Research Ethics
in the
Digital Age

SICSS Berlin & MA Seminar University of Potsdam

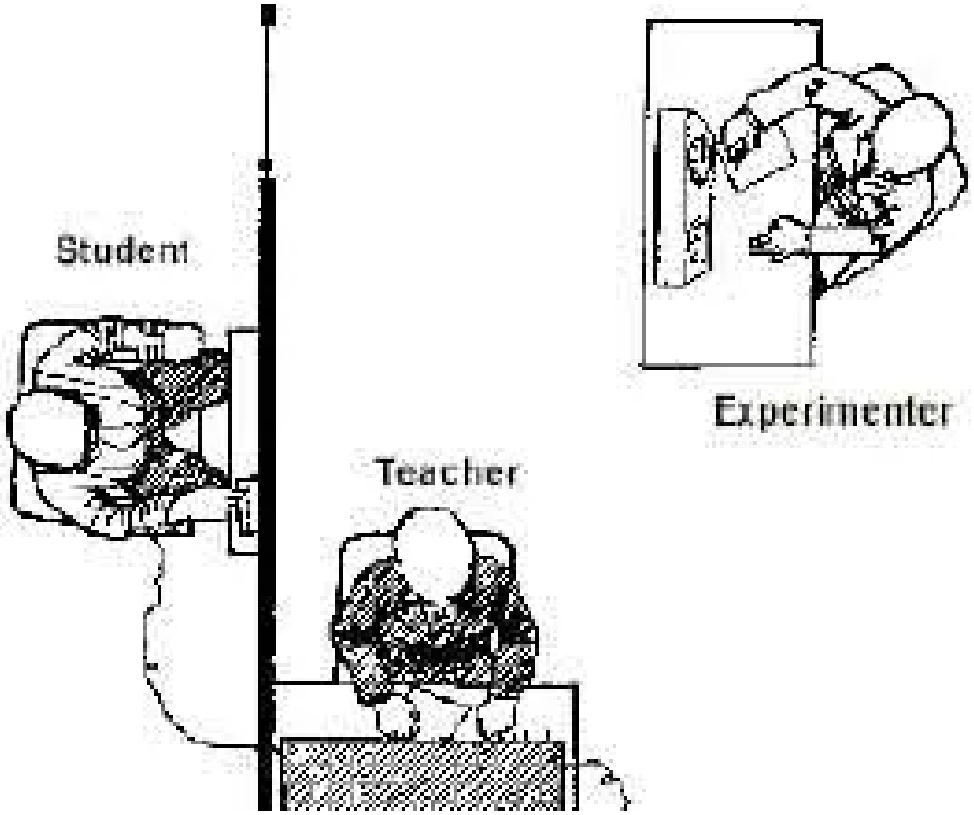
Day 1/Session 11

Overview

1. Why we should care about ethics (in big data research)
2. Which principles and frameworks provide ethical guidelines
3. Practical examples and advice

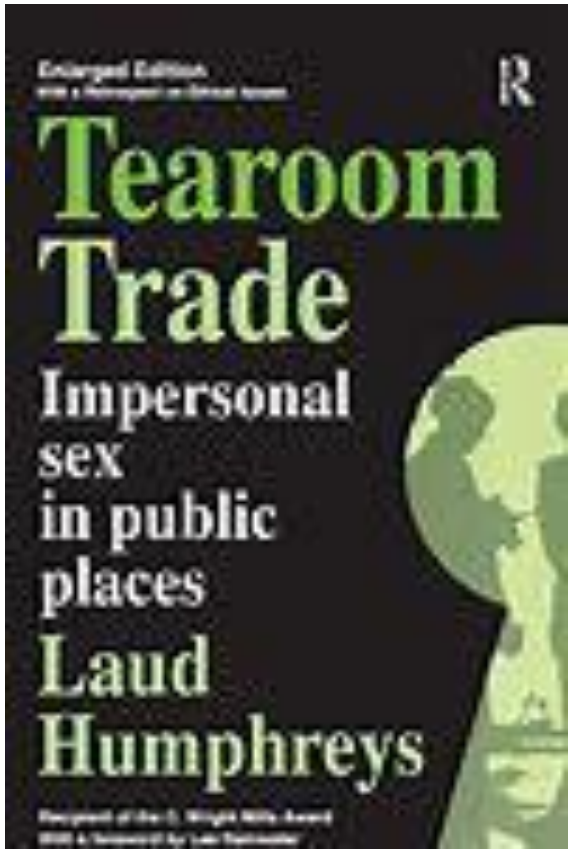
Egregious cases of unethical research

Milgram: Experiments on Obedience to Authority (1963)



