Getting started with secondary data analysis

Getting Started with Secondary Analysis

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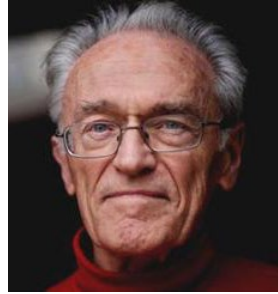15th November 2021

Overview

- What is secondary data?
- Issues with reusing data
- Quantitative and qualitative examples
    - What's available and case study
    - Presentation, demonstration
- Using Mentimeter throughout
- Activity and questions
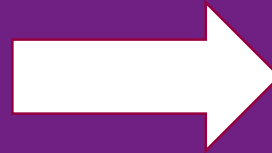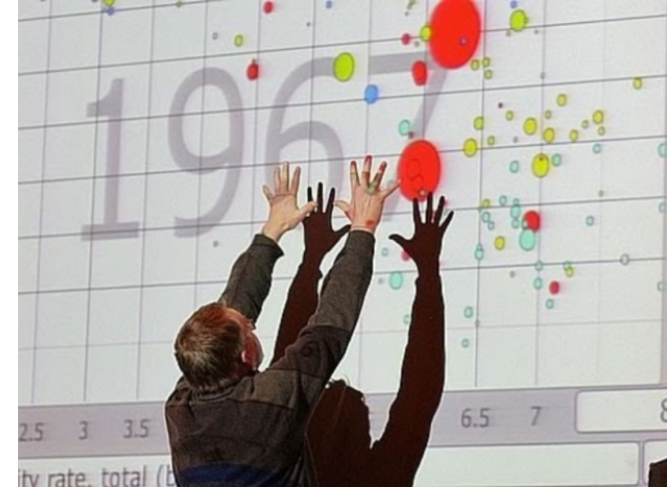
What is secondary data?

Data collector	Data Sharing	Secondary analyst
Primary research		Secondary research
Data collection & analysis for planned purpose		Re-analysis (can be for a different purpose)

Pros and cons of re-using data

| Pros	Cons
Access datasets impossible to create	Do not have insider understanding of data and data collection
Cost effective	Effort to get to know the data
Ethical issues about data collection dealt with	Ethical issues about data use to consider
No need to re-contact data subjects	Data may not match research question
Reuse data used by others to make claims	Cannot extend studies

Researchers reusing data need to:

