

Empirical Methods of Data Science

PROFESSOR MICHELLE LEVINE

WEEK 4: ETHICS

2/13/19

History of Ethical Issues

mid-20th century → first time ethical guidelines for psychologists were *discussed*

Early 1970s → first set of guidelines emerged (for both research with humans and nonhumans)

- National Research Act of 1974

Belmont Report of 1978

- Protect human subjects in research
- Formation of Institute Review Boards (IRB)

Historical Events

External events:

- Nuremberg Code
- Public Health Service Syphilis study (Tuskegee Syphilis Study)
- Willowbrook State School hepatitis study

Within psychology:

- Milgram's study
- Zimbardo's study

History behind Milgram study

Attitudes:

- our beliefs and feelings that predispose us to respond in a particular way
- our attitudes do not always predict our behaviors because other factors (ie. external situation), also influence behaviors, people, and events

Routes to attitude change:

- Central route
- Peripheral route

Experience, Behaviors & Attitude Change

Cooperative actions

- Doing something together can lead to mutual likings/beliefs.
- Not only do people stand for what they believe in (attitude), they start believing in what they stand for.

Justification of effort

- Newly accepted members of a group tend to value their group membership even more if their initiation was especially harsh.

Cognitive dissonance

- People change their attitudes to bring them into line with their behavior.

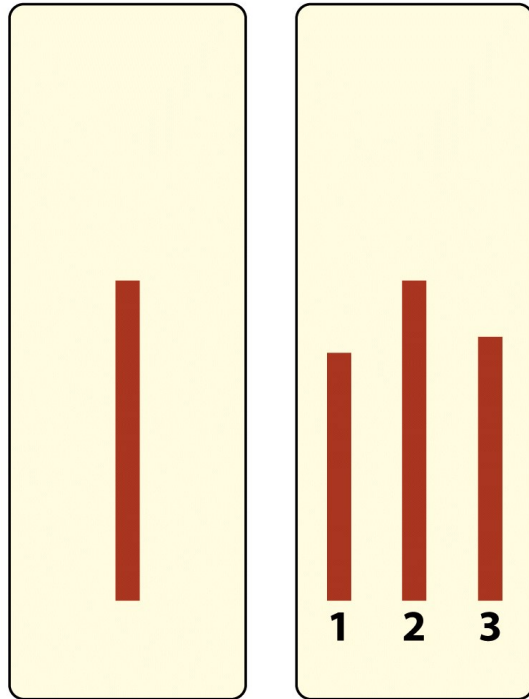
Social Influence

Why and when do we:

- conform?
- obey?
- help?

Conformity (Asch, 1951)

Do you go along with the crowd even when the correct answer is obvious?



What do you do when everyone else says the wrong answer?

Reasons for Conforming

Informational Social Influence

- Based on people's desire to be correct.
- Other individuals may have more or better access to information than we do.

Normative Social Influence

- Based on people's desire to be liked.
- Influence resulting from a person's desire to gain approval or avoid rejection. A person may respect normative behavior because there may be a severe price to pay if not respected.

Conditions that Strengthen Conformity

One is made to feel incompetent or insecure.

The group has at least three people.

The group is unanimous.

One admires the group's status and attractiveness.

One has no prior commitment to a response.

The group observes one's behavior.

One's culture strongly encourages respect for a social standard.

Conformity and Obedience

Behavior is contagious, modeled by one followed by another. We follow behavior of others to conform.

Other behaviors may be an expression of compliance (obedience) toward authority.

Conformity

Obedience

Milgram (1963)

People comply to social pressures.
How would they respond to outright
command?

