

Obedience to Authority:

The Milgram Experiment &
Its Contemporary Replication

Was It Ethical Then?

Is It Ethical Now?

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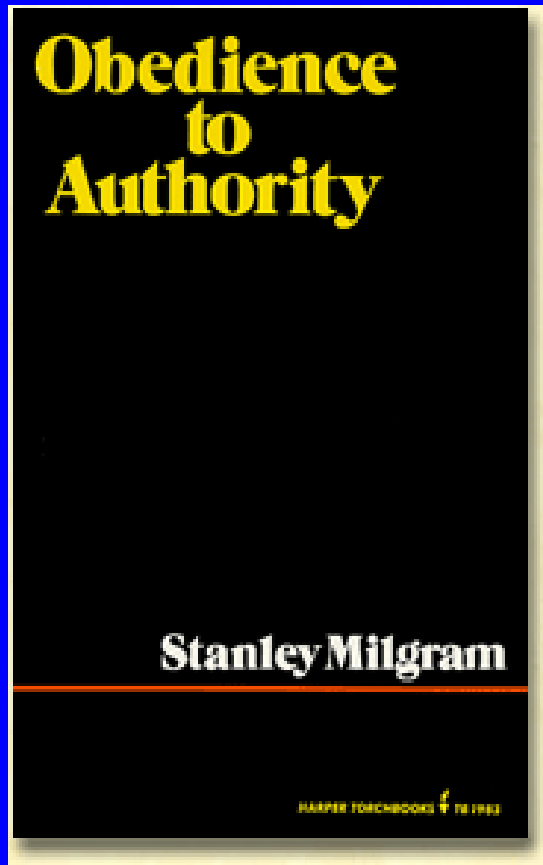
Boston University School of Medicine

Goals

- Describe purpose and methods of Milgram experiment and repeated experiment by Burger
- Apply ethical principles to experiment(s) to determine acceptability of each
- Apply the results of the experiments to your own research setting

- The Study Design
- The Results

Milgram Study 1963



Purpose:

- Determine response to authority
- Recruited volunteers to study learning and memory

Research Question

- How far would research subject go in administering a “shock” in response to encouragement from authority to continue when the learner appeared to be in extreme pain?
- When would they defy authority ?

Persons Needed for a Study of Memory

*We will pay five hundred New Haven men to help us complete a scientific study of memory and learning. The study is being done at Yale University.

*Each person who participates will be paid \$4.00 (plus 50c carfare) for approximately 1 hour's time. We need you for only one hour: there are no further obligations. You may choose the time you would like to come (evenings, weekdays, or weekends).

*No special training, education, or experience is needed. We want:

Factory workers	Businessmen	Construction workers
City employees	Clerks	Salespeople
Laborers	Professional people	White-collar workers
Barbers	Telephone workers	Others

All persons must be between the ages of 20 and 50. High school and college students cannot be used.

*If you meet these qualifications, fill out the coupon below and mail it now to Professor Stanley Milgram, Department of Psychology, Yale University, New Haven. You will be notified later of the specific time and place of the study. We reserve the right to decline any application.

*You will be paid \$4.00 (plus 50c carfare) as soon as you arrive at the laboratory.

TO:

PROF. STANLEY MILGRAM, DEPARTMENT OF PSYCHOLOGY,
YALE UNIVERSITY, NEW HAVEN, CONN. I want to take part in
this study of memory and learning. I am between the ages of 20 and
50. I will be paid \$4.00 (plus 50c carfare) if I participate.

NAME (Please Print)

ADDRESS

TELEPHONE NO. Best time to call you

AGE OCCUPATION SEX

CAN YOU COME:

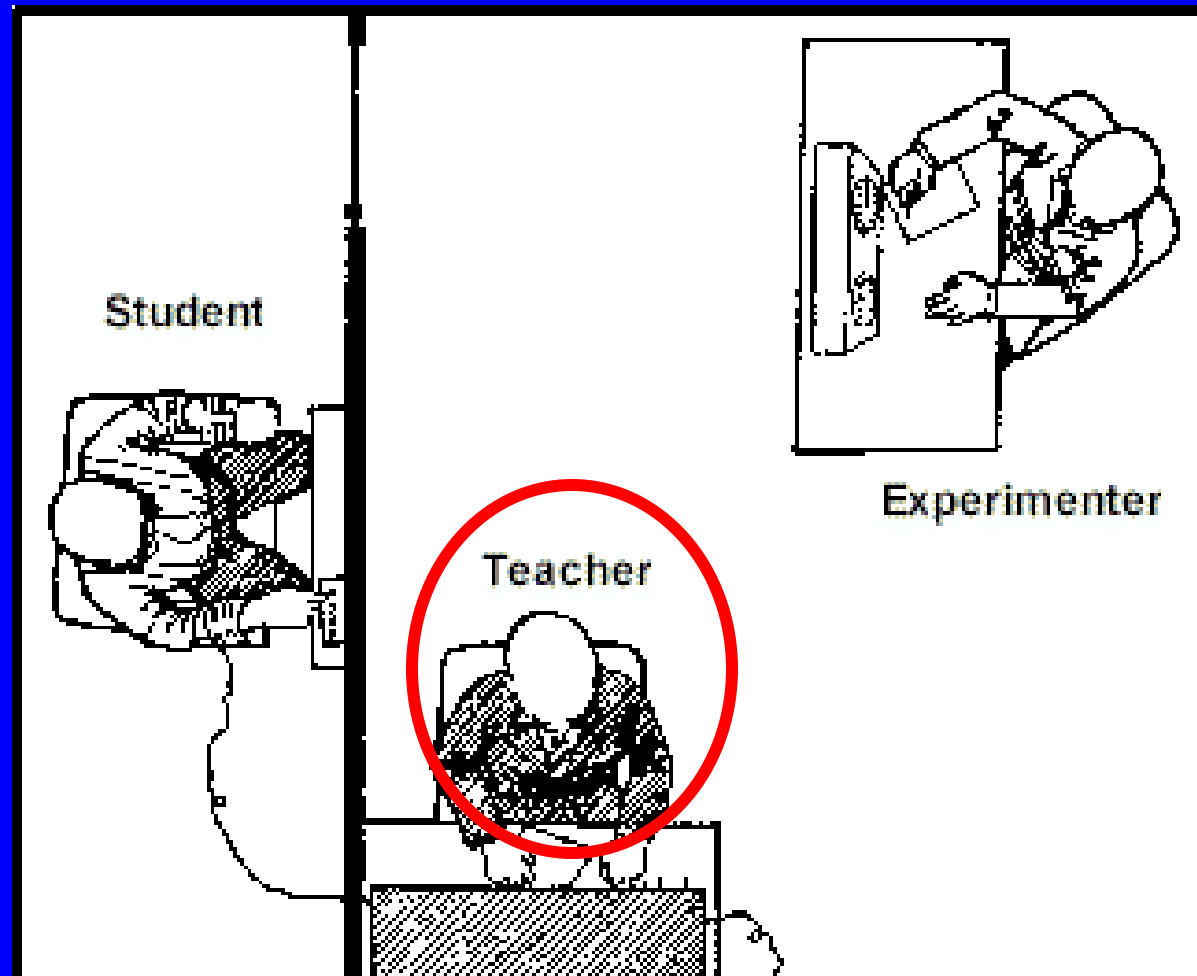
WEEKDAYS EVENINGS WEEKENDS

Fig. 1. Announcement placed in local newspaper to recruit subjects.

The “Student”



The Study Design



Learning Task

- Word Pairs
 - blue box
 - nice day
 - wild duck
- Testing Sequence:
 - Blue: sky ink box lamp
- Learner presses switch; lights up

The “Shock Generator”