Egregious cases of unethical research (cont‘d)

Humphrey: Tearoom Trade Study (1970)



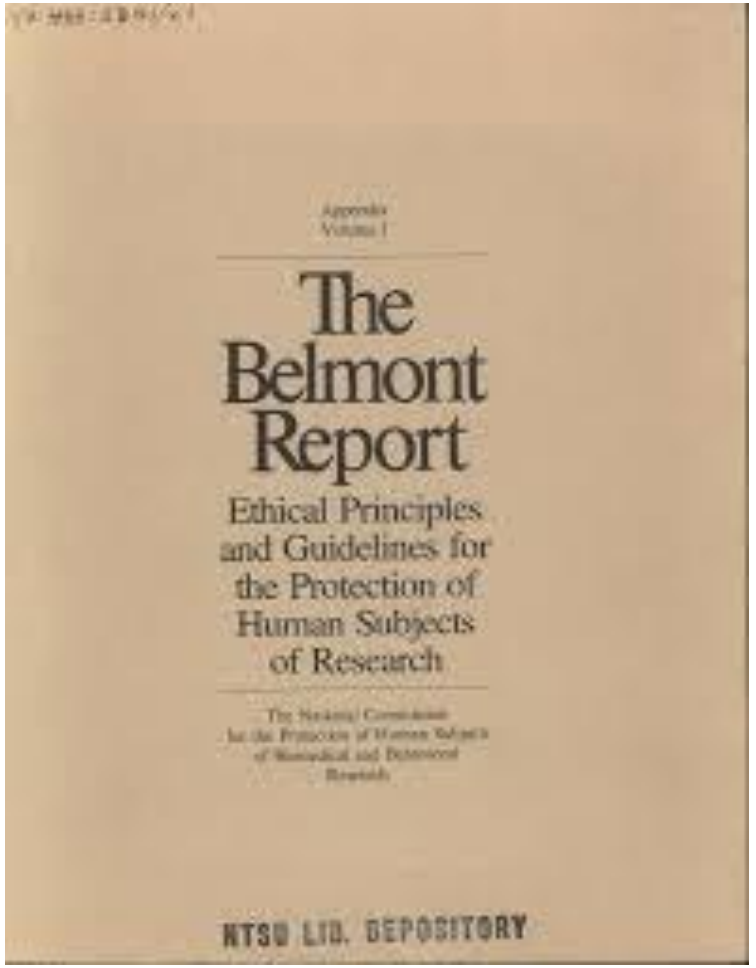
Egregious cases of unethical research (cont‘d)

Tuskegee Syphilis Study (1932-1972)

Ethical Principles

Belmont Report (1978)

