



# MANAGING QUALITATIVE DATA

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DATUM WORKSHOP, NEWCASTLE

26 May 2011



UK • DATA  
ARCHIVE



# PRACTICAL ADVICE FOR QUALI RESEARCHERS

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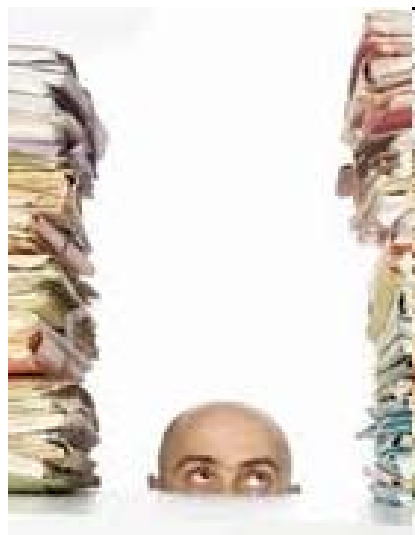
- too much DM advice out there is generic and confusing
- data management is not a word quali researchers understand/like much – we use ‘manage and share’
- guidance needs to be meaningful and relevant
- qualitative data has its own peculiarities – I hope to offer you useful take home messages and tips















# WHERE WE ARE COMING FROM

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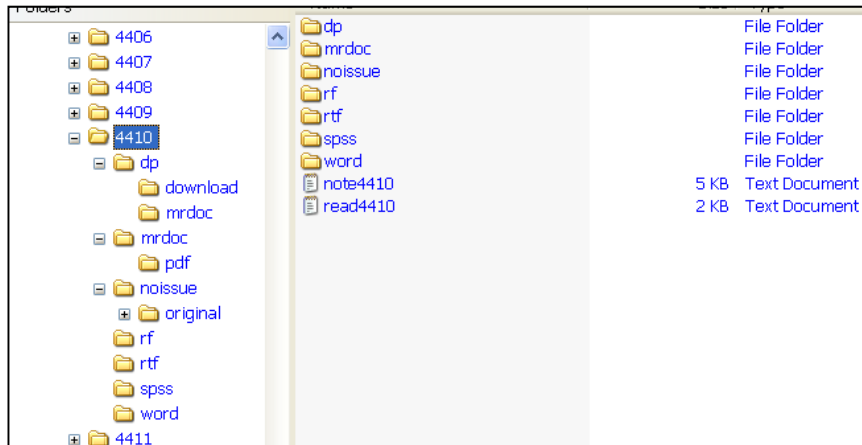
- UK Data Archive experience of providing support for data creators of social science data
- We operate the ESRC Data Policy (since 1995) – **you must share your data!**
- our best practice approaches to making data shareable based on:
  - challenges faced by data creators over the years
  - over 40 years of handling others' social science data - 17 years with qualitative data
- highly skilled staff comprising researchers, technical and information specialists

# JOURNEY FROM YOUR DATA ....



	Doc. 1
	IMPORTANT
	Thesis Final final
	My study
	Interview with Jane
	Interview with Janet
	Int. 1
	My data
	My Passwords
	Thesis version 12
	Data chart for interviews
	Int 1 (2)
	My thesis (copy)
	New doc.

# ...TO OUR DATA



**Study Number: 4410**  
**Interview Reference No. ID 931**

**Female, White British, D.O.B - 14.03.64, Married, Employed, CIS-R Score Time 1 - 22**

NOTE: Machine noise throughout interview.

Q: So I know Clare's been asking you about things about the area, particularly things like changes that have happened over the last twelve months. Could you just sort of like recap for us what you think's changed in the area over the last twelve months.

A: Erm ... well, (Willow Park's?) took over a big project here, you know, they bought a lot of property off the council and they seem to be trying to build the area back up. You know, trying to make it look nicer for ... doing a lot with houses, you know, that they took over. Like double glazing, shower cubicles, new bathrooms, fitted kitchen and ...

(Brief interruption - laughter)

A: ... generally trying to make the properties look better as well.

Q: And is your house anything to do with Willow Park?

A: Yes. Yes.

Q: And have the done anything to your house?

