Data management basics: Ethical and legal issues in data sharing

Presenter: Dr Hina Zahid
Senior Research Data Officer
Overview

Ethical obligations
• Key principles for ethical research.
• Ethical research considerations and best practices.

Legal compliance
• Duty of confidentiality.
• Data protection considerations- GDPR.
• Strategies for managing and sharing research data (disclosure assessment, anonymisation, consent, access controls).
• Copyright considerations.
• Best practices for legal compliance.
Key principles for ethical research

• To maximise benefit for individuals and society & minimise risk and harm.
• The rights and dignity of individuals and groups should be respected.
• Voluntary and appropriately informed participation.
• Research should be conducted with integrity and transparency.
• Clearly defined lines of responsibility and accountability.
• Independence of research should be maintained and where conflicts of interest cannot be avoided they should be made explicit.
Ethical considerations in data sharing

• Clear guidance designed by the National Statistician's Data Ethics Advisory Committee's (NSDEC).

• UKSA Ethics Self-Assessment Tool.
NSDEC ethics principles

**Public Good**
The use of data has clear benefits for users and serves the public good.

**Confidentiality, data security**
The data subject’s identity (whether person or organisation) is protected, information is kept confidential and secure, and the issue of consent is considered appropriately.

**Methods and Quality**
The risks and limits of new technologies are considered and there is sufficient human oversight so that methods employed are consistent with recognised standards of integrity and quality.

**Legal Compliance**
Data used and methods employed are consistent with legal requirements such as Data Protection Legislation, the Human Rights Act 1998, the Statistics and Registration Service Act 2007, and the common law duty of confidence.

**Public views & engagement**
The views of the public are considered in light of the data used and the perceived benefits of the research.

**Transparency**
The access, use and sharing of data is transparent, and is communicated clearly and accessibly to the public.
Best practices for ethical sharing of research data

- Ethical obligations should be considered throughout the research lifecycle; from planning and research design stage, data collection stage to the future use including publications, archiving, sharing and linking of data.
- Be knowledgeable about relevant research organisations own standards and requirements.
- Comply with relevant laws.
- Avoid social and personal harm.
- Data centres facilitate ethical and legal re-use of research data, protection of participants and safeguarding of personal data.
Duty of confidentiality and data sharing

• Exists in UK common law and may apply to research data.
• Disclosure of confidential information is lawful when:
  o the individual to whom the information relates has consented.
  o disclosure is necessary to safeguard the individual, or others, or is in the public interest.
  o there is a legal duty to do so, for example a court order.
• Best practice is to avoid very specific promises in consent forms.
Personal information

• Personal information or data is any information relating to an identified or identifiable natural person (name, address, postcode).

• It also includes sensitive personal data or special category data such as ethnicity, political or religious beliefs, biometric data, health.
Data protection considerations

• If personal information about people is collected or used in research, then the data protection regulations applies.

• Data protection act 2018 (DPA), General data protection regulation 2018 (GDPR) & the UK GDPR 2021.

• DPA (2018) & the UK GDPR (2021) applies when a researcher based in the UK collects personal data about people anywhere in the world a researcher outside the UK collects personal data on UK citizens.

• DPA (2018), EU GDPR (2018) & the UK GDPR (2021) applies when a researcher based in the UK collects personal data about people across Europe.
Data subjects rights

- The right to be informed.
- The right of access.
- The right to rectification (correction).
- The right to erasure (right to be forgotten).
- The right to restrict processing.
- The right to data portability.
- The right to object.
Principles of processing personal data

(DPA and the UK GDPR)

All data must be:
• be processed lawfully, fairly and transparently
• be kept to the original purpose
• be minimised (only the personal data that is necessary is collected)
• be removed if not necessary
• have the accuracy upheld
• be kept confidential and integrity maintained.
## Legal bases to process personal data