1. Respect for persons
2. Beneficence
3. Justice

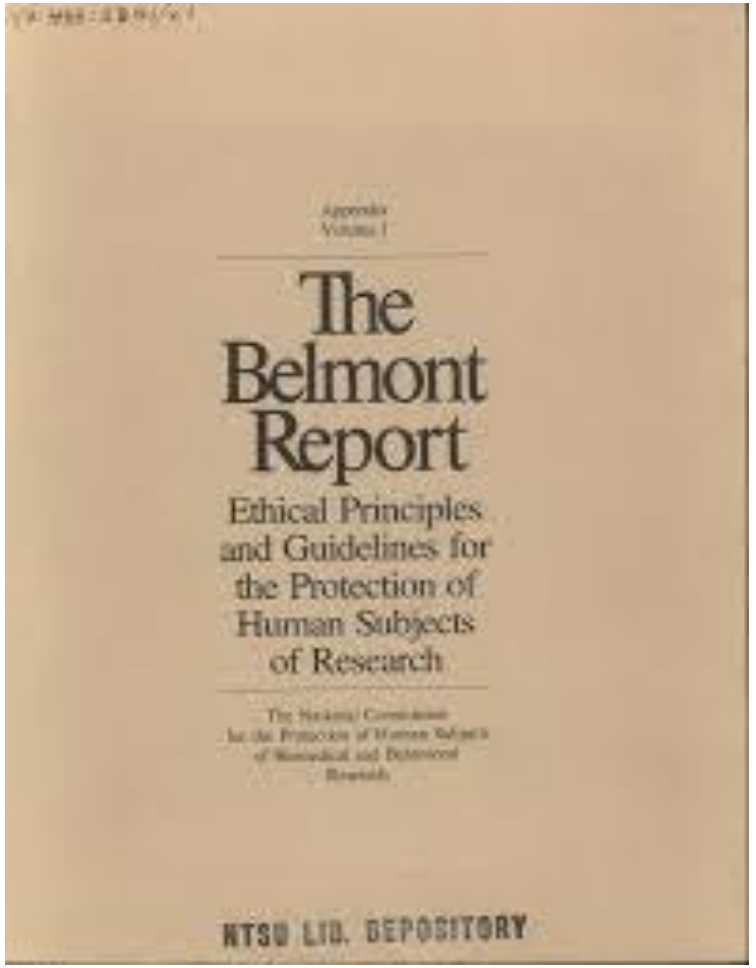


Ethical Principles

Belmont Report (1978)

1. Respect for persons
   - Individuals should be treated as autonomous
   - Additional protection for individuals with diminished autonomy

don‘t do anything to people without giving consent (even when it‘s harmless or beneficial)



Ethical Principles

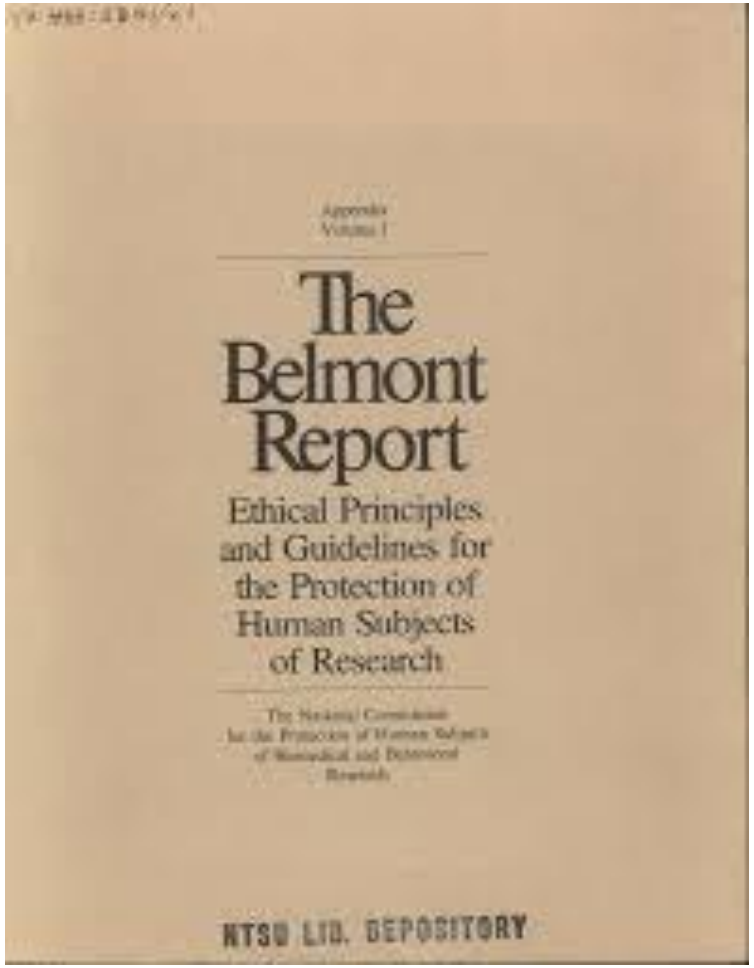
Belmont Report (1978)

