DATA ETHICS

Data Analysis for Journalism and Political Communication (Fall 2025)

Prof. Bell

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TUSKEGEE SYPHILIS STUDY



 Summarizes ethical principles and guidelines for conducting research with human subjects



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- Codified into law as the "Common Rule", which covers all federally-funded research

Respect for Persons

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Justice

Groups who bear the burden of research should also be the beneficiaries of that research.

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 vs. randomized drug trials

EXPANDING PRINCIPLES FOR EQUITY (URBAN INSTITUTE)

- Seek and include communities' interests in research design
- Seek out and incorporate communities' interpretation of the data
- Return data and research results to community members in a form they can use
- Be aware of how sensitive topics can affect people and communities
- Minimize the amount of personally identifiable information (PII) collected
- Avoid undue burden
- Share data to reduce the burden of duplicate data collection



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- There are financial benefits that accrue to the companies, not the research subjects

CASE STUDIES

- Home DNA Testing
- Crisis Text Line
- Oiversity in Faces (DiF) dataset



CASE STUDIES

- What are the relevant ethical principles and practices?
- What concerns are there about violations of ethical principles?
- Mow could the research have been conducted more ethically?

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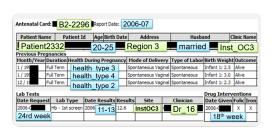
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 - Indirect identifiers: information that in combination would be sufficient to disclose an identity
- De-identification is the process of removing direct and indirect identifiers

Remove direct identifiers

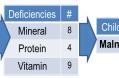


- Remove direct identifiers
- Aggregate or reduce the precision of a variable
 - Generalize the meaning of categories

SubjlD	Region	RegGen
2253	21239	212
2254	21238	212
2255	21135	211
2256	06058	060

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- Aggregate or reduce the precision of a variable
 - Generalize the meaning of categories
 - Collapse categories

Mineral	#	Protein	#	Vitamin	#	
Potassium	1	Kwashiokor	0	B2	3	ı
Magnesium	2	Marasmus	3	B12	0	ı
Calcium	5	Catabolysis	1	С	2	ľ
Zinc	0			Α	0	

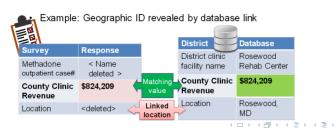




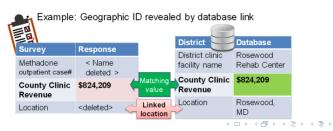
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 - Restrict the upper or lower ranges

Age	Actual Wealth	Top-coded Wealth
24	24,778	24,778
31	26,750	26,750
42	26,780	26,780
64	35,469	30000+
27	43,695	30000+

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 - Restrict the upper or lower ranges
- Anonymize keys that link to other datasets
- Maintain a master log of all replacements, aggregations, or removals and keep it in a secure location separate from the de-identified data files



DE-IDENTIFICATION EXERCISE



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