1. Make effort to understand the data
2. Be pragmatic about whether data are good enough for your purpose

Research plans …
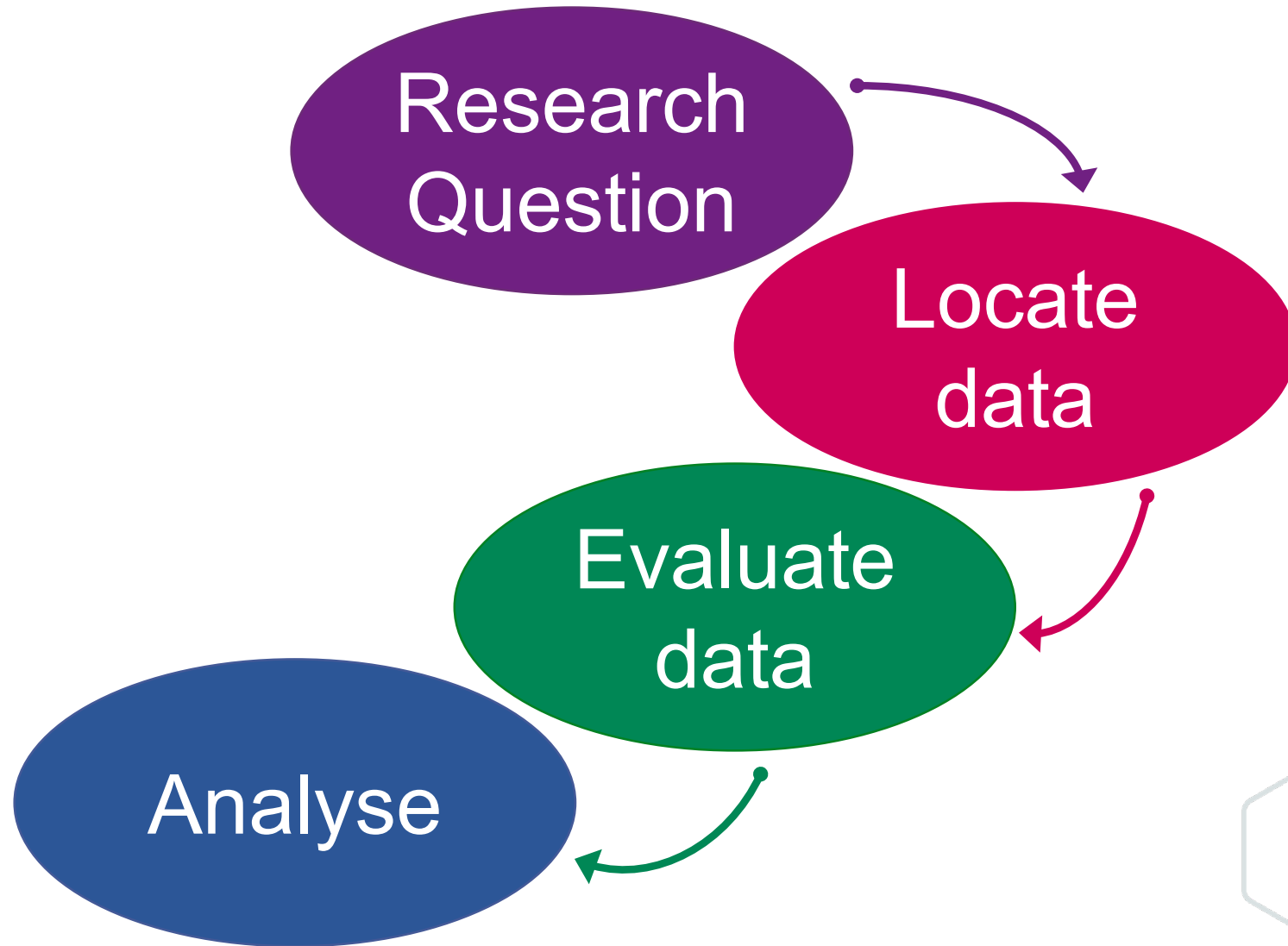
… often involve repeating steps
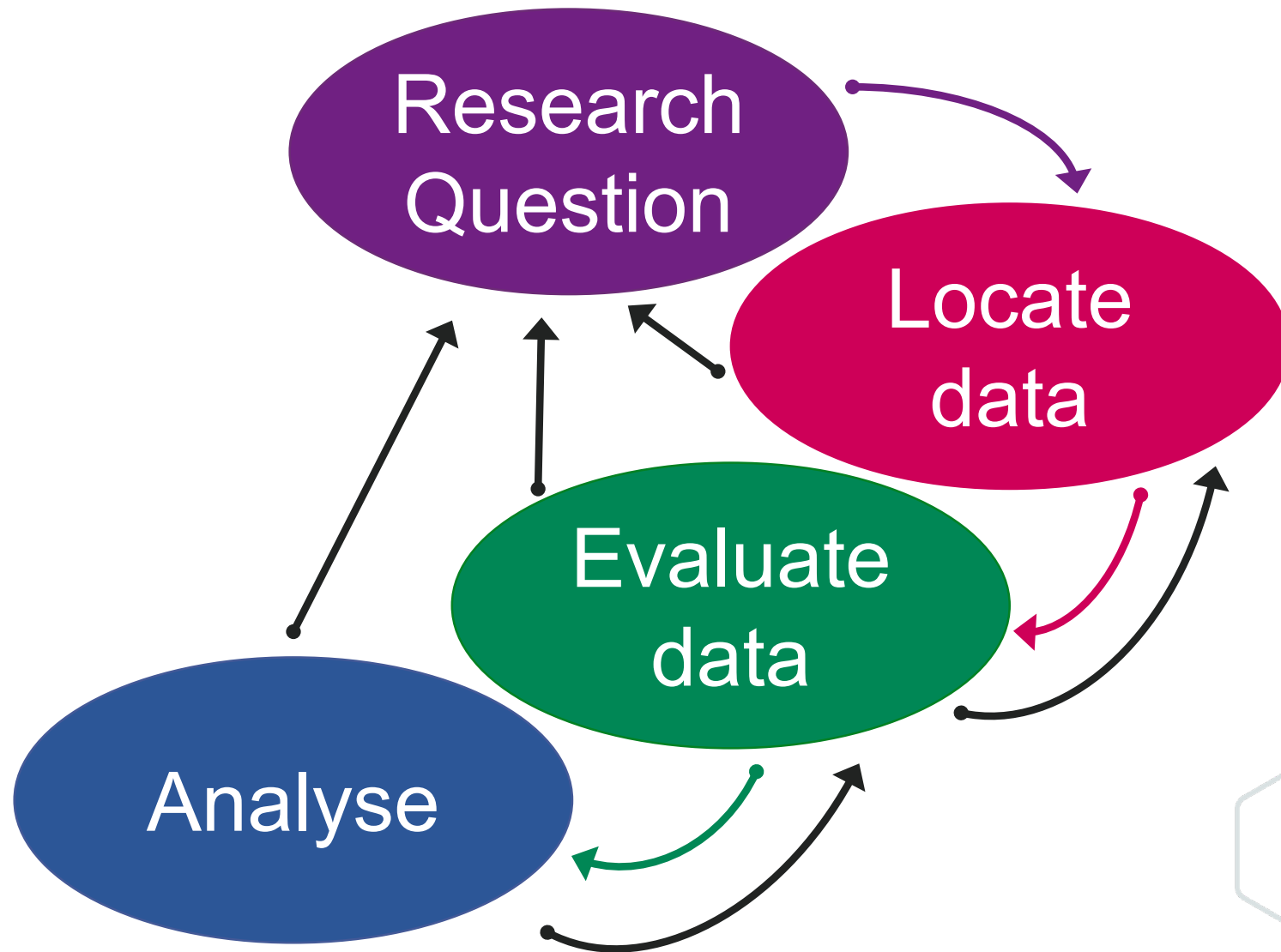
Making sense of your data

