

# Ethical considerations in research

Honesty is the best policy

# Ethical considerations

- APA ethical standards
- NU research requirements
- NAS “on being a good scientist”

# Ethical Standards for Psychologists

## APA, 2002

- The American Psychological Association's (APA's) Ethical Principles of Psychologists and Code of Conduct (hereinafter referred to as the Ethics Code) consists of an **Introduction** , a **Preamble** , five **General Principles** (A - E), and specific **Ethical Standards** . The Introduction discusses the intent, organization, procedural considerations, and scope of application of the Ethics Code. The Preamble and General Principles are aspirational goals to guide psychologists toward the highest ideals of psychology.

# APA ethics (intro continued)

- Although the Preamble and General Principles are not themselves enforceable rules, they should be considered by psychologists in arriving at an ethical course of action.
- The Ethical Standards set forth enforceable rules for conduct as psychologists. Most of the Ethical Standards are written broadly, in order to apply to psychologists in varied roles, although the application of an Ethical Standard may vary depending on the context. The Ethical Standards are not exhaustive. The fact that a given conduct is not specifically addressed by an Ethical Standard does not mean that it is necessarily either ethical or unethical.

# APA ethics Preamble

- Psychologists are committed to increasing scientific and professional knowledge of behavior and people's understanding of themselves and others and to the use of such knowledge to improve the condition of individuals, organizations, and society. Psychologists respect and protect civil and human rights and the central importance of freedom of inquiry and expression in research, teaching, and publication. They strive to help the public in developing informed judgments and choices concerning human behavior. In doing so, they perform many roles, such as researcher, educator, diagnostician, therapist, supervisor, consultant, administrator, social interventionist, and expert witness. This Ethics Code provides a common set of principles and standards upon which psychologists build their professional and scientific work.

# APA ethics:

## **GENERAL PRINCIPLES**

- Principle A: Beneficence and nonmaleficence
- Principle B: Fidelity and Responsibility
- Principle C: Integrity
- Principle D: Justice
- Principle E: Respect for People's Rights and Dignity

# Principle A: Beneficence and Nonmaleficence

- Psychologists strive to benefit those with whom they work and take care to do no harm. In their professional actions, psychologists seek to safeguard the welfare and rights of those with whom they interact professionally and other affected persons, and the welfare of animal subjects of research. When conflicts occur among psychologists' obligations or concerns, they attempt to resolve these conflicts in a responsible fashion that avoids or minimizes harm. Because psychologists' scientific and professional judgments and actions may affect the lives of others, they are alert to and guard against personal, financial, social, organizational, or political factors that might lead to misuse of their influence. Psychologists strive to be aware of the possible effect of their own physical and mental health on their ability to help those with whom they work.

# Principle B: Fidelity and Responsibility

- Psychologists establish relationships of trust with those with whom they work. They are aware of their professional and scientific responsibilities to society and to the specific communities in which they work. Psychologists uphold professional standards of conduct, clarify their professional roles and obligations, accept appropriate responsibility for their behavior, and seek to manage conflicts of interest that could lead to exploitation or harm. Psychologists consult with, refer to, or cooperate with other professionals and institutions to the extent needed to serve the best interests of those with whom they work. They are concerned about the ethical compliance of their colleagues' scientific and professional conduct. Psychologists strive to contribute a portion of their professional time for little or no compensation or personal advantage.

# Principle C: Integrity

- Psychologists seek to promote accuracy, honesty, and truthfulness in the science, teaching, and practice of psychology. In these activities psychologists do not steal, cheat, or engage in fraud, subterfuge, or intentional misrepresentation of fact. Psychologists strive to keep their promises and to avoid unwise or unclear commitments. In situations in which deception may be ethically justifiable to maximize benefits and minimize harm, psychologists have a serious obligation to consider the need for, the possible consequences of, and their responsibility to correct any resulting mistrust or other harmful effects that arise from the use of such techniques.

