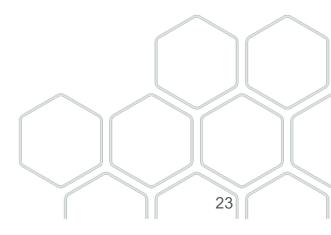
## Cross- national surveys

Individual or household level data

Allow comparisons across different countries

Topics: education and income

Example- European Quality of Life Survey





#### **International Macrodata**

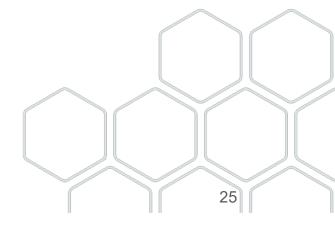
#### International Macrodata

Time series data aggregated to country/region

Regularly updated

International governmental organisations

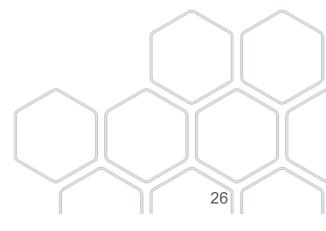
Certain access conditions



#### International Macrodata themes

#### Databanks cover:

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

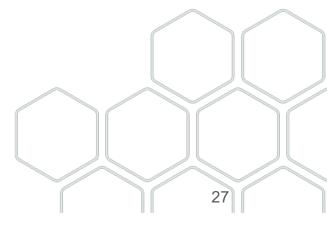


#### International Macrodata: Tools

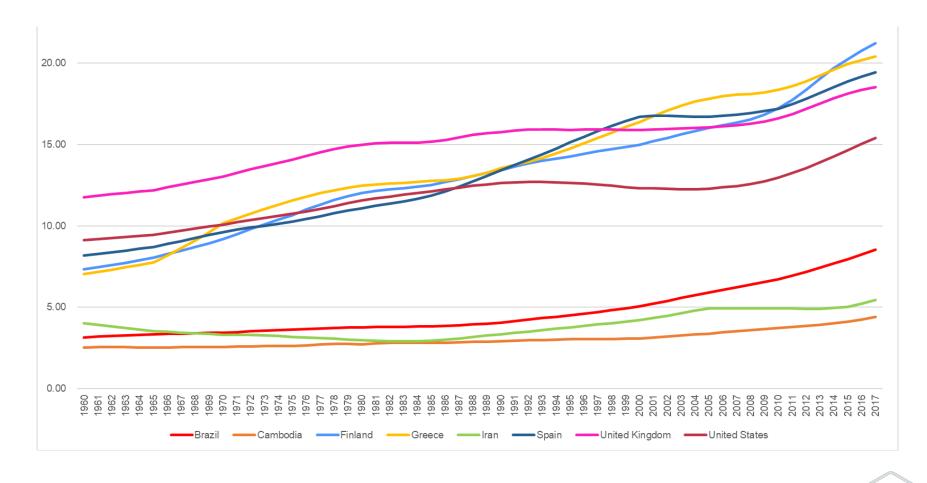
UKDS.Stat or IMF e-library

View the data by provider

Extract the information you require



## International Macrodata Outputs



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



### Census Data



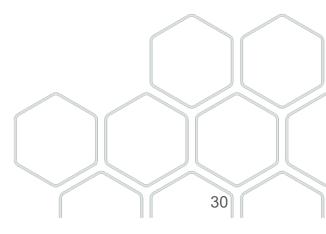
#### **UK Census Data**

• 1971-2011 census data