A: They've recently done the bathroom, I've had a new shower cubicle put in instead of a bath, I've been rewired, I've not had a fitted kitchen because I've got my own, and generally I find the work, if you've got a problem they seem to address it quite quickly.

Q: So has it made a big difference to you personally?

A: Yeah. Yeah.

Economic and Social Data Service

Home Access and support Resources Offer and deposit News Events Which is best for me?

ES410 - Urban Regeneration, Mental Health and Quality of Life in Wythenshawe, South Manchester, 1998-2001

Front-Ends page

Full Data Catalogue search

Internal User \*

Documentation Variable List Keywords Publications Related Studies

Title: Urban Regeneration, Mental Health and Quality of Life in Wythenshawe, South Manchester, 1998-2001

Subject Categories: Mental health - health; Community and urban studies - Society and culture; Social indicators and quality of life - Society and culture

Represented by: Huxley, P.J., King's College London, Institute of Psychiatry, Health Services Research Department

Principal Investigator(s): Huxley, P.J., King's College London, Institute of Psychiatry, Health Services Research Department; Thomas, R., University of Manchester, Department of Geography; Rogers, M., National Primary Care Research and Development Centre; Robinson, R., University of Manchester, Department of Geography

Sponsor(s): Economic and Social Research Council

Grant Number: 4410/01/0001

Other Acknowledgements: Clare Gately - collected all the data and contributed to papers, reports and presentations; Jennifer Evans - questionnaire design, analysis, report and paper writing.

Abstract: The aim of this study was to achieve a better understanding of: the role played by urban regeneration in altering the degree and distribution of socio-economic variations in mental health; the impact of socio-economic changes on groups with differential vulnerability to the development of common mental illness; the measurement of subjective well-being in urban settings and what factors contribute to its improvement or maintenance during socio-economic change.

Notes: This data collection is made up of three distinct parts: The first part consists of data collected from a postal survey carried out at baseline and follow up 10 months later. Information was collected about the individual circumstances and consulting behaviour. Samples were taken randomly from the Index and Control Areas of the study. The second part consists of data from face-to-face structured interviews carried out one year after the initial questionnaire was sent out and again twelve months on. Information was collected about their mental health and QoL. Samples had completed the postal survey and lived in the Index Area.

Number of Units: (A) 16000 (target) 2596 (obtained) Time 1 survey questionnaires (B) 400 (target) 216 (obtained) Time 1 interviews (C) 2596 (target) 1344 (obtained) Time 2 survey questionnaires (D) 214 (target) 118 (obtained) Time 2 interviews (E) 20 (obtained) Time 2 qualitative interviews

Method of Data Collection: Face-to-face interviews; Clinical measurements

Weighting: No information recorded

Language(s) of Written Materials: Study Description: English; Study Documentation: English

Documentation: User manual: paper (9.50p); Acrobat (PDF) (price dependent on media)

Access: Access Conditions: The depositor has specified that registration is required and standard conditions of use apply. The depositor has specified that registration is required and standard conditions of use apply. The depositor has specified that registration is required and standard conditions of use apply.

In addition, ESDS is required to request permission from the depositor prior to supplying the data.

Availability: ESDS Qualidata, UK Data Archive

Contact: Help desk: qualidata@esds.ac.uk

Access Code: C

Date of Release: First Edition: 26 June 2002

Copyright: Copyright P. Huxley

Documentation:

Format	Name	Size in Kilobytes	Description
PDF	esdsQualab.pdf	1607	User guide
PDF	esdsQualab.pdf	10	User List
HTML	UKDA_Study_4410_Information.htm	15	Study information and citation

NOTE File

ESDS File



# BENEFITS OF GOOD DATA MANAGEMENT

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- efficiency – makes research easier
- quality – better research data – for you and others
- safety – protect valuable data
- reputation – enhances research visibility
- compliance – with ethical codes, data protection laws, journal requirements, funder policies