# Principle D: Justice

- Psychologists recognize that fairness and justice entitle all persons to access to and benefit from the contributions of psychology and to equal quality in the processes, procedures, and services being conducted by psychologists. Psychologists exercise reasonable judgment and take precautions to ensure that their potential biases, the boundaries of their competence, and the limitations of their expertise do not lead to or condone unjust practices.

# Principle E: Respect for People's Rights and Dignity

- Psychologists respect the dignity and worth of all people, and the rights of individuals to privacy, confidentiality, and self-determination. Psychologists are aware that special safeguards may be necessary to protect the rights and welfare of persons or communities whose vulnerabilities impair autonomous decision making. Psychologists are aware of and respect cultural, individual, and role differences, including those based on age, gender, gender identity, race, ethnicity, culture, national origin, religion, sexual orientation, disability, language, and socioeconomic status and consider these factors when working with members of such groups. Psychologists try to eliminate the effect on their work of biases based on those factors, and they do not knowingly participate in or condone activities of others based upon such prejudices.

## *7. Education and Training*

- 7.01 Design of Education and Training Programs
- 7.02 Descriptions of Education and Training Programs
- 7.03 Accuracy in Teaching
- 7.04 Student Disclosure of Personal Information
- 7.05 Mandatory Individual or Group Therapy
- 7.06 Assessing Student and Supervisee Performance
- 7.07 Sexual Relationships With Students and Supervisees

## *8. Research and Publication*

- 8.01 Institutional Approval
- 8.02 Informed Consent to Research
- 8.03 Informed Consent for Recording Voices and Images in Research
- 8.04 Client/Patient, Student, and Subordinate Research Participants
- 8.05 Dispensing With Informed Consent for Research
- 8.06 Offering Inducements for Research Participation

## *8. Research and Publication (continued)*

- 8.07 Deception in Research
- 8.08 Debriefing
- 8.09 Humane Care and Use of Animals in Research
- 8.10 Reporting Research Results
- 8.11 Plagiarism
- 8.12 Publication Credit
- 8.13 Duplicate Publication of Data
- 8.14 Sharing Research Data for Verification
- 8.15 Reviewers

## **8.01 Institutional Approval**

- When institutional approval is required, psychologists provide accurate information about their research proposals and obtain approval prior to conducting the research. They conduct the research in accordance with the approved research protocol.

## 8.02 Informed Consent to Research

- (a) When obtaining informed consent as required in Standard 3.10, **Informed Consent**, psychologists inform participants about
  - (1) the purpose of the research, expected duration, and procedures;
  - (2) their right to decline to participate and to withdraw from the research once participation has begun;
  - (3) the foreseeable consequences of declining or withdrawing;

# Informed consent (continued)

- (4) reasonably foreseeable factors that may be expected to influence their willingness to participate such as potential risks, discomfort, or adverse effects;
- (5) any prospective research benefits; (6) limits of confidentiality;
- (7) incentives for participation; and
- (8) whom to contact for questions about the research and research participants' rights. They provide opportunity for the prospective participants to ask questions and receive answers.

## **8.03 Informed Consent for Recording Voices and Images in Research**

- Psychologists obtain informed consent from research participants prior to recording their voices or images for data collection unless (1) the research consists solely of naturalistic observations in public places, and it is not anticipated that the recording will be used in a manner that could cause personal identification or harm, or (2) the research design includes deception, and consent for the use of the recording is obtained during debriefing.

# **8.04 Client/Patient, Student, and Subordinate Research Participants**

- (a) When psychologists conduct research with clients/patients, students, or subordinates as participants, psychologists take steps to protect the prospective participants from adverse consequences of declining or withdrawing from participation.
- (b) When research participation is a course requirement or an opportunity for extra credit, the prospective participant is given the choice of equitable alternative activities.