Used as baseline for other statistics

 Detailed combinations of characteristics

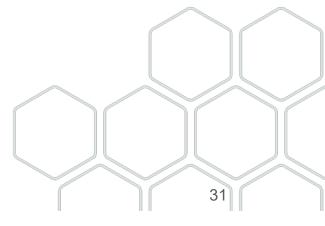
Small geographies



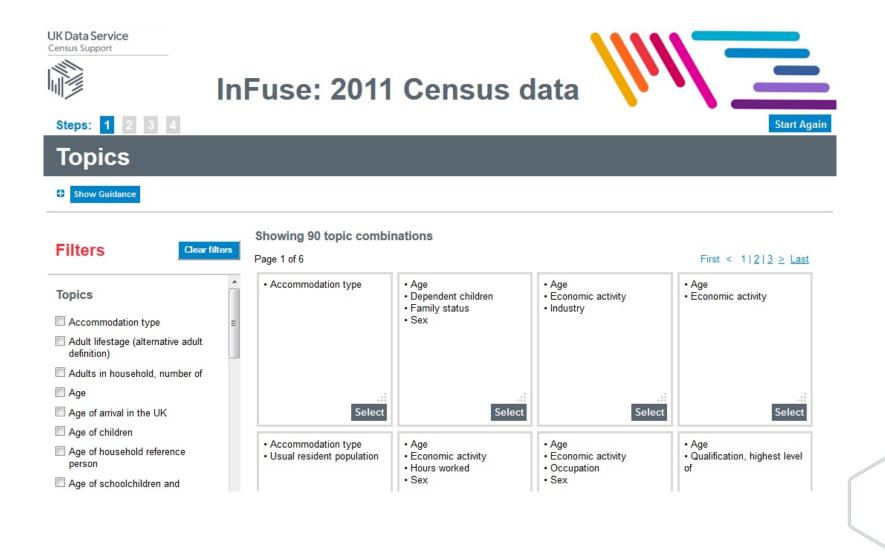
## Census Aggregate Data

Counts of people with particular combinations of characteristics

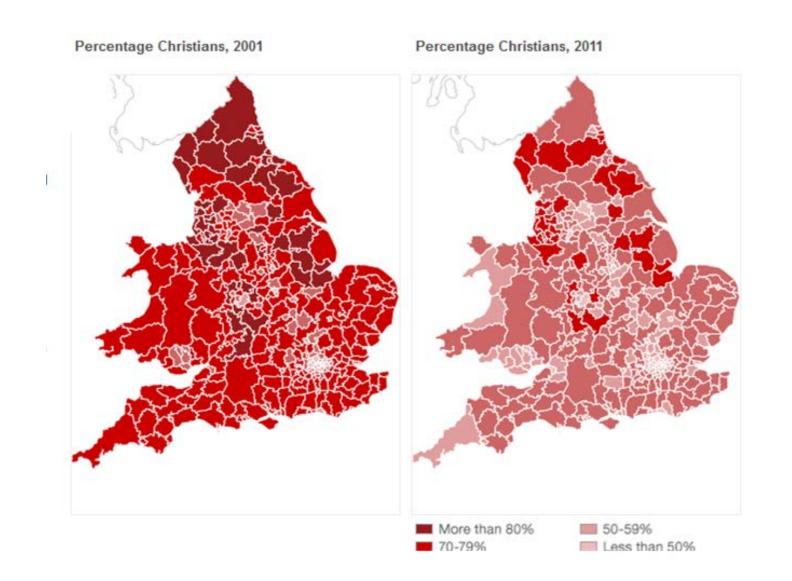
Large to very small areas



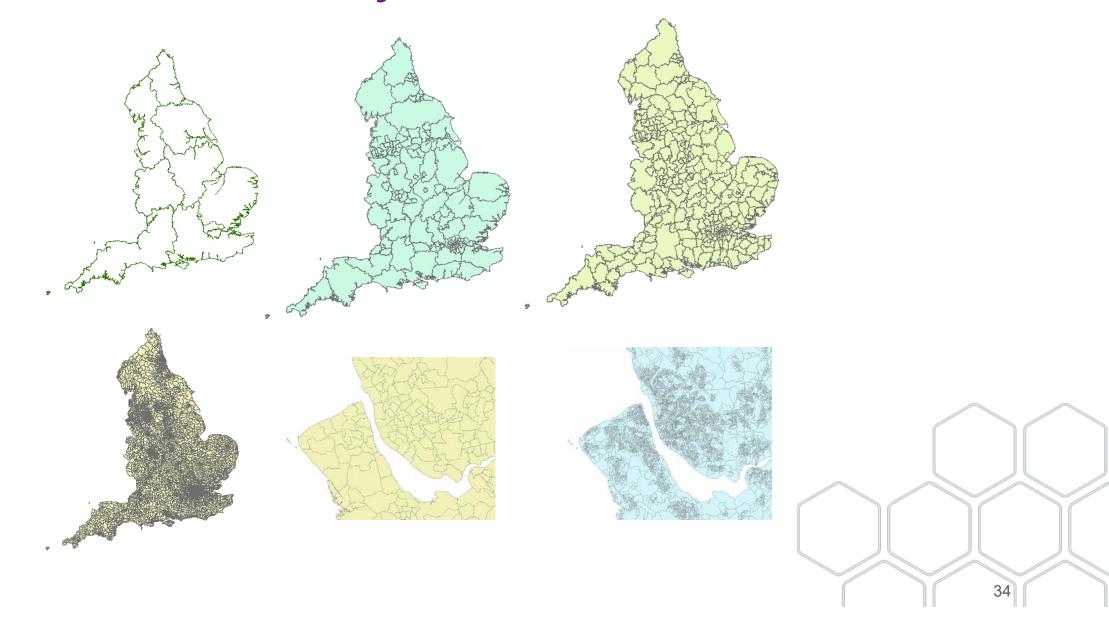
#### Census tools-InFuse



## Census data Output: Religion

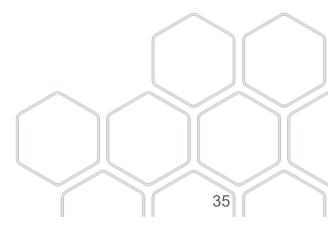


## Census Boundary data



## Census tools: Boundary data

Easy Download	What and Where?	Format					
Boundary Data Selector Postcode Directory Postcode Data Selector	For help with using the Boundary Data Selector interface, see:						
r ostcode Data Selector	How to use Boundary Data Selector						
	Select:						
	Country	Geography V Dates	Find				
	Boundaries						
	Area(s) of Interest:						
			List Areas				
			Expand Selection				
			Previous List				
	Search Summary:						
	Data Format:		SHAPE				
	Archive Method:		Zip				
			Extract Boundary Data				