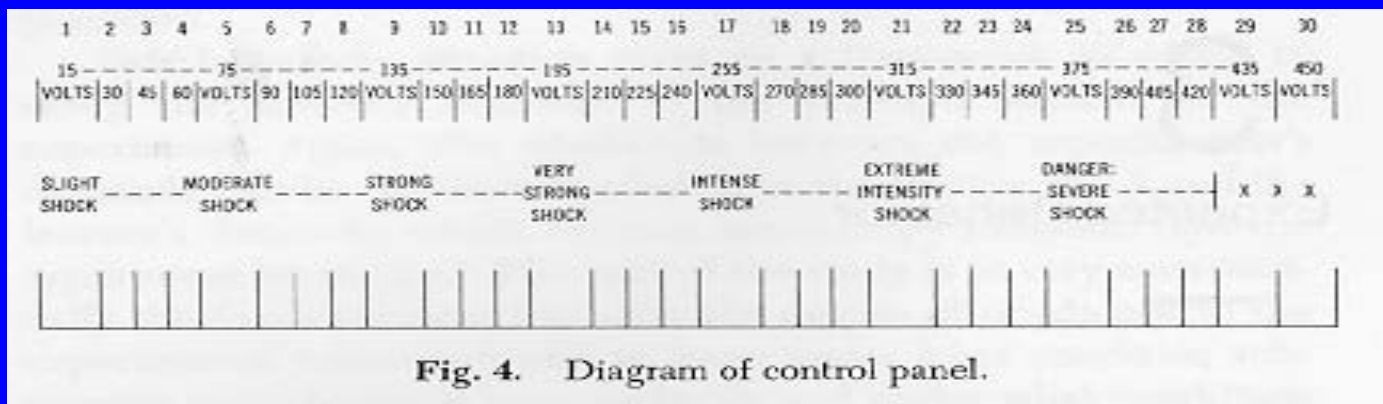
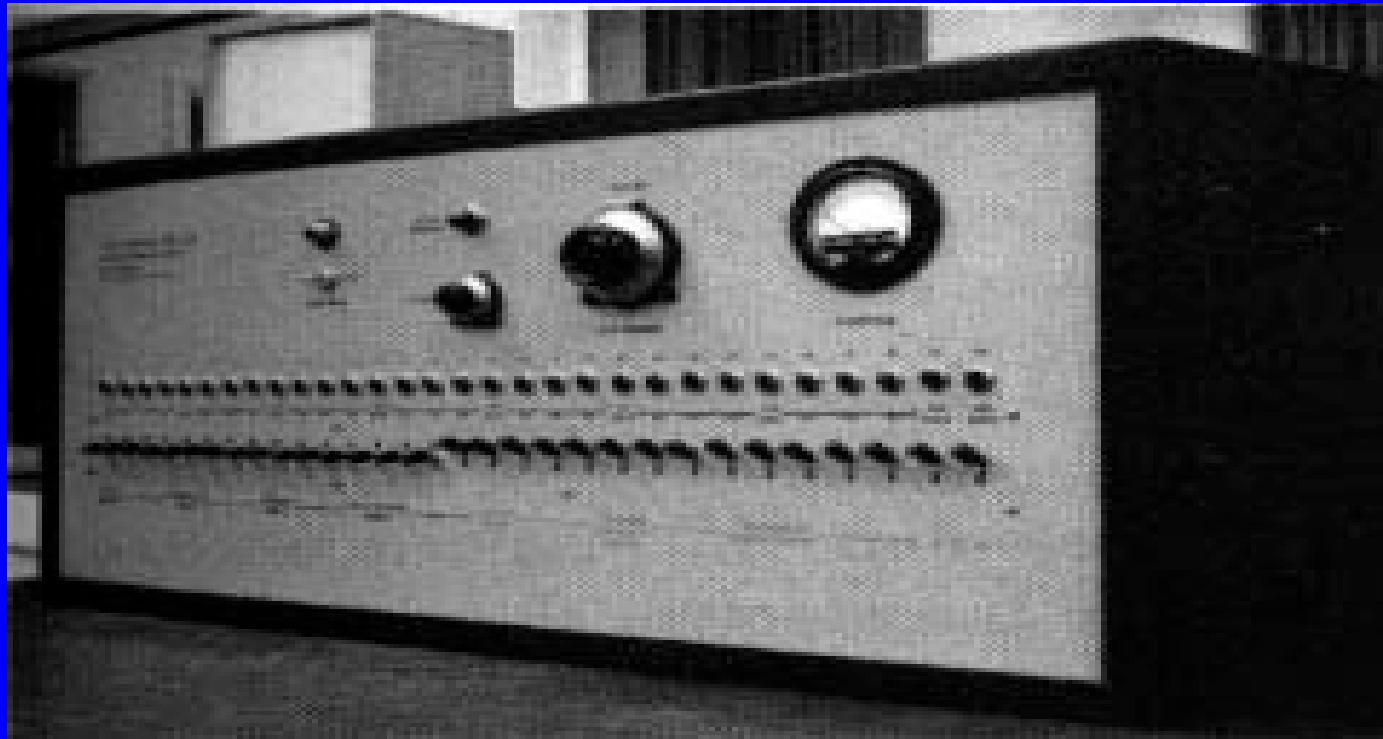


Fig. 4. Diagram of control panel.