# WHAT IS DATA MANAGEMENT?

## CREATE & MANAGE DATA

## RESEARCH DATA LIFECYCLE

## STARTING YOUR RESEARCH

## CONSENT & ETHICS

## COPYRIGHT

## DOCUMENTING YOUR DATA

## FORMATTING YOUR DATA

## STORING YOUR DATA

## ADVICE & TRAINING

## OUR PROJECTS

The screenshot displays the UK Data Archive website. The header includes the UK Data Archive logo and navigation links: HOME, ABOUT US, **CREATE & MANAGE DATA**, DEPOSIT DATA, HOW WE CURATE DATA, FIND DATA, and NEWS & EVENTS. A secondary navigation bar contains HELP, CONTACT US, and SIGN UP. The main content area is titled 'CREATE & MANAGE DATA' and features a video player with a play button and a 'SHOW VIDEO TEXT' link. Below the video, there are sections for 'RESEARCH DATA LIFECYCLE' (with a diagram showing 'DATA CREATION' and 'DATA ANALYSIS'), 'STARTING YOUR RESEARCH' (with a diagram showing a hand holding a string of beads), 'CONSENT & ETHICS', and 'ADVICE & TRAINING'. Each section has a 'READ ON' button. On the right side, there is a search bar, a 'GO' button, and a list of links: DEPOSIT YOUR DATA, FIND DATA, WATCH A VIDEO ABOUT US, A QUICK GUIDE TO THE ARCHIVE, DISCUSS WITH US, DOWNLOAD MANAGING & SHARING DATA BROCHURE, CREATE & MANAGE DATA FAQ, and JOIN OUR MAILING LIST. The footer contains links for TERMS AND CONDITIONS, ACCESSIBILITY, and SITE MAP.

UK • DATA ARCHIVE

THE UK'S LARGEST COLLECTION OF DIGITAL RESEARCH DATA IN THE SOCIAL SCIENCES AND HUMANITIES

HOME ABOUT US **CREATE & MANAGE DATA** DEPOSIT DATA HOW WE CURATE DATA FIND DATA NEWS & EVENTS

HELP CONTACT US SIGN UP

**CREATE & MANAGE DATA** SHOW VIDEO TEXT

We facilitate data sharing. Find out about best practices for creating, preparing, storing and sharing data

RESEARCH DATA LIFECYCLE

STARTING YOUR RESEARCH

CONSENT & ETHICS

ADVICE & TRAINING

SEARCH OUR SITE GO

DEPOSIT YOUR DATA

FIND DATA

WATCH A VIDEO ABOUT US

A QUICK GUIDE TO THE ARCHIVE

2 of 8: We hold thousands of data collections for social science research and teaching, quantitative and qualitative

DISCUSS WITH US

Join us on Methodspace to discuss the latest data issues

Methodspace

DOWNLOAD MANAGING & SHARING DATA BROCHURE

CREATE & MANAGE DATA FAQ

JOIN OUR MAILING LIST

TERMS AND CONDITIONS ACCESSIBILITY SITE MAP



# KEY DATA MANAGEMENT AREAS FOR QUALIS

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- data confidentiality and conditions of use
- describing and documenting data for re-use
- practicalities of looking after data
  - formats, version controlling, encryption, storage, back-up, file-sharing





# ETHICS AND DATA SHARING

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## Ethical duties in research

- confidentiality towards informants and participants
- protect participants from harm
- treat participants as intelligent beings, able to make their own judgements and decisions on how the information they provide can be used, shared and made public (through informed consent)
- duty to wider society to make available resources produced by researchers with public funds

Consider data management and sharing **during ethical review**

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# LEGISLATION AND DATA SHARING

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## Data Protection Act (1998)

- ‘personal data’
  - relate to living individual
  - individual can be identified from those data or from those data and other information
  - includes any expression of opinion about the individual
- only disclose personal data if consent given to do so (exc. legal reasons)
- DPA does not apply to anonymised data

processed fairly and lawfully  
obtained and processed for  
specified purpose  
adequate, relevant and not  
excessive for purpose  
accurate  
not kept longer than necessary  
processed in accordance with  
the rights of data subjects, e.g.  
right to be informed about how  
data will be used, stored,  
processed, transferred,  
destroyed; right to access info  
and data held  
kept secure  
not transferred abroad without  
adequate protection

# PRINCIPLES FOR ETHICAL /LEGAL DATA SHARING

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## Researchers to consider

- obtaining **informed consent** , also for data sharing and preservation / curation
- **protecting identities**  
e.g. anonymisation, not collecting personal data
- **restricting / regulating access** where needed (all or part of data)  
e.g. by group, use, time period
- **securely storing** personal or sensitive data

Consider jointly and in dialogue with participants

Plan early in research

# INFORMED CONSENT

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Information sheet and consent form must include consent for

- engaging in the research process, and right to withdraw
- use of data in outputs, publications
- data sharing and possible future uses

Process or one-off consent? - repeat interactions?