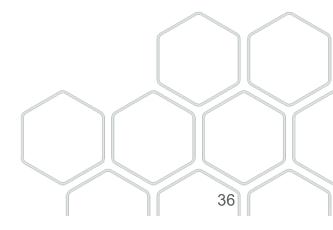
#### Census Flow data

Special type of aggregate data

There is an origin and destination

Two main types: commuting and migration

WICID tool



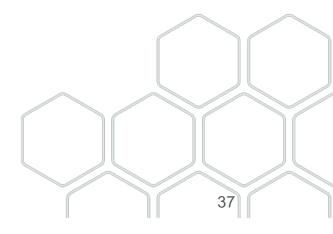
## Census Microdata

Anonymised individual-level data

Analysed using SPSS or Stata

Flexible

• 1991, 2001 and 2011 SARs available



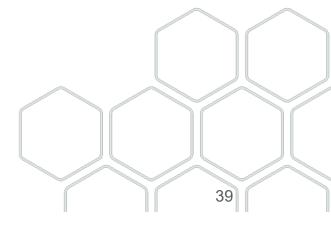


## Registering with the UK Data Service

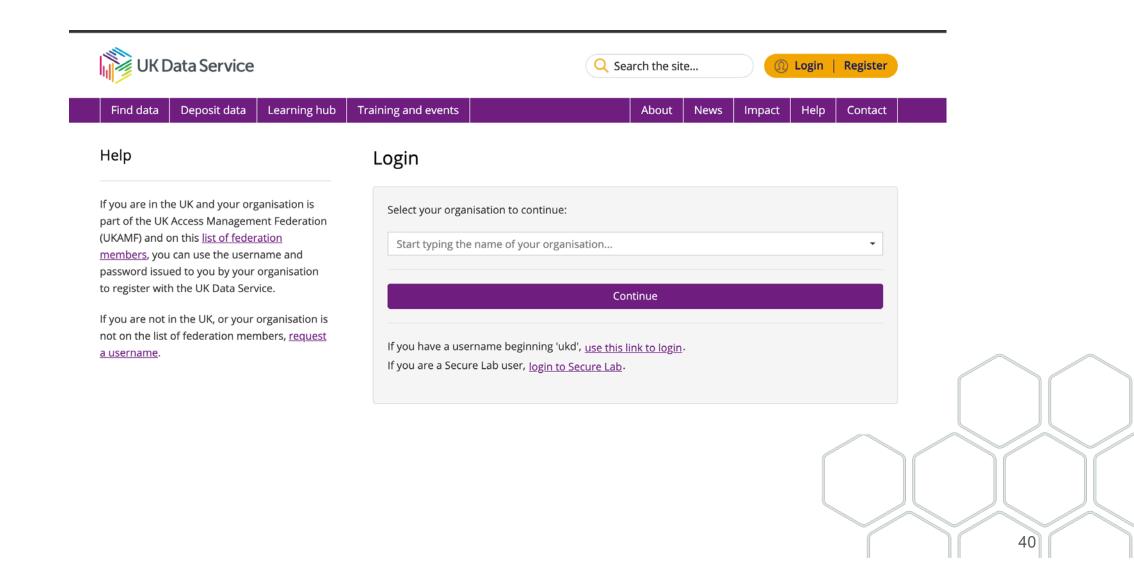
## Registering with the UK Data Service

- UK HE/FE- register through institution
- Apply for a username





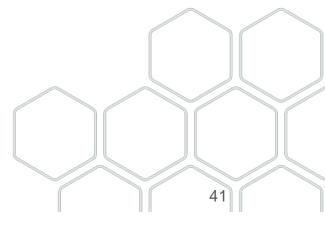
## Registering on the website



## Searching for data

Finding and accessing data from the UK Data Service workshop

7<sup>th</sup> October 2021 – 10am