# 8.05 Dispensing With Informed Consent for Research

- Psychologists may dispense with informed consent only
- (1) where research would not reasonably be assumed to create distress or harm and involves
  - (a) the study of normal educational practices, curricula, or classroom management methods conducted in educational settings;
  - (b) only anonymous questionnaires, naturalistic observations, or archival research for which disclosure of responses would not place participants at risk of criminal or civil liability or damage their financial standing, employability, or reputation, and confidentiality is protected;

## **8.05 Dispensing With Informed Consent for Research (cont)**

- or (c) the study of factors related to job or organization effectiveness conducted in organizational settings for which there is no risk to participants' employability, and confidentiality is protected or
- (2) where otherwise permitted by law or federal or institutional regulations.

## **8.06 Offering Inducements for Research Participation**

- (a) Psychologists make reasonable efforts to avoid offering excessive or inappropriate financial or other inducements for research participation when such inducements are likely to coerce participation.
- (b) When offering professional services as an inducement for research participation, psychologists clarify the nature of the services, as well as the risks, obligations, and limitations.

## 8.07 Deception in Research

- (a) Psychologists do not conduct a study involving deception unless they have determined that the use of deceptive techniques is justified by the study's significant prospective scientific, educational, or applied value and that effective nondeceptive alternative procedures are not feasible.
- (b) Psychologists do not deceive prospective participants about research that is reasonably expected to cause physical pain or severe emotional distress.

# Deception (continued)

- (c) Psychologists explain any deception that is an integral feature of the design and conduct of an experiment to participants as early as is feasible, preferably at the conclusion of their participation, but no later than at the conclusion of the data collection, and permit participants to withdraw their data.

## 8.08 Debriefing

- (a) Psychologists provide a prompt opportunity for participants to obtain appropriate information about the nature, results, and conclusions of the research, and they take reasonable steps to correct any misconceptions that participants may have of which the psychologists are aware.
- (b) If scientific or humane values justify delaying or withholding this information, psychologists take reasonable measures to reduce the risk of harm.
- (c) When psychologists become aware that research procedures have harmed a participant, they take reasonable steps to minimize the harm.

## **8.09 Humane Care and Use of Animals in Research**

- (a) Psychologists acquire, care for, use, and dispose of animals in compliance with current federal, state, and local laws and regulations, and with professional standards.
- (b) Psychologists trained in research methods and experienced in the care of laboratory animals supervise all procedures involving animals and are responsible for ensuring appropriate consideration of their comfort, health, and humane treatment.

# 8.10 Reporting Research Results

- (a) Psychologists do not fabricate data. (See also Standard 5.01a, *Avoidance of False or Deceptive Statements* .)
- (b) If psychologists discover significant errors in their published data, they take reasonable steps to correct such errors in a correction, retraction, erratum, or other appropriate publication means.

## 8.11 Plagiarism

- Psychologists do not present portions of another's work or data as their own, even if the other work or data source is cited occasionally.

## 8.12 Publication Credit

- (a) Psychologists take responsibility and credit, including authorship credit, only for work they have actually performed or to which they have substantially contributed. (See also Standard 8.12b, **Publication Credit** .)
- (b) Principal authorship and other publication credits accurately reflect the relative scientific or professional contributions of the individuals involved, regardless of their relative status. Mere possession of an institutional position, such as department chair, does not justify authorship credit. Minor contributions to the research or to the writing for publications are acknowledged appropriately, such as in footnotes or in an introductory statement.

## Publication credit (continued)

- (c) Except under exceptional circumstances, a student is listed as principal author on any multiple-authored article that is substantially based on the student's doctoral dissertation. Faculty advisors discuss publication credit with students as early as feasible and throughout the research and publication process as appropriate.

## **8.13 Duplicate Publication of Data**

- Psychologists do not publish, as original data, data that have been previously published. This does not preclude republishing data when they are accompanied by proper acknowledgment.