A Real Sample Shock



Strapping in the “Learner”



Experimenter Feedback

1. “Please continue.”
2. “The experiment requires that you continue.”
3. “It is absolutely essential that you continue.”
4. “You have no other choice, you *must* go on.”

Learner Protests

- 75 V, 90V, 105 V: little grunt
- 120 V: shout that shocks becoming painful
- 135 V: painful groans
- 150 V: "Experimenter, get me out of here! I won't be in the experiment any more! I refuse to go on!"
- 180 V: "I can't stand the pain!"
- 270 V: agonizing scream
- 300 V: shout in desperation that he would no longer answer
- 315 V: violent scream; vehemently reaffirmed that he was no longer a participant
- 330 V: shrieked in agony
- >330 V: no sounds

Follow-Up

- Interviewing and Debriefing
- 1 year f/u questionnaire
- Sub-group: psychiatric evaluation

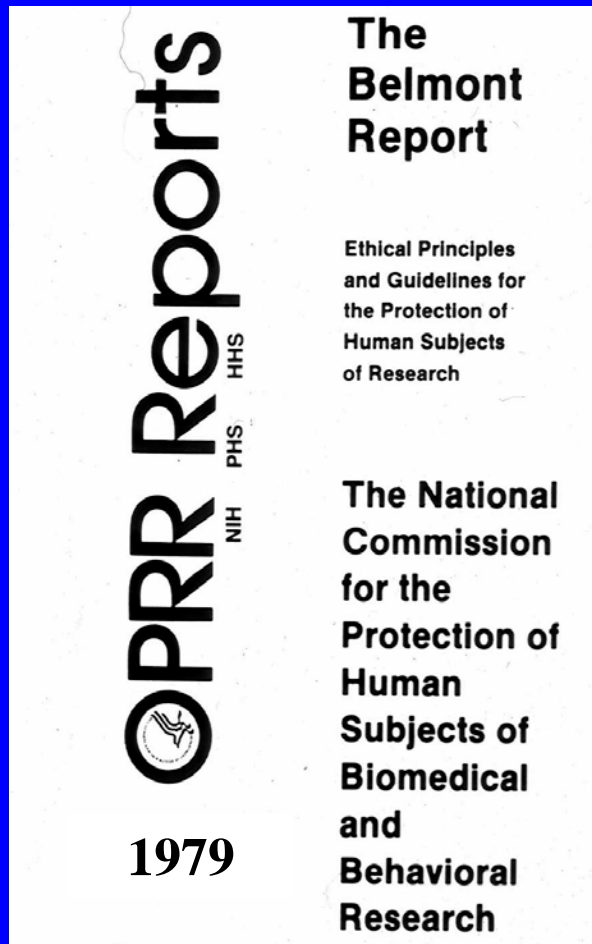
Experimental Conditions

1. Remote feedback
2. Voice feedback
3. Proximity
4. Touch-proximity
5. Heart problem
6. Personnel change
7. Authority closeness
8. Women as subjects
9. Victim's limited contract
10. Institutional context
11. Subject chooses shock
12. Learner demands shock, experimenter no
13. Orders by ordinary man
- 13a. Subject as bystander
14. Authority as victim
15. Two conflicting authorities
16. Two authorities – each role
17. Two peers rebel
18. Peer administers shock

A Variation



BELMONT REPORT



3 Ethical Principles

- Respect for Persons
- Beneficence
- Justice

Nuremberg Code - published 1949

1. The voluntary consent of the human subject is absolutely essential.
4. The experiment should be so conducted as to avoid all unnecessary physical and mental suffering and injury.
7. Proper preparations should be made and adequate facilities provided to protect the experimental subject against even remote possibilities of injury, disability, or death.
9. During the course of the experiment, the human subject should be at liberty to bring the experiment to an end, if he has reached the physical or mental state, where continuation of the experiment seemed to him to be impossible.
10. During the course of the experiment, the scientist in charge must be prepared to terminate the experiment at any stage, if he has probable cause to believe, in the exercise of the good faith, superior skill and careful judgement required of him, that a continuation of the experiment is likely to result in injury, disability, or death to the experimental subject.