<table>
<thead>
<tr>
<th>Legal base</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consent</strong></td>
<td>Survey to capture public opinion, whereby email addresses are collected to contact respondents at a later stage.</td>
</tr>
<tr>
<td></td>
<td>Qualitative study on a sensitive topic, e.g. violence against women, where respondents may be identifiable from the collected information.</td>
</tr>
<tr>
<td></td>
<td>Oral history project where people’s real names are used.</td>
</tr>
<tr>
<td><strong>Public interest / public task</strong></td>
<td>Longitudinal study of people living with dementia and their carers, to identify how people would like to be supported. Findings inform and support the caring strategy and public advocacy</td>
</tr>
<tr>
<td><strong>Legitimate interest</strong></td>
<td>Research project funded and undertaken by a private corporation to look at the effects of smoking on car passengers.</td>
</tr>
<tr>
<td><strong>Protect vital interests</strong></td>
<td>Unlikely in research. Hospital treating a patient after a serious road accident can search for his/her ID to find previous medical history or to contact his next of kin.</td>
</tr>
<tr>
<td><strong>Legal obligation</strong></td>
<td>Unlikely in research. Processing personal data as part of a health and safety report or incident.</td>
</tr>
<tr>
<td><strong>Performance of a contract</strong></td>
<td>Unlikely in research. Processing personal data as part of an employment contract.</td>
</tr>
</tbody>
</table>
GDPR and research

- Principles.
- Rights of data subjects.
- Processing grounds for processing personal data.
- Emphasis on transparency, clear information, clear documentation.
- Reuse for research allowed with safeguards.
Strategies for managing and sharing research data obtained from people

• Protection of identities when promised (anonymisation, de-identification).

• Processing ground for personal data (consent).

• Regulated access where needed (open, safe guarded, controlled).
Disclosure assessment

• **Direct identifiers**: e.g. name, address, postcode, telephone number, biometrics data.

• **Indirect identifiers**: e.g. occupation, geography, marital status, educational qualification, unique or exceptional values (outliers) or characteristics.
De-identification & anonymisation

• **De-identification** – refers to a process of removing or masking direct identifiers in personal data.

• **Anonymisation** - refers to a process of ensuring that the risk of somebody being identified in the data is negligible. This invariably involves doing more than simply de-identifying the data, and often requires that data be further altered or masked. Anonymisation allows data to be shared ethically and legally while preserving confidentiality.
Anonymising quantitative data

• Remove direct identifiers: e.g. names, address, institution, photo.

• Reduce the precision/detail of a variable through aggregation: e.g. birth year instead of date of birth, occupational categories rather than jobs; and, area rather than village.

• Generalise meaning of detailed text variable: e.g. occupational expertise.

• Restrict upper lower ranges of a variable to hide outliers: e.g. income, age.

• Further info.
Anonymising qualitative data

• Plan or apply editing at time of transcription except: longitudinal studies.

• Avoid blanking out; use pseudonyms or replacements.

• Avoid over-anonymising – removing / aggregating information in text can distort data, make them unusable, unreliable or misleading.

• Consistency within research team and throughout project.

• Show replacements, e.g. with [brackets].

• Keep a log of all replacements, aggregations or removals made – keep separate from de-identified data files.

• Further information.
What if anonymisation is impossible?

• Obtain consent for sharing non-anonymised data.
• Regulate or restrict user access.
Consent in research

• Consent for research ethics: provide information regarding study purpose, risks, benefits, voluntary participation.

• Consent can also be used as a legal basis for the processing of personal data under GDPR.
Conditions for consent when used as a legal base for processing personal data

• Must be freely given, informed, unambiguous, specific (granular).
• A clear affirmative action.
• Cannot be inferred from silence, pre-ticked boxes or inactivity.
• Participants can withdraw consent to process their personal data at any time.
• Must be documented, i.e. recorded, written or oral.
• An explicit consent is required to process special categories data (e.g. a person’s race, ethnic origin, politics, religion, genetics, sex life, health).

explicit = express statement of consent, e.g. written statement
How to seek consent?

• Consent can be gained in **written** or **oral** form.

• Format depends on the kind of research.

• Important to document how it has been gained, what information has been provided to the participants and what they have agreed to.
## Formats of consent

<table>
<thead>
<tr>
<th>Type of consent</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
</table>
| Written consent  | • More solid legal ground  
• Often required by Ethics Committees  
• Offers more protection for researcher | • Not possible for some cases: infirm  
• May scare people from participating |
| Verbal consent   | • Best if recorded                                                          | • Can be difficult to make all issues clear verbally  
• Possibly greater risks for researcher |
Consent documentation (part 1)

An information sheet should cover the following topics:

• Purpose of the research.
• What is involved in participating.
• Benefits and risks of participating.
• Procedures for withdrawal.
• Usage of the data during research, dissemination, storage, publishing and archiving.
• Details of the research: funding source, sponsoring institution, name of project, contact details for researchers, how to file a complaint.
Consent documentation (part 2)

Consent form should:

• Use simple language and free from jargon.