To understand data and it's suitability for your research you must understand…

- what information was collected

- from whom

- when and where

- any changes to the raw data before being archived

Use the documentation

- User Guides
- Questionnaires
- Interview Schedules

Plus a variety of other resources

Quantitative data

- What data is available?
- Case study
- Demo - What sorts of documentation are available?
- Key issues

What kinds of data do you think you will find on the UKDS website

Quantitative data by type of analysis

Type of analysis	Type of data
Individuals, families, households, businesses : one point in time	Cross-sectional surveys
Individuals, families, households, businesses : multiple points in time	Repeated cross-sections
Individuals, families, households: over time	Longitudinal data
Small geographic areas	Census aggregate data, flow data
Comparing countries (over time)	International time series

How to find data

- UKDS catalogue search
- Theme pages
- Past webinars
- Further videos coming soon
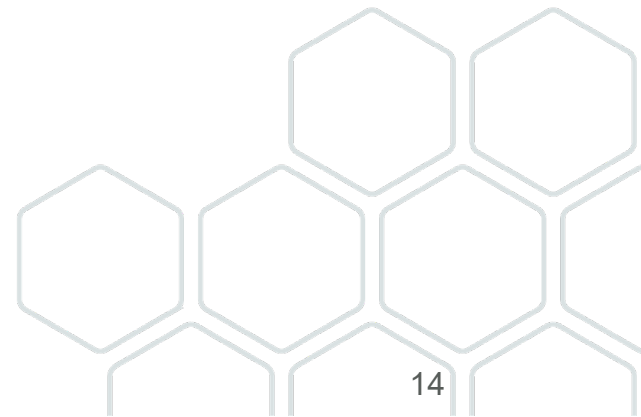
Case Study: Crime Survey for England and Wales (formerly the British Crime Survey)

- Example of a repeated cross-sectional survey
- Important source of information about crime (crime statistics independent from police records)
- Annual survey
- n≈35,000 individuals aged 16+ and 3,000 aged 10-15
- Victim of a crime in the previous 12 months
- Covers demographics, attitudes to the police and the CJS

Case Study: Crime Survey for England and Wales

Data stored as individual anonymised records

|	rowlabel	split	sex	yrsarea	work2
1	137068050	A (Experiences o...	Female	20 years o...	Yes
2	147461190	C (Crime preven...	Female	10 years b...	No
3	137116250	A (Experiences o...	Female	20 years o...	No
4	147354190	C (Crime preven...	Female	20 years o...	Yes
5	137061230	C (Crime preven...	Female	20 years o...	No
6	136898230	C (Crime preven...	Female	20 years o...	No
7	135507330	A (Experiences o...	Male	10 years b...	Yes

Different levels of access

- A standard End User Licence (download after registering)
- Secure Access (for sensitive information)
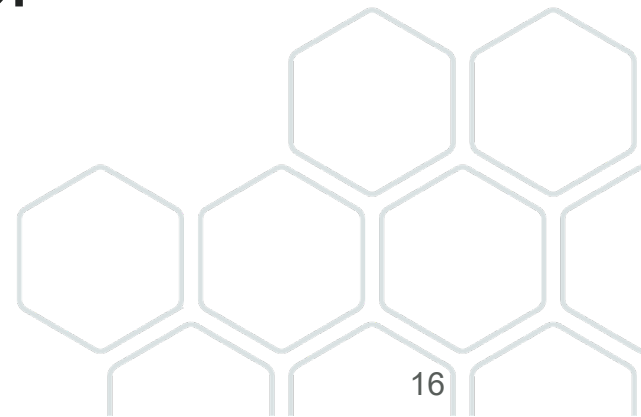
Hind Khalifeh et al (2013)

Examined violence against people with disability in England & Wales

- British Crime Survey 2009/10
- introduction of disability measures
- (a special licence version of the data)
- n = 46,398 adults 16+
- 9,037 had at least one limiting disability
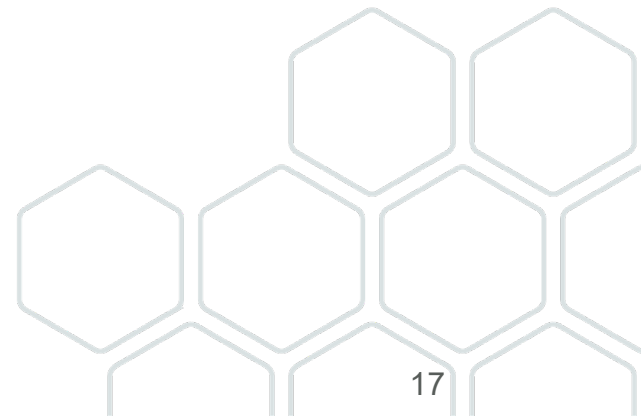
Hind Khalifeh et al (2013) – Findings