## **8.14 Sharing Research Data for Verification**

- (a) After research results are published, psychologists do not withhold the data on which their conclusions are based from other competent professionals who seek to verify the substantive claims through reanalysis and who intend to use such data only for that purpose, provided that the confidentiality of the participants can be protected and unless legal rights concerning proprietary data preclude their release. This does not preclude psychologists from requiring that such individuals or groups be responsible for costs associated with the provision of such information.

## Sharing data (continued)

- (b) Psychologists who request data from other psychologists to verify the substantive claims through reanalysis may use shared data only for the declared purpose. Requesting psychologists obtain prior written agreement for all other uses of the data.

## **8.15 Reviewers**

- Psychologists who review material submitted for presentation, publication, grant, or research proposal review respect the confidentiality of and the proprietary rights in such information of those who submitted it.

## **9.05 Test Construction**

- Psychologists who develop tests and other assessment techniques use appropriate psychometric procedures and current scientific or professional knowledge for test design, standardization, validation, reduction or elimination of bias, and recommendations for use.

# Conducting research at NU

- Office for the Protection of Research Subjects
- <http://www.northwestern.edu/research/OPRS/irb/faq.html>

# Northwestern Research guidelines

- **A. What is the Institutional Review Board (IRB)?** The Institutional Review Board (IRB) is a standing university committee established under federal regulations . The IRB is responsible for reviewing all research involving human subjects, insuring the equitable selection of research subjects, and overseeing institutional compliance with all federal guidelines and regulations relating to research with human subjects.

## **B. Do all studies have to be submitted to the IRB?**

- All research involving the collection of data from human subjects must be submitted to the Office for the Protection of Research Subjects (OPRS). Some research activities are exempt from full IRB review; the OPRS staff must confirm the type of review required and will issue a determination of exemption on the IRB's behalf [See Types of Review.](#)

# Consent forms (see OPRS template for detail)

- Procedure
- Benefits
- Costs/Risks
- Alternatives
- Confidentiality
- Subject's rights and the right to withdraw
- Consent

# Training courses

- <http://www.northwestern.edu/research/OPRS/irb/slides/>
- taken from a training course at Harvard and required for any investigator or experimenter running human subjects at NU
- Excerpts from the Harvard/NU slides:

# Welcome to the Human Subject Protection Training Program for Researchers in the Social and Behavioral Sciences

This program should take approximately one hour to complete. At the end of the program you will be asked to register in Northwestern's Course Management System to take a quiz. After passing the quiz with a grade of 80% you will receive a certificate of completion. The certificate will be mailed to you about three weeks after completion of the quiz. Please retain a copy of the certificate for your records.

This on-line exercise presents a survey of important issues relating to the conduct of research involving human subjects.

The following topics will be addressed:

- Definitions of research involving human subjects
- History
- Ethical principles
- University and federal rules regarding the use of human subjects
- Roles and responsibilities
- Informed consent
- Special categories of research and research subjects

***Would the following activities  
be considered research  
involving human subjects ?***

A telephone survey of middle school  
teachers in the Greater Boston area to  
learn about television watching habits



***Would the following activities be considered research involving human subjects ?***

A telephone survey of middle school teachers in the Greater Boston area to learn about television watching habits

**Yes, because it is a *systematic investigation with interaction* between the investigator and the subjects**

At least three parties have legitimate interests in any research venture involving human subjects: the *investigator* who initiates it, the *society* that provides the conditions for it, and the *subjects* who participate in it.



Ultimately, if the study is important, their interests do not conflict, but in the short range they can and often do. Sad experience has demonstrated that able and conscientious scholars sometimes fail to give proper weight to considerations that are salient to the interests of either the public or the subjects. To leave all the decisions solely in the hands of one of the parties involved is not wise.



The formal codification of ethical guidelines for the conduct of research involving humans began in the late 1940s.

In 1946, twenty-three Nazi defendants, twenty of them physicians, were tried for war crimes and crimes against humanity. Sixteen of the defendants were found guilty. Seven were hanged and nine were sentenced to prison terms ranging from ten years to life.