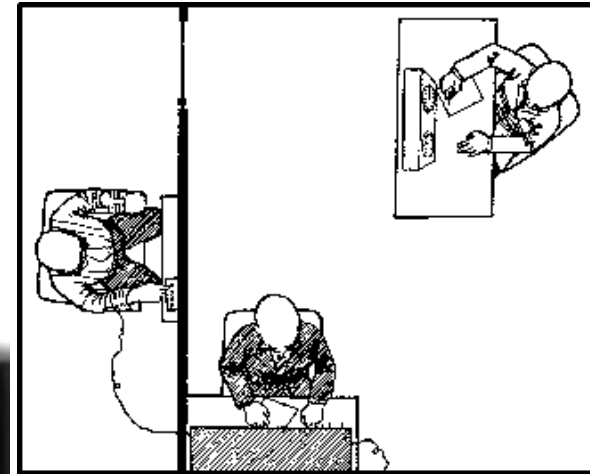
Stanley Milgram designed a study
that investigates the effects of
authority on obedience.



Courtesy of CUNY Graduate School and University Center

Stanley Milgram
(1933-1984)

Both Photos: © 1965 By Stanley Miligram, from the film *Obedience*, dist. by Penn State, Media Sales



Slight
(15-60)

Moderate
(75-120)

Strong
(135-180)

Very
strong
(195-240)

Intense
(255-300)

Extreme
intensity
(315-360)

Danger:
severe
(375-420)

XXX
(435-450)

