Getting Started with Secondary Analysis

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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?

<table>
<thead>
<tr>
<th>Data collector</th>
<th>Secondary Analyst</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Office for National Statistics</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Understanding Society</strong></td>
<td></td>
</tr>
<tr>
<td><strong>NatCen Social Research</strong></td>
<td></td>
</tr>
<tr>
<td>Primary research</td>
<td>Secondary research</td>
</tr>
<tr>
<td>Data collection &amp; analysis for planned purpose</td>
<td>Re-analysis (can be for a different purpose)</td>
</tr>
</tbody>
</table>
## Pros and cons of reusing data

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

Research Question

Locate data

Evaluate data

Analyse
Research plan

- Research Question
- Locate data
- Evaluate data
- Analyse
Making sense of your data

To understand data and its 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
Mentimeter word cloud – What kinds of data do you think you’ll find on the UKDS website?
Quantitative data by type of analysis

<table>
<thead>
<tr>
<th>Type of analysis</th>
<th>Type of data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals, families, households, businesses: one point in time</td>
<td>Cross-sectional surveys</td>
</tr>
<tr>
<td>Individuals, families, households, businesses: multiple points in time</td>
<td>Repeated cross-sections</td>
</tr>
<tr>
<td>Individuals, families, households: over time</td>
<td>Longitudinal data</td>
</tr>
<tr>
<td>Small geographic areas</td>
<td>Census aggregate data, flow data</td>
</tr>
<tr>
<td>Comparing countries (over time)</td>
<td>International time series</td>
</tr>
</tbody>
</table>
How to find data

• UKDS catalogue search
• Theme pages
• Past webinars
• Further videos on this coming soon for new website
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

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:

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…**

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>flexitime (flexible working hours),</td>
</tr>
<tr>
<td>2</td>
<td>an annualised hours contract,</td>
</tr>
<tr>
<td>3</td>
<td>term-time working,</td>
</tr>
<tr>
<td>4</td>
<td>job sharing,</td>
</tr>
<tr>
<td>5</td>
<td>a nine-day fortnight,</td>
</tr>
<tr>
<td>6</td>
<td>a four-and-a-half day week,</td>
</tr>
<tr>
<td>7</td>
<td>zero hours contract,</td>
</tr>
<tr>
<td>8</td>
<td>on-call working, or</td>
</tr>
<tr>
<td>9</td>
<td>none of these?</td>
</tr>
</tbody>
</table>

**ONS ✓**

**GOV ✓**

**SPL ✓**

**EUL ✓**

**Applies if in work during reference week**

IF (Wrking=Yes) OR (JbAway=Yes) OR (OwnBus=Yes) OR (RelBus=Yes) OR (TYPSC12=1,2,3,5,8) On a government training scheme considered as employment OR ((TYPSC12=9) AND (YTETJB=Yes)) OR (YTETJB=Yes) Doing paid work in addition to this particular government training scheme
And what was done with data afterwards?

- derived variables are created from the ‘raw’ data.
Reusing qualitative data

• Types of qualitative data reuse
• Case study: School Leavers Study
• Demo - Finding data: browse, search, QualiBank
• Key issues
### Mentimeter question – What ways can qualitative data be re-used?

<table>
<thead>
<tr>
<th>Evidence for dissertations</th>
<th>newquestion</th>
<th>Unsure</th>
</tr>
</thead>
<tbody>
<tr>
<td>As a template for gathering more information</td>
<td>analysing interview transcripts</td>
<td>validate previous findings</td>
</tr>
<tr>
<td>For ethnographic studies</td>
<td>Showing changing attitudes</td>
<td>Stories</td>
</tr>
</tbody>
</table>
Mentimeter question – What ways can qualitative data be re-used?

- doing comparative study
  - Trends
  - Basis for theories
- validate previous studies
  - Comparison
  - Using new methods to analyse the data
- Narrative
  - compare between different domains or locations
  - Sentiment analysis
<table>
<thead>
<tr>
<th>New ideas</th>
<th>For archival research</th>
<th>Finding new themes</th>
</tr>
</thead>
<tbody>
<tr>
<td>informing quantitative studies</td>
<td>Investigations</td>
<td>Content analysis</td>
</tr>
<tr>
<td>Perceptions</td>
<td>For development of theories</td>
<td>recode</td>
</tr>
<tr>
<td>Comparisons</td>
<td>Informing primary data</td>
<td>Coding into quantitative data</td>
</tr>
</tbody>
</table>
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.

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 nearly lovely girl. I had to work in London in my next job and came back home every weekend.
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
<table>
<thead>
<tr>
<th>1978</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mundane &amp; grounded jobs; gradual career progression; periods of unemployment.</td>
<td>Well-paid, instantaneous jobs; choice but uncertainty; influence of celebrity culture.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>1978</th>
<th>2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>“It was hard finding a job, I failed a few chances, but eventually got what I wanted locally, a craft apprenticeship.” (Essay 27, male)</td>
<td>“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)</td>
</tr>
<tr>
<td>“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)</td>
<td>“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)</td>
</tr>
<tr>
<td>“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)</td>
<td>“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)</td>
</tr>
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</table>
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:

http://www.livingandworkingonsheppey.co.uk/
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
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