Adjusting for age, sex, socio-economic characteristics…

- disability increases risk of experiencing violence
- levels of victimisation highest amongst those with mental health problems
- estimated 116,000 victims of violence attributable to disability
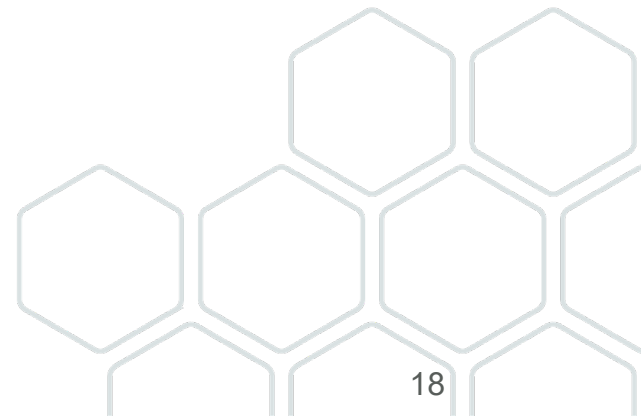
Sampling considerations

- Surveys are based on samples
- Is the sample representative?
  - Who is included (adults, those in private address)?
  - Response rate and bias
  - Do you need to apply a weight to make the data representative?

Sampling considerations – sample size

Do I have enough cases to make a precise estimate?

• Important for small sub-populations

Cite the Data

- Citations provided for every record and dataset
- Use the UK Data Service citation tool to copy and paste the correct citation
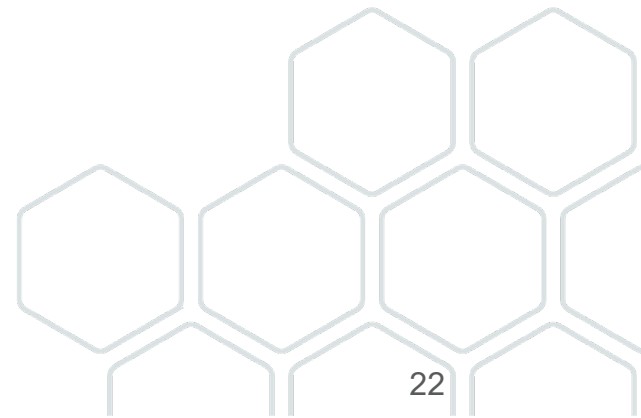

Citation and copyright

The citation for this study is:

NatCen Social Research. (2014). *British Social Attitudes Survey, 2013*. [data collection]. UK Data Service. SN: 7500, http://doi.org/10.5255/UKDA-SN-7500-1

Demonstration

Looking at the documentation

Who was asked what?

- Computer Aided Interviewing (CAI) makes it easy to send respondents through the questionnaire by different routes

- Many questions may only be applicable to some of the sample

Who was asked what…

FLEX10   **UK**

Some people have special working hours arrangements that vary daily or weekly.   **W1/EQ**

In your (main) job is your agreed working arrangement any of the following…   **MAIN**

Code up to 3   **AW/AJ and OD**

    1   flexitime (flexible working hours),   **RUNNING PROMPT**

    2   an annualised hours contract,

    3   term-time working,

    4   job sharing,

    5   a nine-day fortnight,

    6   a four-and-a-half day week,

    7   zero hours contract,

    8   on-call working, or

    9   none of these?

ONS ✔   *GOV* ✔   *SPL* ✔   *EUL* ✔

Applies if in work during reference week

IF (Wrking=Yes) OR (JbAway=Yes) OR (OwnBus=Yes) OR (RelBus=Yes)