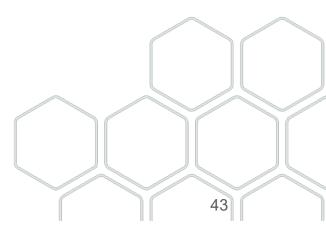


# Useful resources and further help

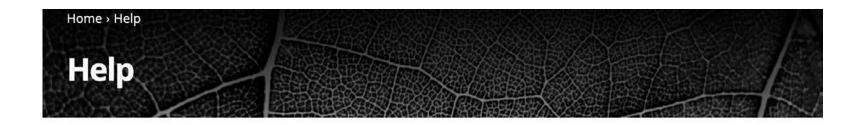
### Advice for new users

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



#### 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 >

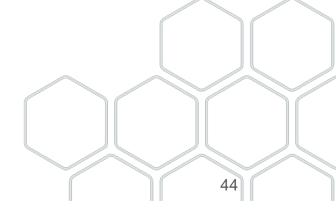
Reasons to cite data correctly >

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.

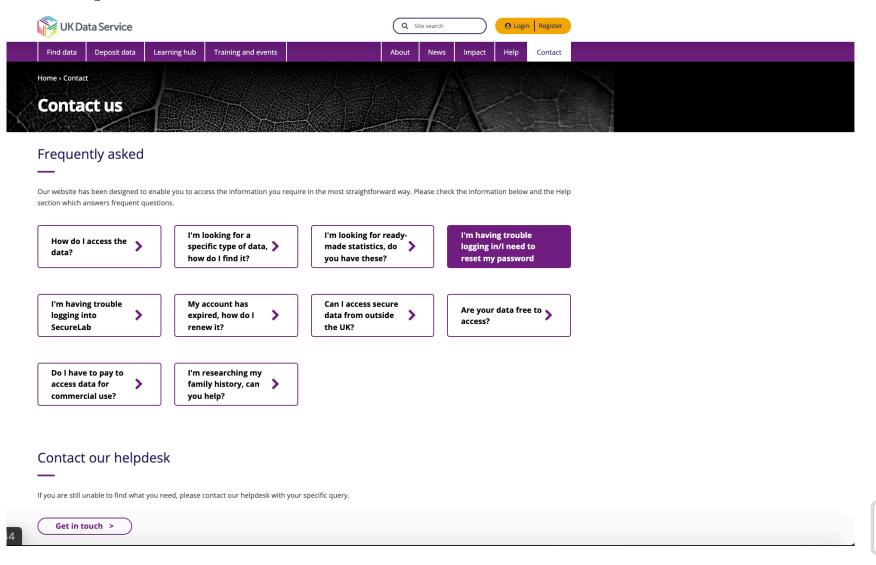
#### Data skills modules

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 longrunning 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.

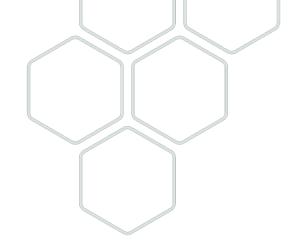
## Helpdesk





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





## Thank you

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

help@ukdataservice.ac.uk

https://twitter.com/ukdataservice