1. Respect for persons
2. Beneficence
   - Do not harm
   - Maximize potential benefits and minimize potential harm

→ risks & benefits need to strike an ethical balance

→ risk = probability*severity of an adverse event

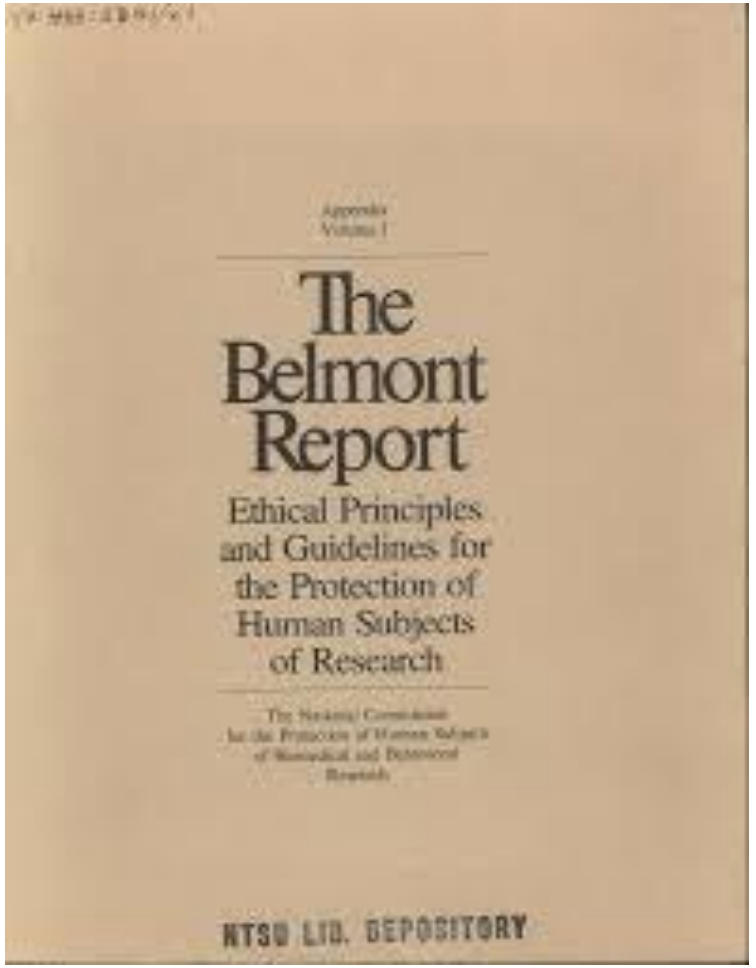
→ research impacts participants & non-participants



Ethical Principles

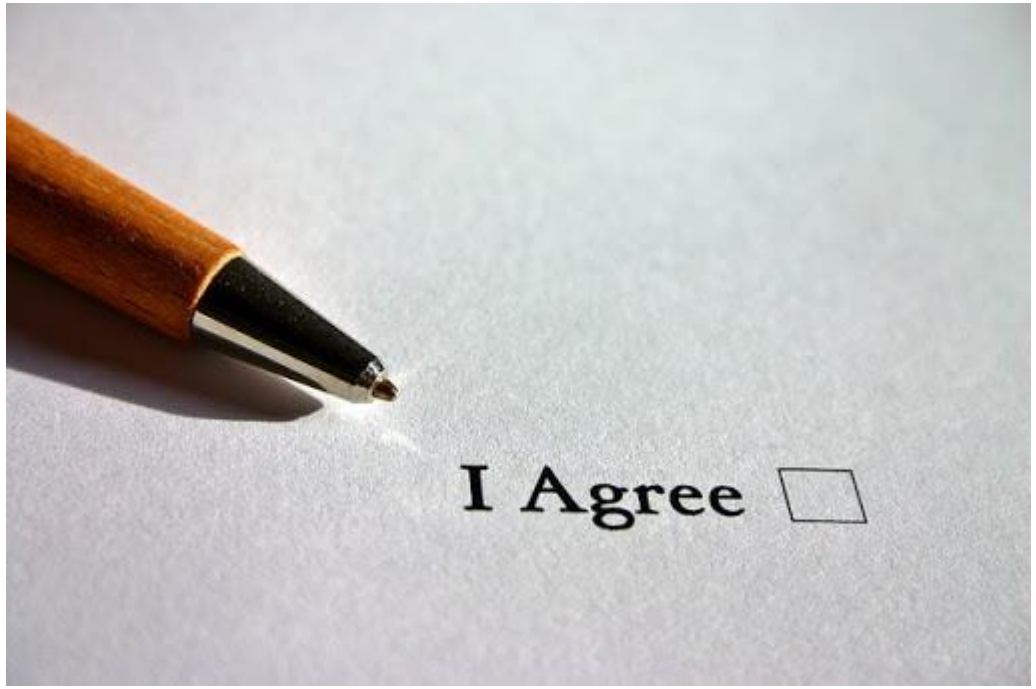
Belmont Report (1978)

1. Respect for persons
2. Beneficence
3. Justice
   - Risks & benefits of research should be *equally distributed* between different (socio-demographic) groups
   - Around 1990s, shift from *protection* to *access*



