

Psychology 2020

Introduction to Psychological Methods

Unit 7
Ethical Considerations for Research and Applications

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Research Guidelines

- The evolution of ethical practices in doing research.
 - Tuskegee Syphilis Study (1932-1972)
 - The Milgrim Study (1960s)
 - The Stanford Prison Study (Zimbardo, 1970s)

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The Milgram Study

- Stanley Milgram looked at conditions that influenced people to follow requests of an authority figure.
- He wanted to see what made individuals more or less willing to comply with requests that resulted in harm to others.

[Milgram Video](#)

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Reaction to the Milgram Study

- Some people have criticized the Milgram study. They have argued that it was unethical to deceive subjects in this manner, and they feel that the study never should have been done. What do you think?

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Stanford Prison Study

- In the 1970's, Philip Zimbardo studied social roles in an experiment now known as the Stanford prison study.
- The narrator on the following video is Zimbardo.

[Stanford Prison Study Video](#)

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Questions for you to ask yourself

- How do you imagine the experiment would have impacted you if you were a subject in the experiment?
 - How would you have felt if you were a prisoner?
 - If you were a guard?
 - What kind of guard would you have been?
 - What kind of prisoner?

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Impact of the experiment

[Stanford Prison Study Debriefing Video](#)

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Research Ethics

- Protection of human participants based on the **Belmont Report**
 - Beneficence (maximize benefits and minimize harm)
 - Respect for persons (participants can make informed decisions about participation)
 - Justice (fairness in sharing risks and benefits of research results)

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Beneficence

If there are potential risks to research subjects (costs), the benefit derived from the research must outweigh the cost of these risks.

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Risks to Research Participants

- Stress, Psychological and/or Physical Harm
 - Will the participants in the research be subjected to painful, uncomfortable and/or embarrassing circumstances?
 - Could they suffer lasting harm from participating in the research ?
- Loss of Privacy and Confidentiality

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Informed Consent

- Research participants must give their consent willingly to participate in the study.
- For consent to be “informed” they must be informed:
 - About the purposes of the study and what is expected from them.
 - Of the risks to them if they participate (both potential psychological and physical harm risks)
 - Of their rights to refuse to participate at any time and withdraw from the study.

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Problems with Informed Consent

- Providing the information to satisfy the “informed consent” requirement may bias the participant’s responses in the experiment.
- The people who agree to participate may be of a “certain type” and therefore may limit the applicability of the findings to general population.

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Deception in Research

- Deception of research participants
 - Do the research participants fully understand what they will have to do in the study, how it may affect them, how they will be observed and do they consent to this willingly?
 - Is some form of participant deception necessary for the research question to be studied objectively?

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The Milgrim Study

- No informed consent.
 - Participants were not told of the potential risks of participating in the study
 - They were not told they could quit the experiment at any time.
 - They were not told the real purpose of the study.

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The Milgrim Study

- Could the study have been completed with similar results if informed consent was provided?
- What should Milgrim have told his participants to insure their consent was “informed”?

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Pros and Cons of Deception in Research

- Pros
 - Some form of deception is necessary to insure objectivity.
 - Some deception makes the experiment more plausible, lifelike and/or involving.
- Cons
 - Misleading others is morally wrong.
 - Use of deception makes people distrust researchers.
 - Deception can get out of control and be used unnecessarily

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Minimizing the Harmful Effects of Deception in Research

- Debriefing
 - After the participant completes the study they are told what the study was really about and why they were deceived.
 - Experimenters must ensure that the participants do not leave the experiment in a “psychologically agitated” state.
 - Debriefing the participants serves both an ethical function and an educational function.

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Alternatives to Deception

- Role-playing
 - Describing the experimental situation and asking the person to describe how they or another person would act if they were in that situation.
- Simulations
 - Setting up laboratory situations for participants that simulate the real world situation.
- Honest Experiments

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Reducing Other Risks to Participants

- Privacy and Confidentiality
 - Responses from individual participants must be kept confidential (not able to connect any response with any particular subject).
 - Observing the private behavior of participants without their consent is unethical.
- Special Populations of Research Participants
 - Minors must have the informed consent of a parent or guardian to participate.
 - Mentally impaired individuals adjudicated as dependent must have the informed consent of their guardian.