Shock levels in volts

Results

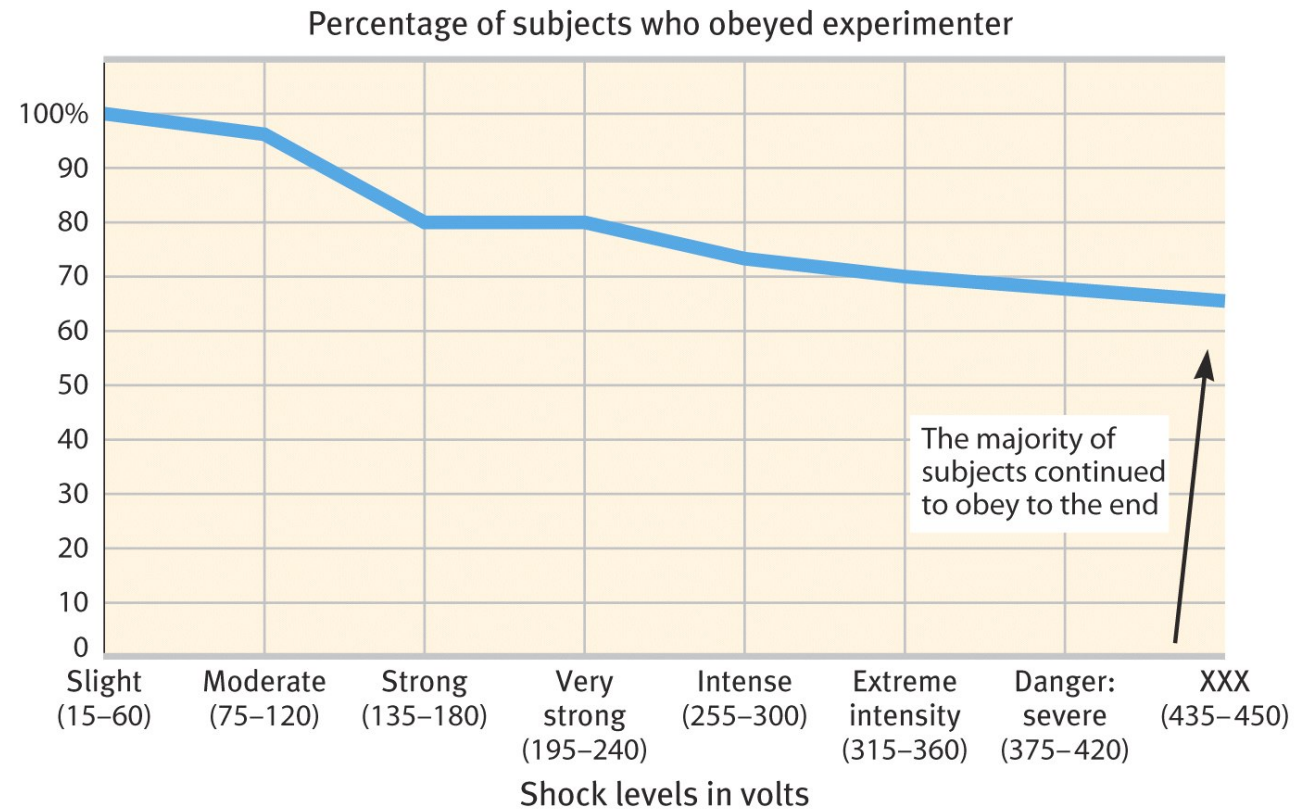




Figure 14.8 Giving a shock while in close proximity to the learner
Gray: Psychology, Fifth Edition
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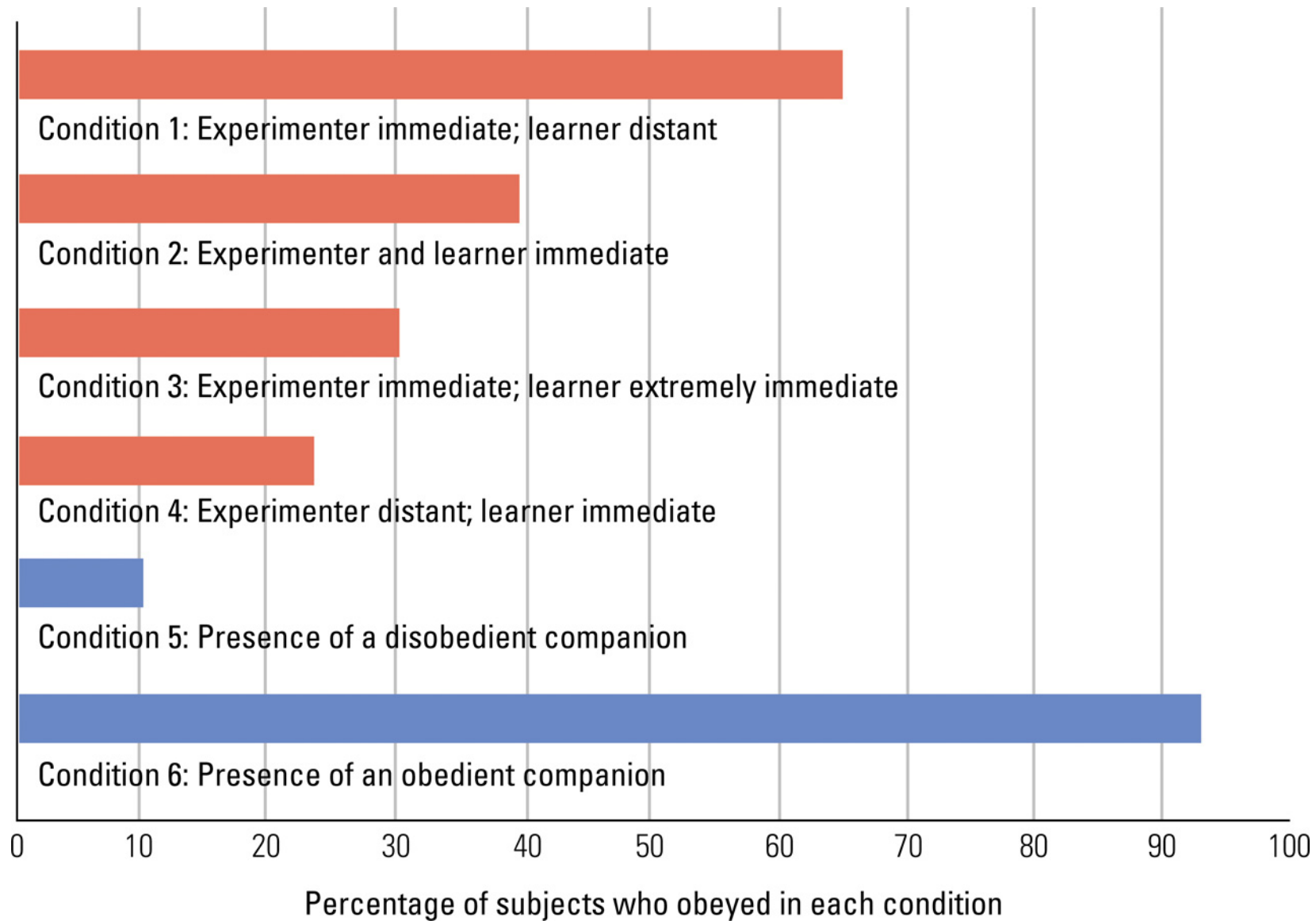