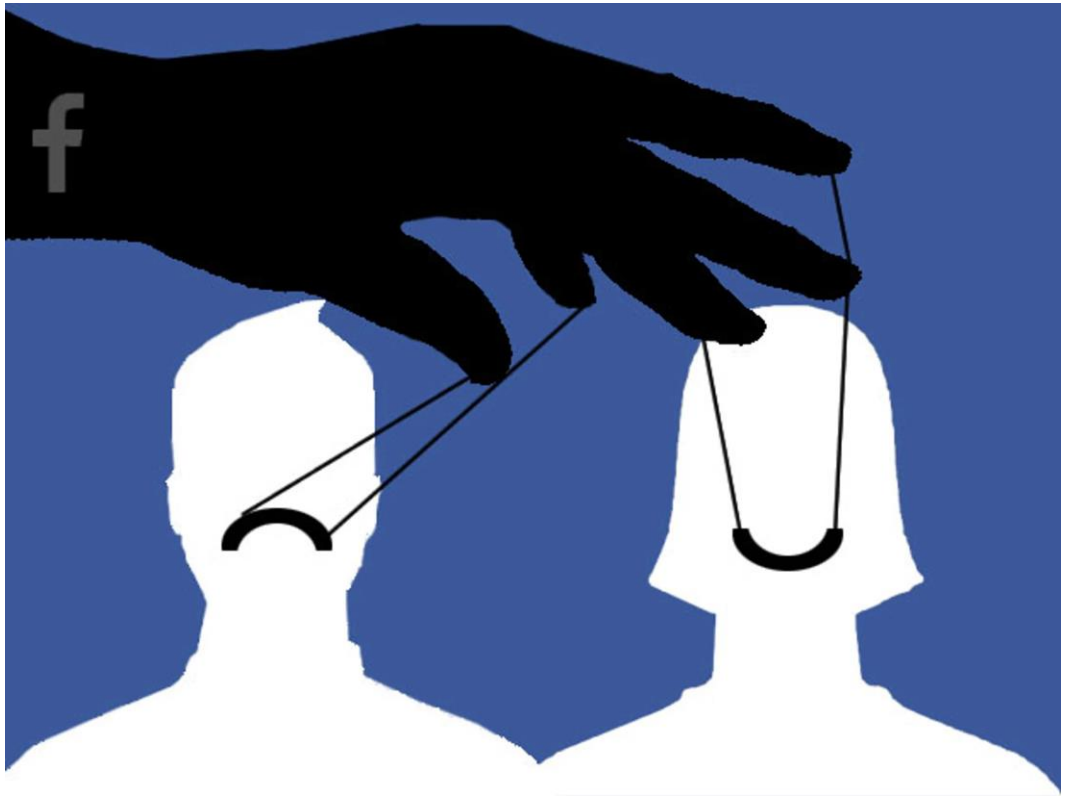
(Why) Is digital different?

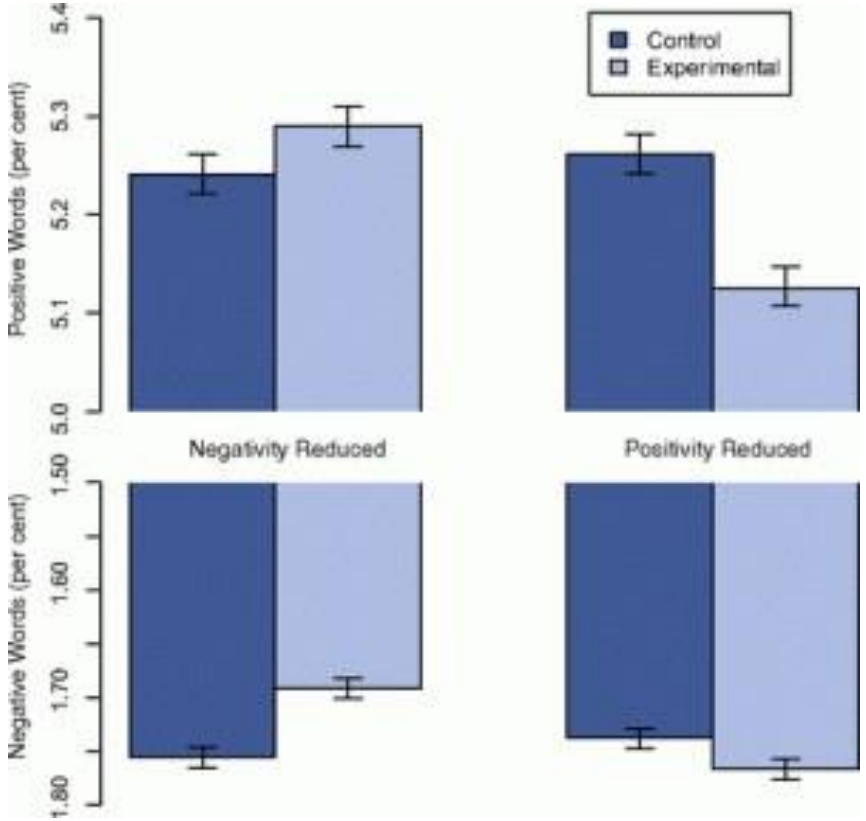
- Scale (N)
- Difficulty to obtain consent
- Unanticipated secondary use of data
- Data linkage
- …



