
Research Ethics : Observational Research

Emma Eriksson, Yu Liu, Ambuj Varshney, Thanh Truong, Minpeng Zhu

Introduction

§ Observational study

- Investigators observe subjects and measure variables of interest **without** assigning treatments to the subjects
- Example: the effect of smoking on lung capacity in men
- Survey, video recording, digital traces etc

§ Written consent (to protect participant)

E.g some points in video recording consent

- Whether copies will be made of the video?
 - How and where, how long and secure the video will be stored?
 - Will the video be used for other purposes?
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Studies involving Children

§ “..if a child is under 15 years of age, both guardians as well as the child must consent to participate” (Good research practice)

§ Is it ethical to decide for another person, a child, that he/she should participate in an experimental study?

§ Are the parents always entitled the results?



Mobile and Participatory Sensing

1. Different types of sensors on phones turns these into data collection instruments!
 - a. Location sensing
 - b. Biometric
 - c. Visual/Audio
 2. Ubiquitous nature means these provide data about environment and people at never before seen scale.
 3. Ethical issues in collecting and using data collected from these devices.
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Mobile and Participatory Sensing

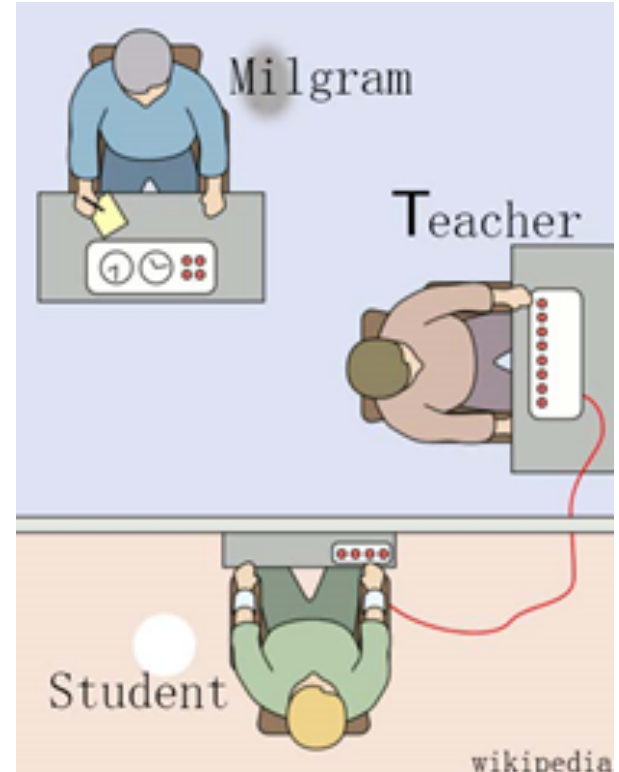
1. Publishing studies involving human subjects using tools like smartphone still needs to go through ethics board review.
 - 1.1. From ACM MobiSys 2014 (Flagship conference on Computing Systems, Mobile Sensing, Applications and services) -
“As part of the submission process, authors of papers that describe experiments on human subjects, or that analyze nonpublic data derived from human subjects (even anonymized data), will be asked to certify that their work was vetted by an ethics review (e.g., IRB approval). We expect authors to follow the rules of their host institutions around data collection and experiments with human subjects.”

Deception

Milgram Experiment (1961)

Aim: to see whether people really would obey authority figures, even when the instructions given were morally wrong.

Settings



Deception

Ethics Issues: Deception or not??

Fact: He did not tell the participants the real purpose beforehand, but he did that after it right away.

Criticism:

1. How could he deceive the participants who even want to help you with your research?
2. The fact that the participants thought that they had caused suffering to other human beings (i.e. how can we so evil?), could have caused severe emotional distress.

Arguments:

1. Purpose seems reasonable: He was trying to establish whether the claim of war-criminals (e.g. World War II), that they were just obeying orders, was a reasonable defense or not.
 2. After the experiment, he told participants all the things.
 3. Subsequent research indicated that there were no long term psychological effects on the participants (referring to Stanford Prison Experiment).
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Deception

Current Rules

Here is a summary of the APA (American Psychological Association) code of ethics and informed consent policy - most other research areas use similar codes of practice.

1. Must not perform experiments using deception unless the research has a valid use, and there is no viable alternative.
2. There are some risks that must never be concealed, such as physical risk, severe emotional distress and discomfort.
3. Any deception should be revealed as soon as possible, and certainly no later than the conclusion of the experiment.

If a researcher designed a similar experiment with Milgram today, *it would not be allowed today.*

Deception

Do they work??

Corresponding to the rules:

1. unless the research has a valid use: it's extremely hard to define "valid use", and to tell whether some experiments are useful or not, before we actually see the effects of these experiments, especially those blank areas of research, like this "how likely shall we obey orders?"
2. some risks that must never be concealed: for many risks, even potential risks, we have no idea. For doing research, many unexpected things could happen. How to tell whether we tell all the risks?

Besides, most participants are non-scientists, and it is all too easy to inadvertently mislead them because they do not fully understand the consequences.

3. This could be done easily. And it have recently been adapted. A subject signs an initial consent form but, after the experiment has been explained at the end, they sign a second and can ask for their contribution and records to be destroyed.
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Discussion

- Ethical issues exist in Observational Studies
 - Researchers
 - get Approval from Regional Ethical Review Board
 - give away requirements and consent forms in advance / afterwards
 - act accordingly to Personal Data Act and Ethical Reviews of Research Involving Humans
 - Participants
 - get hands on the consent form, normally in writing
 - know the Personal Data Act
 - Under the hood
 - Privacy
 - Benefits vs Risks
 - Individual
 - Research Community
 - Society
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