Written or verbal consent? - how realistic?

Consent needs to be suitable for the research purposes

[UK Data Archive sample consent form](http://staging.data-archive.ac.uk/create-manage/consent-ethics/consent?index=3)

<http://staging.data-archive.ac.uk/create-manage/consent-ethics/consent?index=3>



# ANONYMISING DATA

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## Identity disclosure

- direct identifiers – often not essential research info
- indirect identifiers

## Anonymise data

- remove direct identifiers
- reduce precision/detail through aggregation / generalisation
- restrict upper lower ranges variables to hide outliers
- replace rather than remove
- pseudonyms
- maintain maximum meaningful info
- log edits

# DATA ACCESS CONTROLS

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at the UK Data Archive

- archived research data NOT in public domain
- use of data for specific purposes only after user registration
- data users sign legally binding End User Licence
  - e.g. not identify any potentially identifiable individuals*
- stricter access regulations for sensitive data (case to case basis):
  - access to approved researchers only (approved researcher/special license)
  - data access permission from data owner prior to data release
  - data under embargo for given period of time

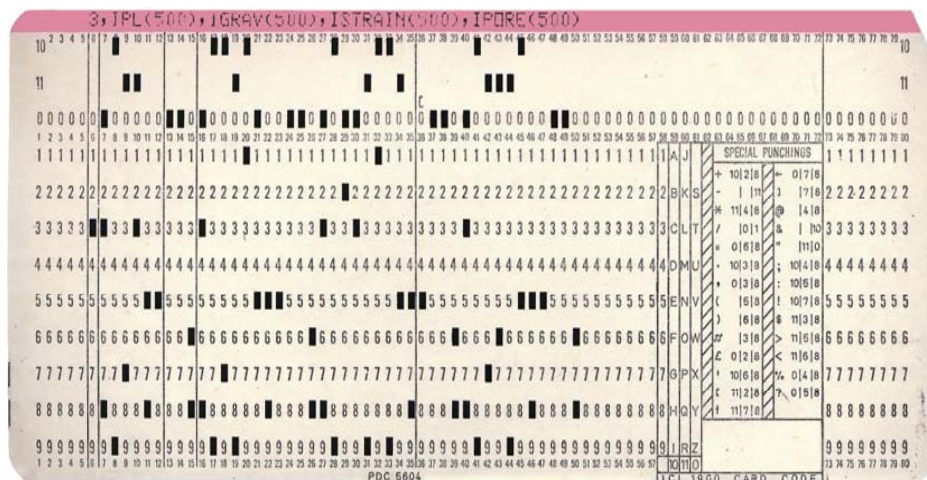
# DOCUMENTING DATA

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If someone was using your data for the first time, what would they need to know?

- context information about research and data
  - final report, publications, fieldnotes, thumbnail about interview setting
- data collection methodology and processes: sampling, data collection process, instruments used, tools used, temporal/geographic coverage, data validation
- documentation: descriptions of codes or classifications used
- data listings for qualitative data
- any conditions of use and access?

# CAN YOU UNDERSTAND/USE THESE DATA?



SrvMthdDraft.doc

SrvMthdFinal.doc

SrvMthdLastOne.doc

SrvMthdRealVersion.doc



UK DATA ARCHIVE



# DATA QUALITY CONTROL IN THE RESEARCH PROCESS

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- data collection – data must reflect facts, responses, observations, events
  - examples: standardised protocols, computer assisted interviews, interview recording and transcription
- data entry, digitisation, transcription and coding – avoid errors - use standardised and consistent procedures
  - examples: validation rules for data entry, controlled vocabularies or choice lists, transcription template
- data checking and verifying - automated and/or manual
  - typos, check for data completeness, peer review of data

# DATA FORMATS

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- choice of software format for digital data
  - planned data analyses/discipline-specific customs
  - software availability
  - hardware used – e.g. audio recorders
  - discipline-specific standards and customs
- best formats for long-term preservation
  - standard formats
  - interchangeable formats
  - open formats

*tab-delimited, comma-delimited (CSV), ASCII, RTF, PDF/A, OpenDocument format, XML*
- beware of errors in data conversion! Always check

# FIELDWORK FROM HELL

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“I’m sorry but we had to blow up your laptop”



“What....all my client case notes and testimony, writing, pictures, music and applications. Years of work. NO!!!! What?? Are you insane?? What were you thinking? THAT’S ALL MY WORK!?”

