Research Ethics

To educate a person in mind and not in morals is to educate a menace to society.

Theodore Roosevelt
Adventurer and U.S. President

Instructions for IRB Assignment

• 5 Point Assignment = ½ letter grade
• Due Wednesday, October 5th at 2:30
• Requires ≈ 2 hours
• Detailed instructions on the class website

Please complete the online Human Participant Protection training program and submit a printed copy of your Completion Report.

Research Atrocities by WWII Nazis

• "Researchers" in Dachau and Auschwitz camps
  – Immersed prisoners in cold water until they died
  – Decompressed prisoners in high-altitude chambers until they died
  – Injected prisoners with typhus (many died)

• Nuremberg Medical Trial (1946-1947)
  – 23 defendants were tried (including 20 physicians)
  – 7 were acquitted, 7 received the death penalty, and the remainder received prison sentences from 10 years to life

Nuremberg Code (1947)

1. Research participants must voluntarily consent to research participation.
2. Research aims should contribute to the good of society.
3. Research must be based on sound theory and prior animal testing.
4. Research must avoid unnecessary physical and mental suffering.
5. No research projects can go forward where serious injury and/or death are potential outcomes.
6. The degree of risk taken with research participants cannot exceed anticipated benefits of results.
7. Proper environment and protection for participants is necessary.
8. Experiments can be conducted only by scientifically qualified persons.
9. Human subjects must be allowed to discontinue their participation at any time.
10. Scientists must be prepared to terminate the experiment if there is cause to believe that continuation will be harmful or result in injury or death.
Obedience to Authority Study

The purpose of this 1961 study was to determine response to authority in normal humans. The researchers told recruited volunteers that the purpose was to study learning and memory. Each subject was told to teach a “student” and to punish the students’ errors by administering increasing levels of electric shocks. Sixty-three percent of the subjects administered lethal shocks; some even after the "student" claimed to have heart disease. Many subjects were profoundly disturbed by their capacity to inflict harm.

Ethical concerns: Use of a vulnerable population, reinforced image that social scientists use deception casually in research, lack of informed consent.

San Antonio Contraception Study

In San Antonio, Texas, a number of Mexican-American women participated in a 1971 study to determine side effects of an oral contraceptive. The women came to a clinic seeking contraceptives. Unbeknownst to them, the study was designed so that half the women would receive oral contraceptives for the first half of the study, then switched to placebo. The women initially receiving placebo were placed on the oral contraceptive for the second half of the study. Ten of the 76 subjects became pregnant while using placebo.

Ethical concerns: Lack of informed consent, use of a vulnerable group of subjects, risks outweighed benefits.

Tuskegee Study of Untreated Syphilis

This study (1932-1972) was designed to document the natural history of syphilis in African-American men. At the time the study began there was no known treatment for syphilis. Hundreds of men with syphilis and hundreds of men without syphilis (serving as controls) were enrolled. Even after penicillin was found to be an effective treatment for syphilis in the 1940s, the men were denied antibiotics. The study resulted in 28 deaths, 100 cases of disability, and 19 cases of congenital syphilis. (This was not a secret!)

Ethical concerns: Use of a vulnerable population, reinforced image that social scientists use deception casually in research, lack of informed consent.


1. Respect for Persons
   - Acknowledge autonomy
   - Protect those with diminished autonomy

2. Beneficence
   - First, do no harm
   - Good research design; competent researchers
   - Maximize possible benefits; minimize possible harms

3. Justice
   - Distribute benefits and burdens fairly

Belmont Report (1978): Applications

1. Informed Consent
   - Information: procedure, purposes, risks/benefits, alternatives, right to withdraw at any time
   - Comprehension: match subject’s capacity
   - Voluntariness: no coercion or undue influence

2. Risk/Benefit Assessment
   - Nature and scope: probability & magnitude of harm
   - The systematic assessment: “favorable ratio”

3. Selection of Subjects
   - Individual and social considerations

Institutional Review Board (IRB)

- The principles of the Belmont Report govern all research supported by the U.S. Government. The ethical principles outlined are the basis for subsequent regulations designed to ensure protection of human subjects in research.
- The purpose of an IRB is to review research and to ensure the rights and welfare of human subjects involved in research are adequately protected.
Criteria for IRB Approval

• Risks are minimized.
• Risks are reasonable in relation to benefits.
• Selection of subjects is equitable.
• Informed consent will be sought for each prospective subject.
• Informed consent will be documented.
• Research plan adequately provides for monitoring the data collected to ensure safety of the subjects.
• Research plan adequately protects the privacy of subjects and maintains confidentiality.
• When some or all of the subjects are likely to be vulnerable to coercion or undue influence, additional safeguards need to be included in the protocol to protect the rights and welfare of these subjects.

The IRB has the Authority to:

• Approve a study as proposed
• Require modifications prior to approval
• Table
• Disapprove all research activities including proposed changes in previously approved human subject research

Modern Day Milgram Experiment

Academic Integrity at Vanderbilt

There is nothing complex about the Honor System. It is as simple as a man’s giving his word and keeping it.

– C. Madison Sarratt, Dean of Students, 1929

I pledge my honor that I have neither given nor received aid on this examination.

– Undergraduate Honor Pledge

Violations of the VU Honor Code

• Falsifying or cheating
• Plagiarism
• Failure to report a known or suspected violation
• Any action designed to deceive
• Any falsification of class records
• Submission of work prepared for another course
• Use of work prepared by commercial or noncommercial agents
• Falsification of results of study or research

2008 VU Quality of Life Findings

22.0% reported personally observing someone cheating on an examination.
36.6% reported personally observing unauthorized sharing or exchange of academic work.
16.3% reported personally observing someone falsifying research or data.
10.5% reported personally observing an individual assisting someone else in cheating.
Berman & Elkin 2010 Survey

- HOD Honors Program research study
- 252 undergraduates surveyed in the fall of 2010
- 6 classes of varying disciplines and grade levels
- Anonymous questionnaire
- 15 behaviors evaluated

What Students Consider Cheating

- 99.6%: Taking an exam for someone else
- 99.6%: Looking at a classmate’s paper without their knowledge during an exam
- 97.6%: Allowing classmates to copy off you during an exam
- 93.3%: Bringing notes into an exam
- 91.3%: Allowing friends to copy take home assignments
- 91.3%: Paraphrasing/using someone else’s work without citation
- 84.1%: Making up references in bibliographies
- 76.6%: Receiving information about a test by a student who took the test in an earlier section

Responsibility of VU Students

If a student has reason to believe that a breach of the Honor System has been committed, he or she is obligated to take action in one of the following ways:
- Issue a personal warning to the suspect, or
- Report the incident to the Honor Council, or
- Inform the instructor in the course of the suspicions and identify, if possible, the person(s) suspected.

Responsibility of VU Faculty

The flagrancy of the violation determines which course of action the faculty member or student is expected to follow. The option of warning the student personally is open to the instructor only in the event of a minor suspicion or if there is not evidence available. If suspicion is strong or if evidence is available, the instructor is obligated to report the incident to the Honor Council.

Can You Spot the Cheating?

Honor is better than honors.

Abraham Lincoln
Lawyer and U.S. President