Digital-age studies with ethical controversies

Emotional contagion (Kramer et al., 2014)





Digital-age studies w/ ethical controversies

Tastes, Ties, and Time (Wimmer and Lewis 2010, Lewis et al. 2012)

Harvard University "Tastes, Ties, and Time (T3)" Study	Violated subjects' autonomy and privacy – subjects did not agree to participate in the research, and subjects were able to be identified (failure of researchers to protect subjects from deductive disclosure)

Digital-age studies w/ ethical controversies

Netflix Prize (Narayanan and Shmatikov 2008)

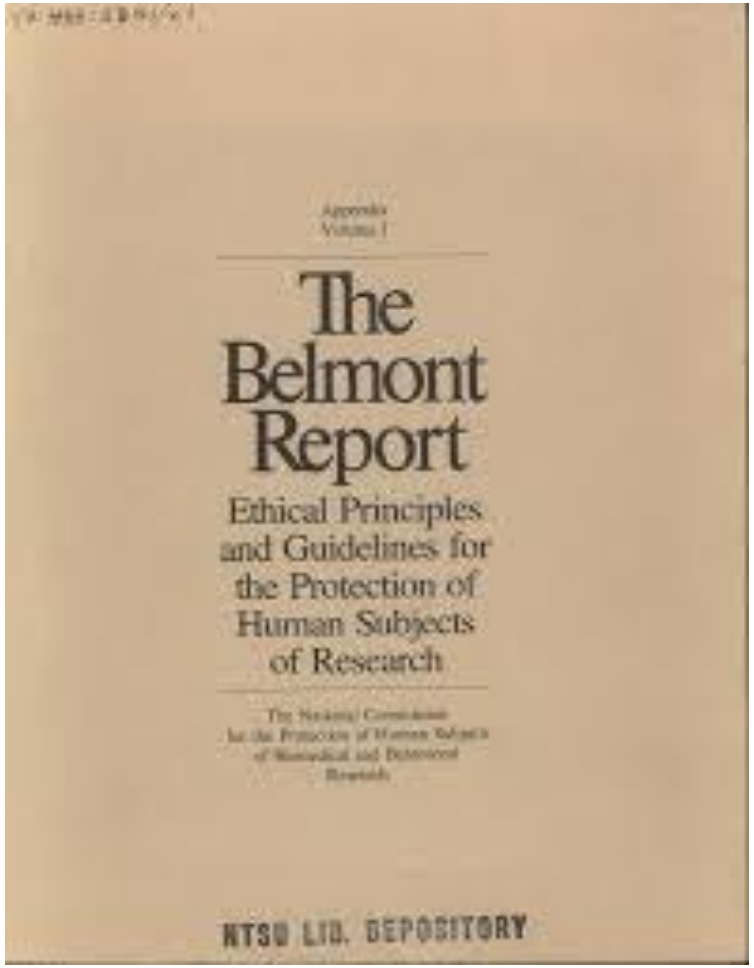
Ethical Principles

Belmont Report (1978)

1. Respect for persons
2. Beneficence
3. Justice

Menlo Report (2012)

4. Respect for Law and Public Interest
   - Compliance
   - Transparency-based accountability
   - All data are potentially sensitive & identifiable



Ethical Frameworks

Ethical Frameworks

Deontology

Focus on principles/means

- Immanuel Kant

e.g., Belmont Report (1979) re. beneficence: researchers should not „injure one person regardless of the benefits that might come to others“

Consequentialism

Focus on ends

- Jeremy Bentham
- John Stuart Mill

e.g., Belmont Report (1979) re. beneficence: „justifiable to seek cetain benefits despite the risks involved“

Small-group activity

1. What are the (potential) ethically problematic aspects?
2. How would a deontologist assess the ethical issues raised by the research project?
3. How would a consequentialist assess the ethical issues raised by the research project?
4. What could the researchers have done/do to reduce ethically problematic aspect of the project?