• Allow the participant to clearly respond to points such as:
  o The participant has read and understood information about the project.
  o The participant has been given the opportunity to ask questions.
  o The participant voluntarily agrees to participate in the project.
  o The participant understands that they can withdraw at any time without giving reasons and without penalty.
  o Future uses (e.g. publications, share and reuse).
  o Signatures and dates of signing for the participant and the researcher.
Consent documentation (part 3)

If personal information is collected:
• How personal information will be processed and stored and for how long.
• Procedures for maintaining confidentiality.
• Procedures for ensuring ethical use of the data.

If the GDPR applies:
• The contact details of the data controller (DPO, REO, Researcher).
• Who will receive or have access to the personal data.
• A clear statement on the right of the participant (right to access, correction or removal).
### When to seek consent

<table>
<thead>
<tr>
<th>Type of consent</th>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>One-off consent</td>
<td>• Simple</td>
<td>• Research outputs not known in advance</td>
</tr>
<tr>
<td>Used for taking part in the research project only once</td>
<td>• Least hassle to participants</td>
<td>• Participants will not know all info they will contribute</td>
</tr>
<tr>
<td>Process consent</td>
<td>• Ensures ‘active’ consent</td>
<td>• May not get all consent needed before losing contact</td>
</tr>
<tr>
<td>Consent is requested continuously throughout the research project</td>
<td></td>
<td>• Repetitive, can annoy participants</td>
</tr>
</tbody>
</table>
Challenges in obtaining informed consent

• Participant perception and expectations.
• Children & vulnerable people.
• Participant’s poor awareness of their rights.
• Failure to provide adequate information.
• Absence of consideration of participant’s background such education, culture.
• Use of jargon.
• Skeptical of confidentiality issues.
Managing access to data

**Open**
- Available for download/online access under open licence without any registration.

**Safeguarded**
- Available for download / online access to logged-in users who have registered and agreed to an End User Licence (e.g. not identify any potentially identifiable individuals).
- Special agreements (depositor permission; approved researcher).
- Embargo for fixed time period.

**Controlled**
- Available for remote or safe room access to authorised and authenticated users whose research proposal has been and who have received training.
Handling personal data in research

• Will the research project collect personal data or special categories of data?
• Who will be the data controller for the research project?
• Will the research involve collaboration with other partners?
• Who will have access to the personal data collected?
• What ground will be used for processing the personal data in a project?
• What information needs to be communicated to participants?
• How and where will the personal data be stored?
Copyright considerations

• Copyright is an intellectual property right assigned automatically to the creator.

• Data owner (researcher) has copyright of research data.

• Compiled datasets contain original copyright – seek permission to archive when collecting.

• Data archives publish data – hold no copyright.

• Information being in the public domain (e.g. online) does not mean copyright does not apply!
Best practices when using secondary data

Questions to ask:
• Who the copyright holder of the datasets is?
• Are you allowed to use them and in what way?
• Are you allowed to archive and publish them in a data repository?

• If not, you may need to seek for further permission to distribute material you do not own - copyright clearance.

• If permission is not granted, need to remove copyrighted variables/material before publishing or sharing.
Best practice for legal compliance

• Investigate early which laws apply to your data, including cross-country collaborative working.
• Do not collect or keep personal or sensitive data if not essential to your research.
• Plan early on; seek advice from your research office.
• Ensure that you check participants know how this data will be used.
• Remember: not all research data are personal (e.g. anonymised data are not personal).
Further resources

• UK Data Service.
• UKDS Model Consent Form.
• Example Consent Forms.
• Example Information Sheet.
• Consent for data sharing.
• DARIAH ELDAH Consent Form Wizard | CFW.
• Rights when using secondary data sources.
• Regulating access to data.
• Managing and sharing research data: A guide to good practice.
Future training events

UK Data Service events page.

- Depositing your data with Reshare
- Consent issues in data sharing
- Introduction to Copyright: Copyright & publishing
- Introduction to copyright: copyright issues in secondary data use

Past events
How to anonymised quantitative and qualitative data
Thank you.

Dr Hina Zahid
hzahid@essex.ac.uk
Twitter: @hinazahid2016