Criteria for IRB approval

45 CFR 46.111

21 CFR 56.111

- Risks are minimized
- Risks are reasonable in relation to benefits
 - To subjects, if any
 - Importance of knowledge
- Selection of subjects is equitable
- Informed consent will be obtained
- Informed consent will be documented
- Safety monitoring, when appropriate
- Protection of privacy, when appropriate

Milgram Study: Ethical Problems

- Respect for persons - Deception
- Beneficence - Psychological harm

“I observed a mature and initially poised businessman enter the laboratory smiling and confident. Within twenty minutes he was reduced to a twitching, stuttering wreck, who was rapidly approaching a point of nervous collapse.”

Stanley Milgram

Burger - 2006

- Santa Clara University
- ABC News *Primetime*





Study Design Changes

- Maximum “shock” 150V
- Subject screening
- Subjects told ≥ 3 they could withdraw
- Sample shock 15V (instead of 45V)
- Immediate debriefing
- Experimenter = clinical psychologist; session stopped if excessive stress

Criteria for IRB approval

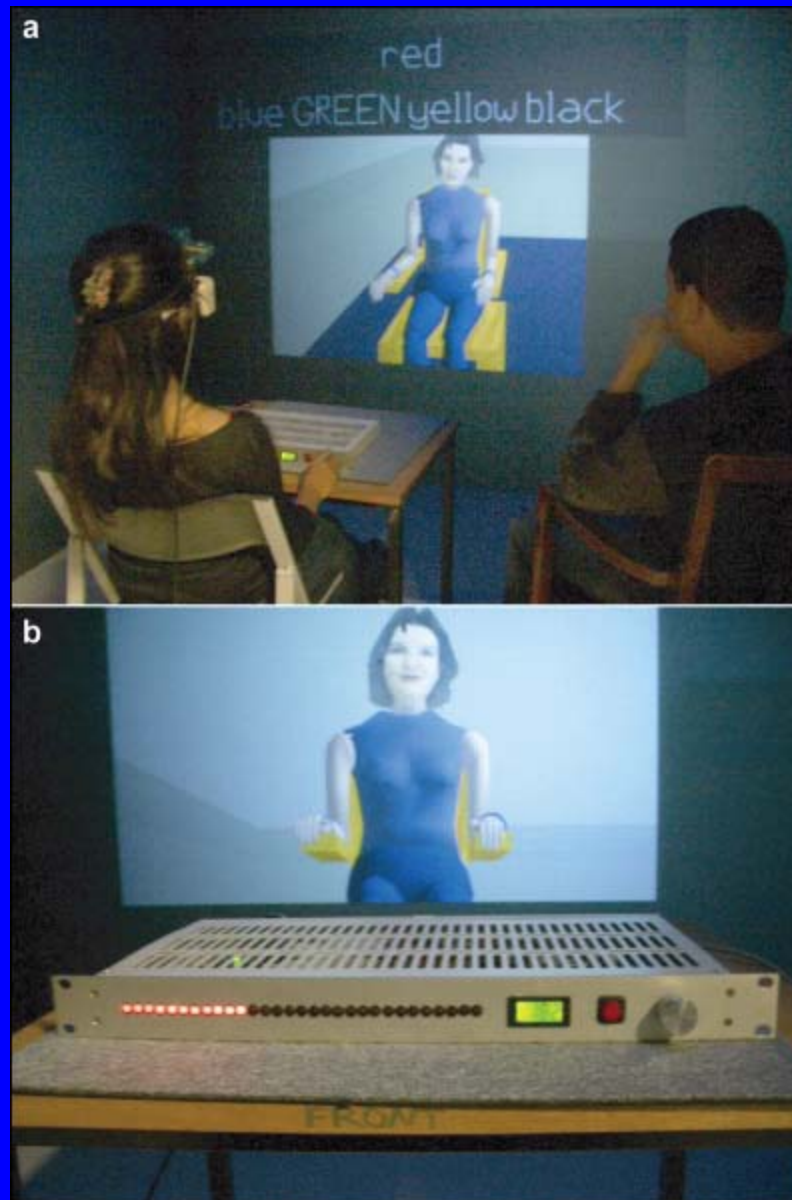
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Virtual “Milgram”