OR (TYPSCH12=1,2,3,5.8) On a government training scheme considered as employment

OR ((TYPSCH12=9) AND (YTETJB=Yes)) OR (YTETJB=Yes) Doing paid work in addition to this particular government training scheme
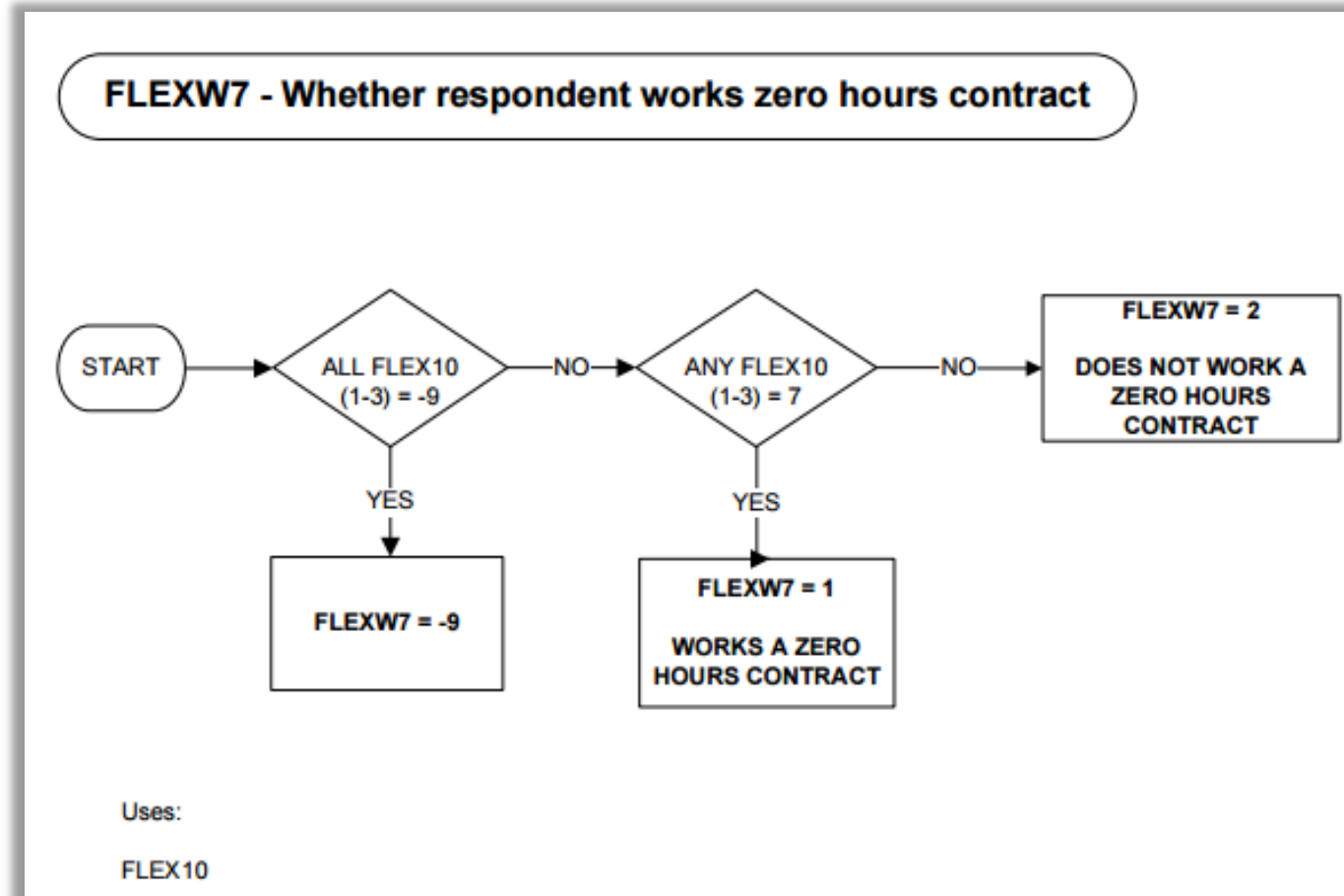
What was done with the data collected?

- derived variables are created from the 'raw' data

FLEXW7 - Whether respondent works zero hours contract

START → ALL FLEX10 (1-3) = -9 —NO→ ANY FLEX10 (1-3) = 7 —NO→ FLEXW7 = 2 DOES NOT WORK A ZERO HOURS CONTRACT

ALL FLEX10 (1-3) = -9 ↓ YES → FLEXW7 = -9

ANY FLEX10 (1-3) = 7 ↓ YES → FLEXW7 = 1 WORKS A ZERO HOURS CONTRACT
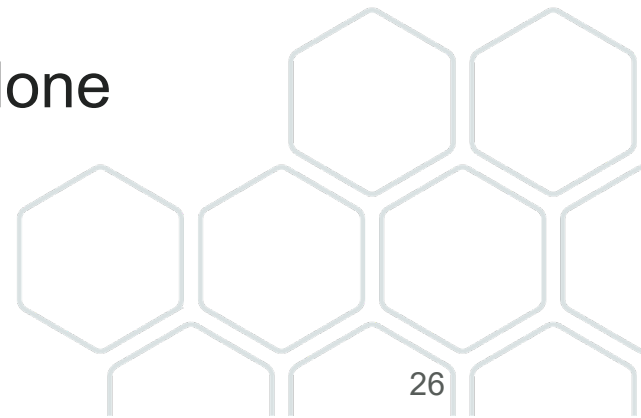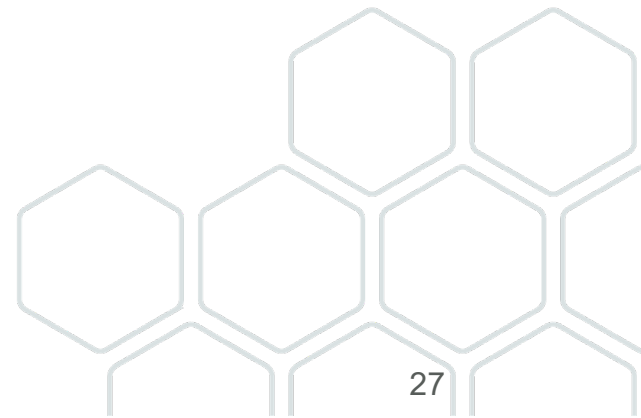
Uses:

FLEX10

Quiz

Some questions about the British Social Attitudes survey from 2019 on the attached worksheet

We will give you 20 minutes to look at the documentation and complete your answer

We will then record your answers to see how well you have done
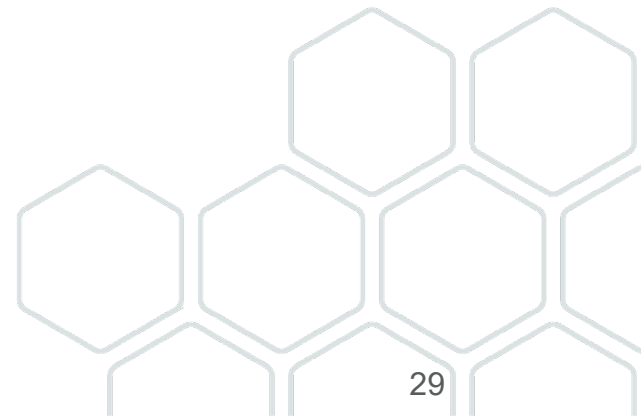
Add in quiz questions

Reusing qualitative data

- Types of qualitative data reuse
- Case study: School Leavers Study
- Demo - Finding data: browse, search, QualiBank
- Key issues

How can you reuse qualitative data (mentimeter)

Many ways of re-using data

1. Description
   - See more data, not limited to published extracts
2. Research design and methodological advancement
   - Study sampling, data collection methods, topics guides
3. Reanalysis
   - A research question different to the original research
4. Learning and Teaching
5. Restudy
   - Replicate and compare
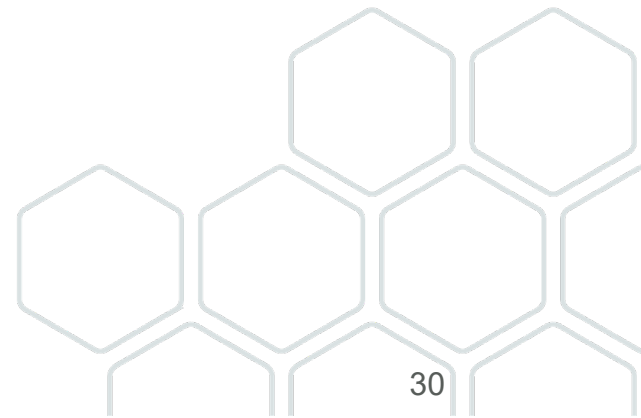
SN 4867: School Leavers Study

Principal investigator: Ray Pahl

In 1978, teachers at a comprehensive school on the Isle of Sheppey were asked to set an essay about 10 days before pupils were due to leave school. They were then asked to write an imaginary account of their life over the next 30 or 40 years.

School Leavers Re-Study: Imagining the Future

Principal Investigators:

Graham Crow and Dawn Lyon, University of Kent and University of Southampton
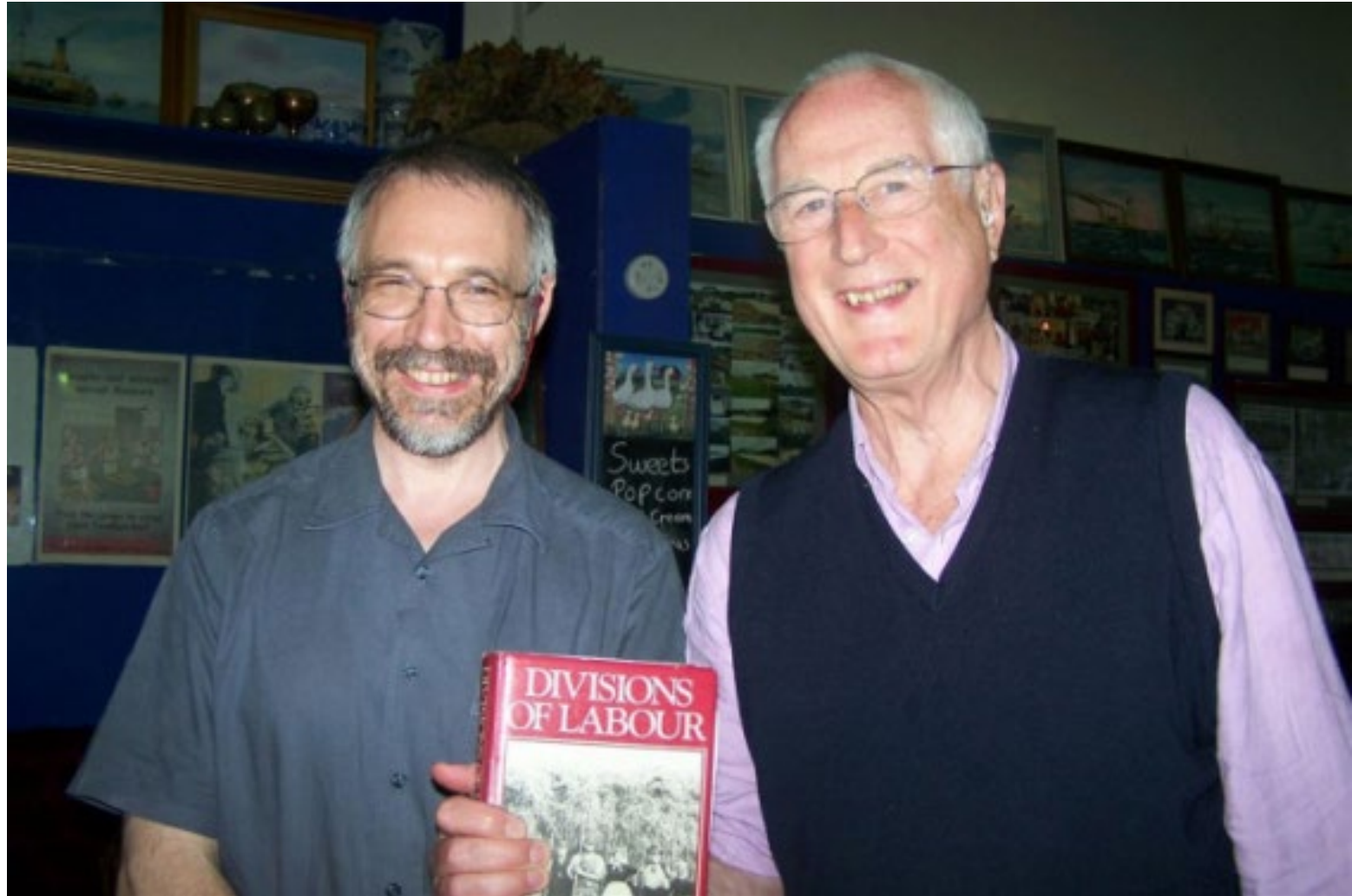
School Leavers Re-Study

Essay instructions 2010: Imagining the Future:

I want you to imagine that you are towards the end of your life. Look back over your life and say what happened to you. Spread your story over your whole life from the time of leaving school.

Sheppey: Essay 30
Group: Boys

My Past

I was sitting in front of the fire smoking my pipe, just thinking of the past. I was nearly seventeen when I left school, I had an apprenticeship in the Tudor Glass, an electrical apprenticeship lasting four years, I served my four years and got my diploma for an electrical engineer. I was now twenty and courting a rearly lovely girl. I had to work in London in my next job and came back home every weekend. Jobs were scarce so you had to take what you can get, I didn't want to go to London,

Living and Working on Sheppey study

1978: **141 essays** (89 boys and 52 girls)

Living without a job: how school leavers see the future

2009-10: **110 essays** (55 boys and 55 girls)

Living and Working on Sheppey project

Together, these two sets of essays shed light on the aspirations of Sheppey's young people (and young people more generally) and cover a range of topics including:

- Health, Education, Career, Family and Leisure

Comparing the responses from 1978 and 2010

1978 Mundane & grounded jobs; gradual career progression; periods of unemployment.	2010 Well-paid, instantaneous jobs; choice but uncertainty; influence of celebrity culture.
"It was hard finding a job, I failed a few chances, but eventually got what I wanted locally, a craft apprenticeship." (Essay 27, male)	"I was 20 now living the dream I had a amazing band...I had toured the world 3 times sold 4 million records." (Essay 30, male)
"When we found a house it was a semi-detached in Sittingbourne. I wanted to live in Italy but that was asking for too much." (Essay 56, male)	"I arrive at my 3-bedroom luxury villa; I land my helicopter on my own heli-pad and walk inside. I grab my keys and jump in my Bentley Continental GTS." (Essay 40, male)
"I longed for something exciting and challenging. But yet again I had to settle for second best. I began working in a large clothes factory." (Essay 104, female)	"In my future I want to become either: a dance teacher, hairdresser, or a Professional Show Jumper/horse rider. If I do become a dancer my dream would be to dance for Beyoncé or someone really famous." (Essay 61, female)

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Living and Working on Sheppey

Search [ ] Search

Welcome to this website where you can find material from two research projects about the Isle of Sheppey!

Our latest work (2013-14) is a project called **Imagine Sheppey** which is about how young people imagine the future. This builds on our previous work in **Living and Working on Sheppey: Past, Present and Future** (2009-11) where we explored the history and changes in working lives on Sheppey in the last decades of the 20th century and into the 21st. You can find out about both projects here!