Source: [Lilysussman’s Blog](#)

# DATA STORAGE

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- ALL digital storage media are fallible
- file formats and physical storage media ultimately become obsolete
  - optical (CD, DVD) and magnetic media (hard drive, tapes) degrade
- best practice:
  - use data formats with long-term readability
  - storage strategy - at least two different forms of storage and locations; maintain original copy and external copies
  - check data integrity of stored data files regularly (checksum)
  - know your personal / institutional back-up strategy: network server/PC/laptop; data retention policies
  - what to protect? Not only data, and not only digital

# DATA SECURITY

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- protect data from unauthorised access, use, change, disclosure and destruction
- personal data need more protection – always keep separate
- control access to computers
  - passwords
  - anti-virus and firewall protection, power surge protection
  - networked vs non-networked PCs
  - all devices: desktops, laptops, memory sticks, mobile devices
  - all locations: work, home, travel
  - restrict access to sensitive materials e.g. consent forms, patient records
- proper disposal of equipment (and data)
  - even reformatting the hard drive is **not** sufficient
- control physical access to buildings, rooms, cabinets
- but beware of “requirements” to destroy data

# ENCRYPTION

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- always encrypt personal or sensitive data
- easy to use
  - Safehouse
  - Truecrypt
  - Axcrypt
- basic principles
  - use an algorithm to transform information (A=1)
  - need a “key” to decrypt
- encrypt anything you would not send on a postcard
  - for moving files e.g. transcripts
  - for storing files e.g. shared areas, mobile devices