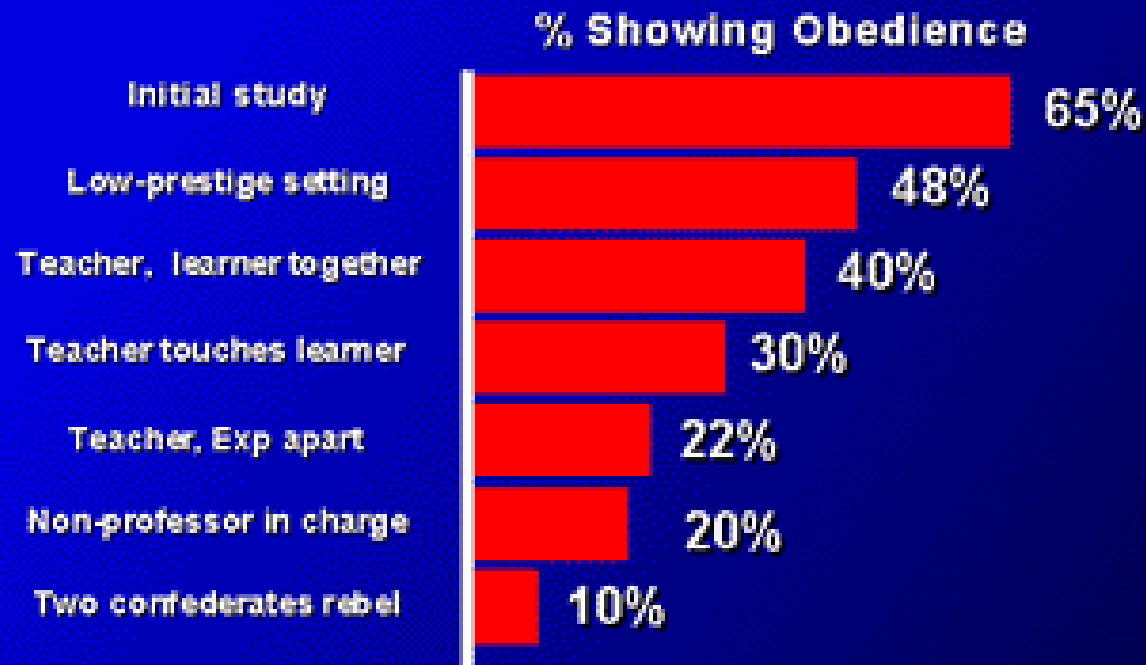
- Slater M, Antly A, Davidson A, et al. Virtual reprise of the Stanley Milgram obedience experiments. PLoS ONE 2006;1(1): e39.
- Purpose: would subjects respond to such an extreme social situation as if it were real



Results and Implications

Milgram's Results

Milgram's Obedience Studies



Jerry Burger

“We found obedience rates in 2006 only slightly lower than what Milgram found 45 years earlier. Contrary to expectation, participants who saw a confederate refuse the experimenter’s instructions obeyed as often as those who saw no model. Men and women did not differ in their rate of obedience, but we found some evidence that individual differences in empathic concern and desire for control affected participants’ responses. “

- <http://abcnews.go.com/video/playerIndex?id=2769000>
- <http://thesituationist.wordpress.com/2007/12/22/the-milgram-experiment-today/>