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IRB (Institutional Review Board)

- Every institution that receives federal funds for research must have a group of individuals to review all research proposals involving human participants for compliance with ethical standards.
- There must be at least 5 members on this board and 1 must be from outside the institution.

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The IRB Process

- Research proposals submitted to the IRB must include:
 - A description of the risks and benefits
 - Procedures for minimizing risks
 - The exact wording of the informed consent form
 - How participants will be debriefed
 - The procedures to insure confidentiality is maintained
- Not all research requires a full IRB review

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Exempt Research

- Research where there is absolutely no risk to the participants is granted exemption from a full IRB review.
- The researcher may not make this determination but others at the researchers institution may.
- Examples:
 - Anonymous questionnaires and surveys
 - Educational testing and classroom activities
 - Naturalistic observation in public places
 - Archival research

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Minimal-Risk Research

- The risks to participants is no greater than would be encountered in daily life.
- Extensive risk prevention methods are not mandated (usually) by the IRB.
- Examples:
 - Collecting normal physiological data (heart rate, weight, EEG, body temperature, etc.) that do not invade privacy.
 - Moderate exercise requirements
 - Behavior producing minimal stress (perception tests, computer simulations, memory activities, group interactions, etc)

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Greater-Than-Minimal-Risk Research

- Requires a complete and thorough review by the IRB.
- Complete informed consent and extensive safeguards are required.
- Examples:
 - The effects of drugs on learning, memory, growth, etc.
 - Research with minors that could cause harm (abduction prevention research, studies of child fears, etc.)
 - Physiological research involving surgery or irreversible procedures, etc.

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Fraud

- Making up or altering experimental results is considered fraud.
- Copying the work of others and presenting it as one's own is plagiarism and considered fraud.
- Fraud is not tolerated in scientific research because it undermines the value of the scientific approach to understanding the world.

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APA Ethical Standards Summary

- Researchers must plan their research to be competent, ethical, legal, and get appropriate approval from their supportive institutions.
- Researchers must get informed consent from their participants and minimize invasiveness in their data collection methods.
- Researchers must avoid unnecessary or excessive inducements or deception in their experiments.
- Researchers must provide information about their results, share their results with others and honor their commitments to their participants.

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Research with Nonhumans

- Advantages
 - Better control of genetic factors and learning histories
 - Experimental environment can be managed more precisely and a wider variety of recording devices used.
 - Reach questions can be addressed that would be unethical with human subjects

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Research with Nonhumans

- Criticisms
 - Results don't apply to humans because of their different genetic endowments.
 - The most interesting human research questions involve language and social behavior that is not present in nonhumans.
 - Nonhuman experimentation is morally wrong (nonhuman research abuses innocent animals).

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Generalizing Experimental Results

- External validity
 - Do the results from an experiment apply to those outside the experiment?
 - If psychology experiments only use white rats or college students will the results apply to others?
- Internal Validity
 - Were all the experimental confounds controlled such that we are sure that the changes in the dependent variable were caused by the changes in the independent variable.

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Factors Affecting Generalization

- Volunteers (they may be different than those that don't volunteer)
- Gender
- Locale
- Cultural characteristics
- Experimenter's personal characteristics
- Pretesting

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Generalization as Interaction

- If results do not generalize then perhaps there is some specific aspect of the method or participants that interacts with the Independent Variable manipulation that produced the Dependent Variable changes.
- Experimenters can investigate these interactions with different experimental designs or participants.

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Replications

- Exact replication
 - The method is replicated precisely with a new set of participants
- Conceptual replication
 - Different procedures are used to replicate the findings but the main research concepts or questions are the same (or very similar).

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Meta-Analysis vs. Literature Reviews

- Literature review describes the past research and draws qualitative conclusions.
 - This approach is affected by the subjective opinions of the reviewer.
- A meta-analysis combines the numerical results of many similar studies and draws quantitative conclusions.
 - This approach is more objective than the literature review approach because it is based on the combined data of all the analyzed studies.

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Applying Research Results

- Research should promote the welfare of others.
- Psychological research findings should be freely shared with others (“giving it away”)
- Those who better understand the research process will be better able to understand and use important psychological research results.

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