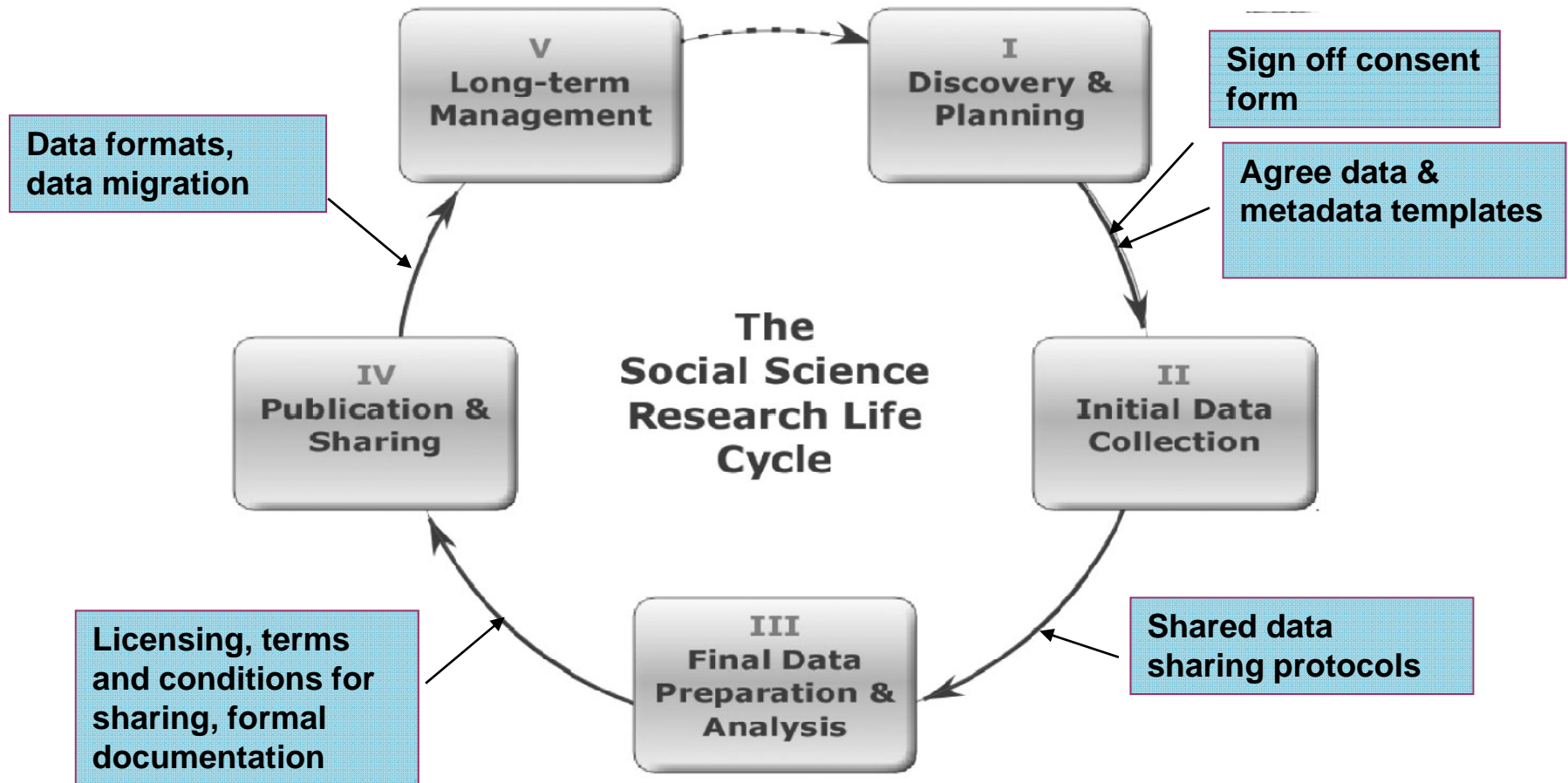
# FILE TRANSMISSION

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## Sharing data between researchers and teams

- virtual research environments
  - MS Sharepoint
  - Sakai
- file transfer protocol (ftp)
- Yousendit, Dropbox
- via physical media
- too often email attachments

# KEY DATA MANAGEMENT INTERVENTION POINTS







## BASICS OF WHAT TO PUT IN A DATA MANAGEMENT PLAN

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- need for access to existing data sources
- data planned to be produced
- planned quality assurance and back-up procedures for data
- plans for management and archiving of collected data
- expected difficulties in making data available for re-use and measures to overcome such difficulties
- who holds copyright and intellectual property rights of data
- data management roles and responsibilities



# WHAT RESEARCH DATA ARE WORTH KEEPING?

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- rich data, breadth, unique, topical, time series
- format, usability and condition of material
- data that have further analytic potential than the original investigation (depth; large-scale; longitudinal)
- relative importance or impact of the study
- confidentiality issues unproblematic (consent)
- copyright is not prohibitive



## HOW DO PEOPLE RE-USE DATA?

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- descriptive material
- comparative research, restudy or follow-up study
- re-analysis/secondary analysis
- research design and methodological advancement
- replication of published statistics
- teaching and learning

# IS IT REALLY DIFFICULT

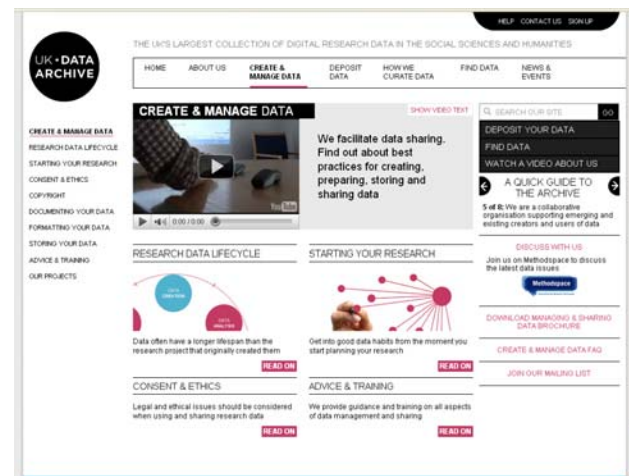
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- no, it's just common sense.
- it's all about good research practice
- be organised and accountable, and anticipating disaster at any time!

**SIMPLES!**



# CONTACT



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[www.data-archive.ac.uk/sharing](http://www.data-archive.ac.uk/sharing)