Figure 14.9 Results of Milgram's obedience experiments
Gray: Psychology, Fifth Edition
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“Ordinary people, simply doing their jobs, and without any particular hostility on their part, can become agents in a terrible destructive process”

– Milgram, 1974, pg. 6

Why?

Ethical concerns

Extreme emotional distress reported by many participants.

What does this truly tell us about obedience?

Do the benefits of such a study outweigh the costs?

Are there other ways to address when we confirm/obey and not have such potential consequences on the participants?

Stanford Prison Experiment

Zimbardo (1972)

- Randomly assigned students the roles of guards and prisoners.
- Found that guards and prisoners developed role-appropriate attitudes.
 - Guards became sadistic.
 - Prisoners depressed and extremely stressed.
- Ended after six days (not 14).



Psychology, 8/e Figure 13.22
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Zimbardo prison experiment

Traditional interpretation

Any other potential explanations?

Recent criticisms

Zimbardo's response to critics

“In my response to my critics, I hereby assert that none of these criticisms present any substantial evidence that alters the SPE's main conclusion concerning the importance of understanding how systemic and situational forces can operate to influence individual behavior in negative or positive directions often without our personal awareness. The SPE's core message is not that a psychological simulation of prison life is the same as the real thing, or that prisoners and guards always or even usually behave the way that they did in the SPE. Rather, the SPE serves as a cautionary tale of what *might* happen to any of us if we underestimate the extent to which the power of social roles and external pressures can influence our actions.”

– statement from Philip Zimbardo, prisonexp.org

Is my study ethical?

APA (2002) Ethical Concerns of Psychologists and Code of Conduct

- 5 General Principles:
 - Beneficence and nonmaleficence
 - Fidelity and responsibility
 - Integrity
 - Justice
 - Respect for people's rights and dignity

Responsibility of conducting ethical studies:

- Researcher and review boards (ie, Institutional Review Board)

Institutional Review Board (IRB)

Formal process for evaluating the ethics of a proposed research study

Protects research participants (and researcher)

Required whether research funded or not

Subject recruitment

No coercion

- Especially if paying participants or receiving course credit
 - I.e., make it clear grade doesn't depend on it

Informed Consent

Every participant must sign an agreement to take part in the study

For most cases, informed consent is obtained before the participant begins the experiment

Key components:

- Must provide as much information as possible about what is involved and any potential risks
- Assure participant that they may revoke consent at any time

Confidentiality

Participants must consent to have any information disclosed to a third party

- This includes for data analysis purposes, presentations, everything

Any exceptions must be explicitly stated to participants

Participants' names and any other identifying information remain confidential

- an ID number is assigned to each participant
- then only the ID numbers are used throughout experiment and data analysis

Debriefing

At the end of the experiment, the researcher

- Explains the experiment's purpose, design and educational objectives
- Describe manipulations not discussed in consent form
- Answer any questions

Goal is to make sure that participants leave the study in the same psychological state in which they came and there is no stress, uncertainty, etc.

Other ethical concerns

Deception

Clinical research

Nonhuman subjects

Plagiarism

Reporting data

Overall, ethical research relies on cost-benefit analyses – balance out the costs incurred by participants and the benefits that may come from conducting the study.

- Consider mental, emotional and physical distress

What does this mean for big data??

- (To be discussed next week)