Burger

American Psychologist, in press

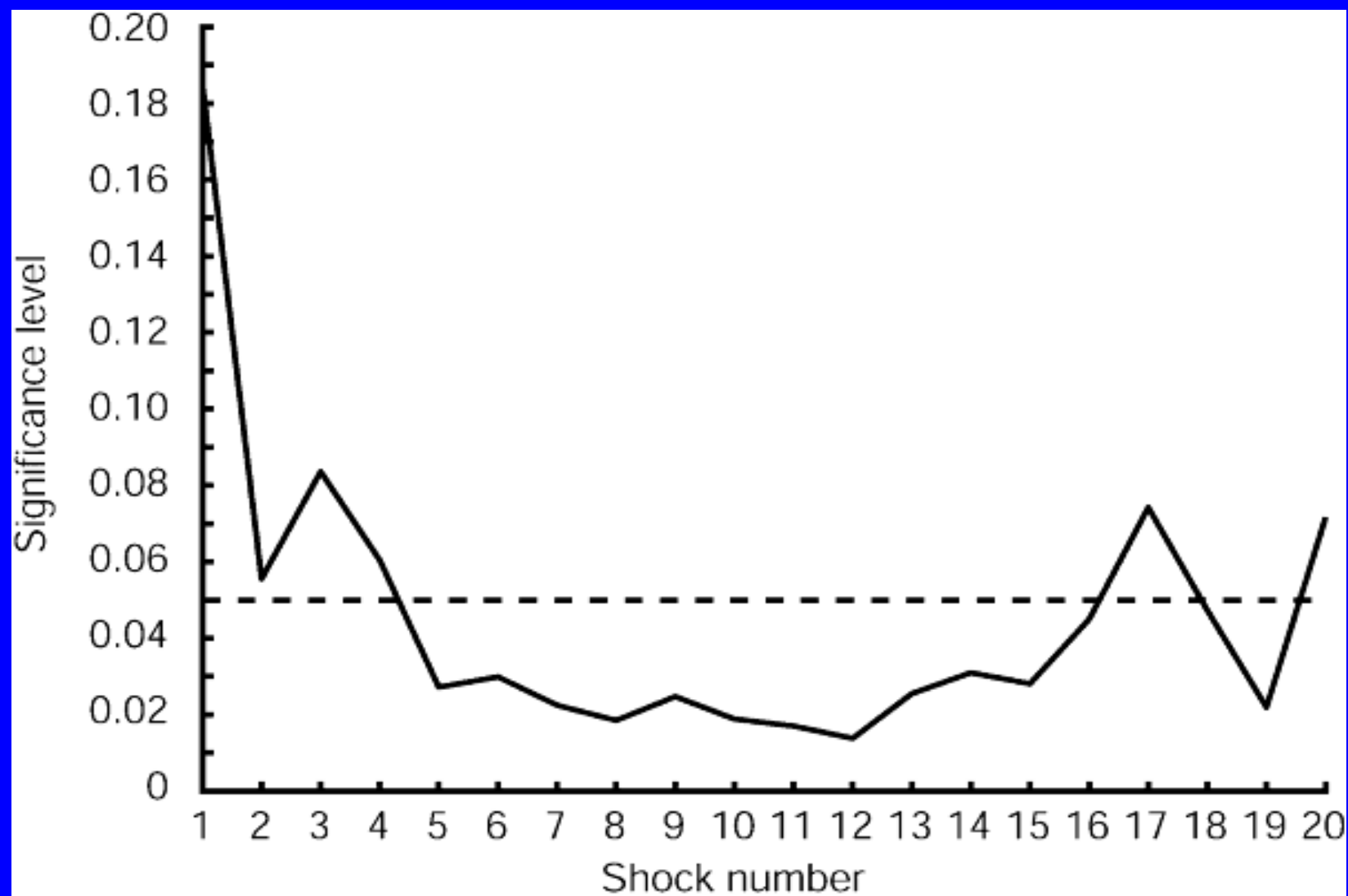
	Base Condition	Modeled Refusal Condition	Milgram #5
Stopped at $\leq 150V$	30%	37%	18%
Continued after 150	70%	63%	82%

Burger

American Psychologist, in press

Men Women

	Base Condition	Modeled Refusal Condition
Stopped at \leq 150V	33% 27%	46% 37%
Continued after 150	67% 73%	55% 68%



Milgram and others: Lessons

- People can readily perform unethical acts in the presence of an authority figure
- Authority relationships:
 - PI over staff
 - PI over subject
 - Sponsor over PI
 - Protocol over PI

Investigator-Subject Relationship

The investigator must place the subject's rights, welfare and safety above all other personal and scientific concerns.