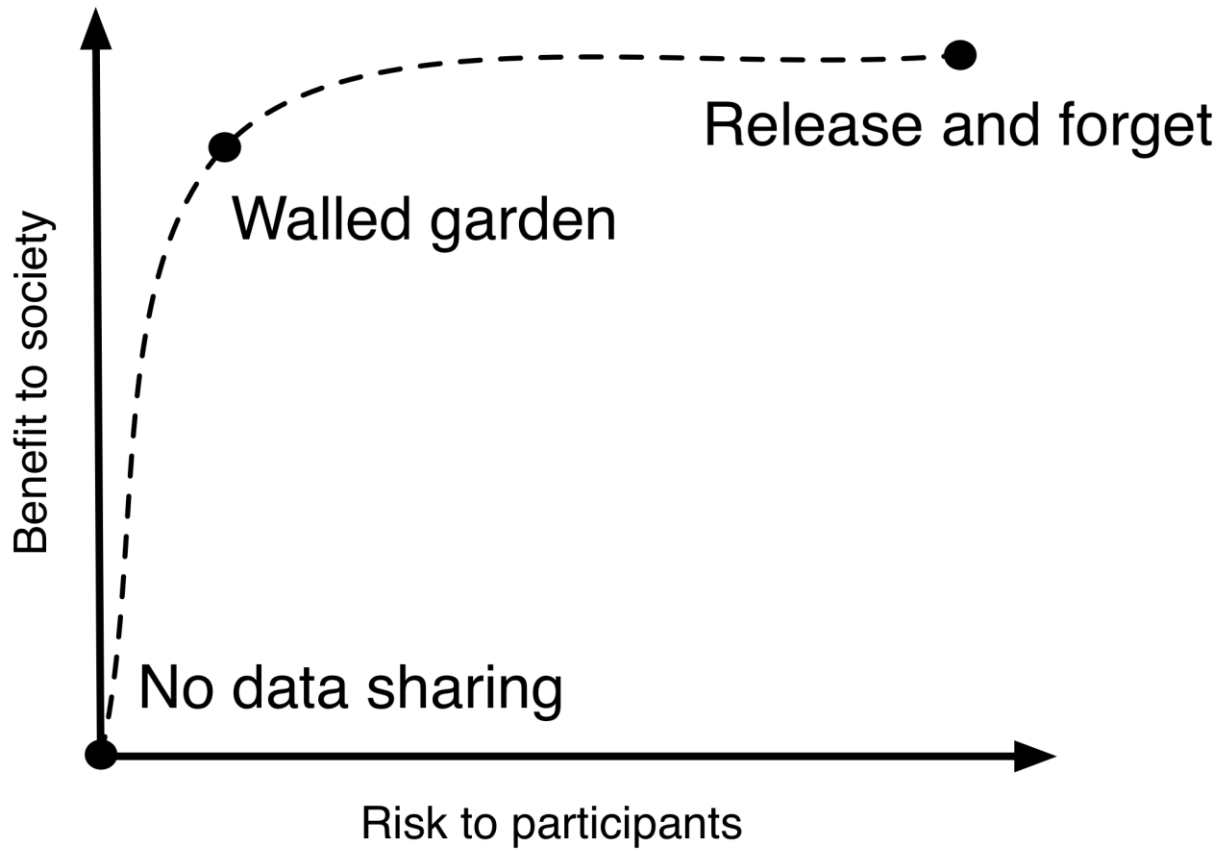
Some practical advice

Ethical concerns vs. making research happen

Precaution seems reasonable, but: there are also ethical risks of inaction

1) Integrity: How would you feel? What do your friends say?
2) Ethical response surveys
3) Stage trials (probably less applicable to most of our research)
4) Write an ethical appendix
5) Power calculations
6) Data protection plans

Ethics approval = protection for you as well


Release and forget
Walled garden
No data sharing
Benefit to society
Risk to participants