If you are curious about young people and wonder about how they see the world and themselves within it, and what they imagine their futures have in store for them, you might be interested in:

- Our Imagine Sheppey Fast Forward video made by the artists, Tea – coming soon!
- Reading and listening to short essays written by young people in 2009-10 where they talk about their hopes and aspirations for their working lives, families, and travel as well as some

Home

Imagine Sheppey Fast Forward

Fast Forward Workshops

Imagine Sheppey Fast Forward Video

Living and Working on Sheppey

Older people's memories

Young people and the future

1978 Essay Writers Facebook Page

Ray Pahl's Sheppey Studies

Access to data

The Isle of Sheppey: context

Getting started

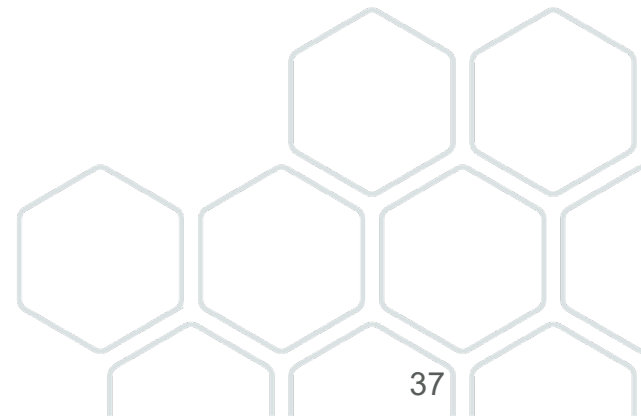Orient yourself to the original research project

- Documentation and metadata

Understand the structure of the original data
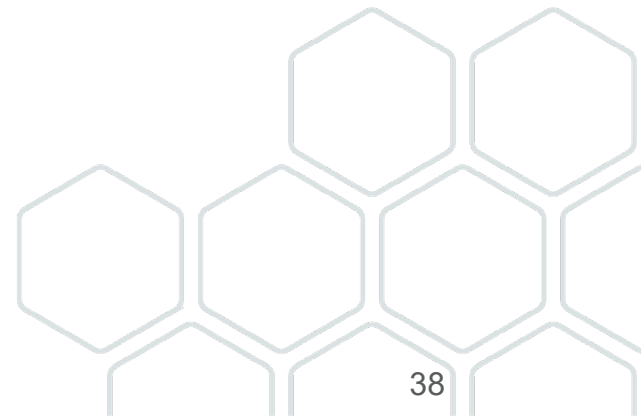
- Sampling and recruitment

Become familiar with the project data as a whole

- Think about your approach

Other resources for reusing data

- User guides and training resources
- Information about secondary analysis
- See handout for further links and information

Key issues in reusing data - summary

Many benefits
- large scale research, ethics completed, cost effective
Iterative
- research questions, locate and evaluate data, analysis
Context
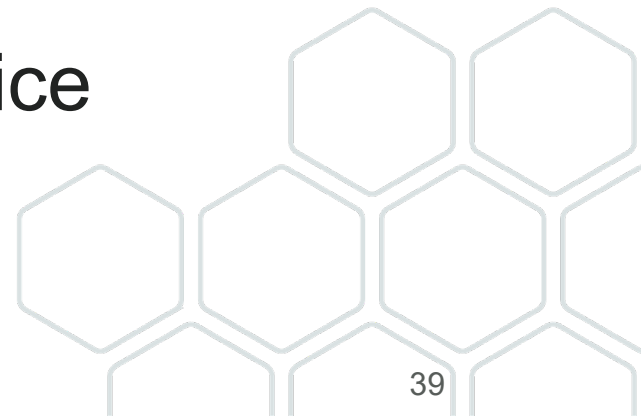- consider methodology and prior research
Plan and prepare
- understand data through study documentation
Support
- more information available in the UK Data Service website
Cite the data
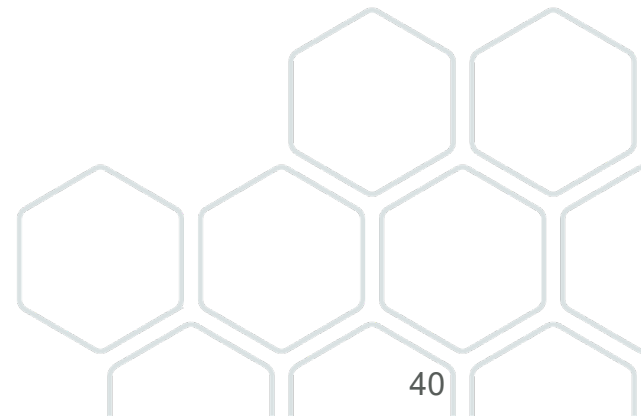
Any questions?

Website > Use Data > Secondary Analysis
http://www.ukdataservice.ac.uk/use-data/secondary-analysis.aspx

Email:
help@ukdataservice.ac.uk

Video guides and webinars:
https://www.youtube.com/user/UKDATASERVICE

Follow the UK Data Service on Twitter:
@UKDataService

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Thank you.

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