Human Subjects Protection: Shared Responsibility

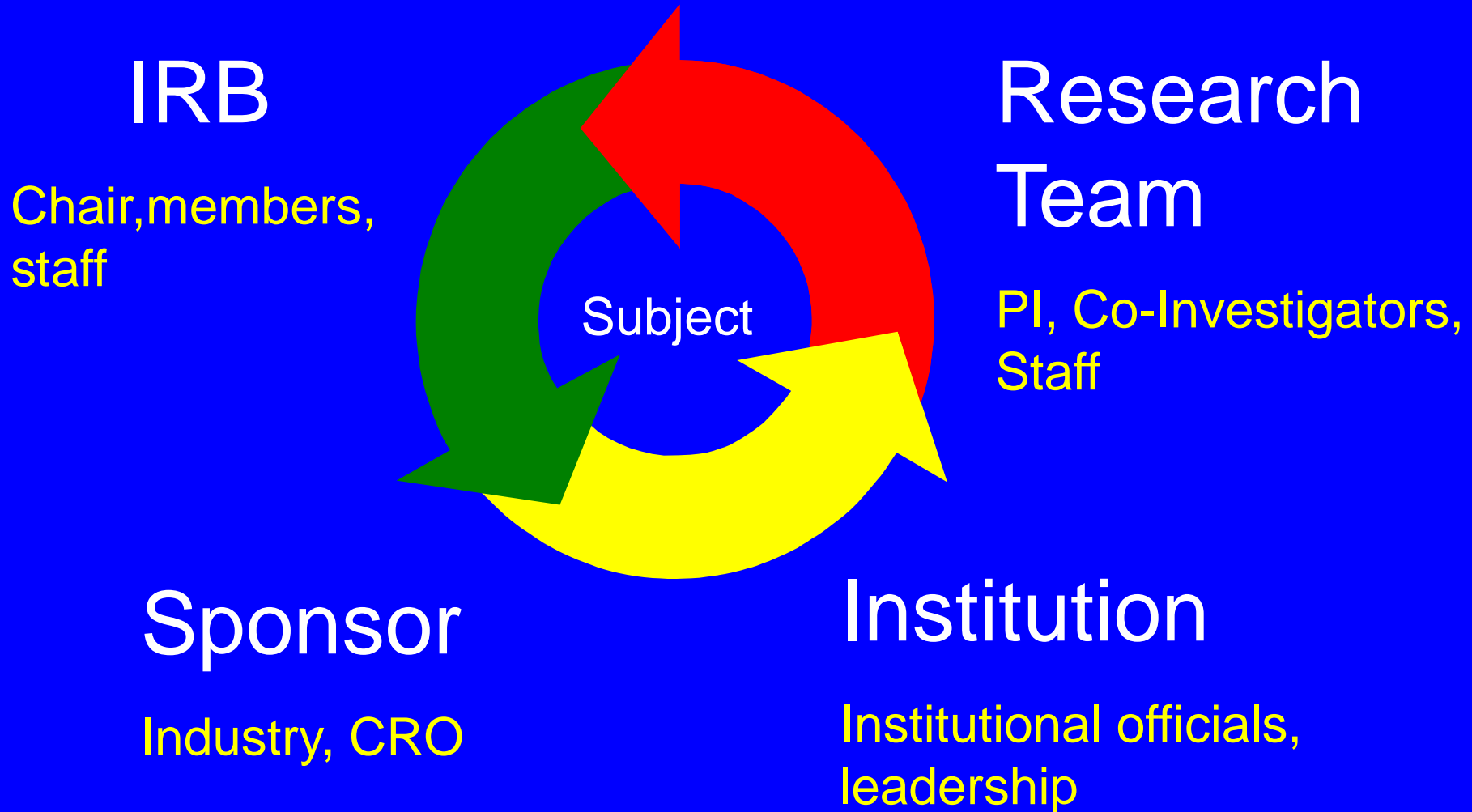


Researcher's Ethical Obligations

- Good science
- Scrupulous honesty
- Duty to protect subjects
 - Early termination of participation
- Obligation not to enroll subjects who cannot give voluntary, informed consent
- To protect rights and welfare



Human Subjects Protection: Shared Responsibility



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