The world was shocked at the revelations of experiments these doctors conducted, including studying the effects of extreme cold, high altitude, exposure to noxious substances, poisons, infection with all manner of disease, and list of other dreadful procedures.

## Nuremberg Code (continued)

- Research should involve no unnecessary physical or mental suffering or exposure to harm. In particular, the experiment should not be conducted if there is reason to believe it may lead to death or disabling injury of a subject, "except, perhaps, in those experiments where the experimental physicians also serve as subjects."
- Risks should be reasonable based on the possible benefits of the research, which should take into account the humanitarian importance of the problem being studied.

# Principles Taken from the Nuremberg Code

- Researchers are responsible for obtaining voluntary informed consent from their subjects. They should not delegate this responsibility to others.
- Experiments should be designed to benefit society, and not be random or unnecessary.
- Precede human research with animal experiments and studies on the natural history of disease whenever this is possible, so that the anticipated results will justify the performance of the experiment.

## Nuremberg Code (continued)

- Researchers must be scientifically qualified and should perform professionally at every stage of the experiment.
- Subjects must be at liberty to withdraw at any time of their own free will.
- The experimenter should stop the study at any time if in his opinion subjects may be harmed by continuing to participate.

Over the next twenty-five years, several studies widely reported in the press helped to focus the public's interest on research involving human subjects in this country and led many people — including many in Washington — to think that some kind of federal oversight of research might be necessary.

- The Wichita Jury Case
- Immunological research at The Jewish Chronic Disease Hospital
- LSD and Psilocybin research by Timothy Leary and Richard Alpert
- Research on obedience to authority by Stanley Milgram
- PHS-funded research on the natural course of untreated syphilis in Tuskegee

## The Wichita Jury Case

In 1953, University of Chicago researchers tape recorded the deliberations of juries in six civil cases, with the consent of the judge and counsel for both sides, but without the jurors' knowledge. The researchers were investigating whether the comments of some lawyers might have inappropriately affected the deliberative process.



## Timothy Leary and Richard Alpert

These two Harvard faculty (Leary was Lecturer in Social Relations and Alpert was Assistant Professor at the Ed School) worked together in the early 1960s at the Center for Research in Personality. Hallucinogenic drugs were not then illegal and they had experimented with psilocybin and LSD obtained from Sandoz Pharmaceuticals, which they also dispensed to friends, associates, and students.

As time passed, the research became more and more free-wheeling and, in the opinion of many departmental colleagues, rapidly lost any semblance of academic rigor.



## Research on Obedience to Authority

At Yale University in the early 1960s, Stanley Milgram devised a series of experiments to examine the circumstances under which naïve individuals would follow instructions whose consequence was the apparent injury of another person.

His protocol involved a "teacher" (the subject) and a "learner" (actually a confederate of the experimenter). The teacher was to click one of a series of switches on a large and impressive device each time the learner gave a wrong answer in a word-pairing test. The teacher was told that each switch would administer a painful electric shock to the learner, of increasing intensity. Realistic cries of pain came from a separate room in which the learner was strapped to his chair--later, pounding on the wall, and, ultimately, at switches labeled up to "450 volts," no response.

## The Jewish Chronic Disease Hospital

In 1963, researchers from The Sloan-Kettering Institute began a study at Brooklyn's Jewish Chronic Disease Hospital to investigate certain aspects of the body's reaction to foreign tissue. The protocol involved injecting a culture of cancerous cells under the skin of elderly, disabled patients with compromised immune systems.



Many patients were incapable of giving informed consent and even those who were capable were told the doctors were conducting a “harmless skin test.”

## **Public Health Service study on the natural progression of untreated syphilis (“Tuskegee Syphilis Study”)**

This research began in 1932. 600 men, all poor and all black, were enrolled in a study ostensibly designed to monitor and record their health. Some were told they had “bad blood” but none, apparently, were told they had syphilis. They were given free medical attention, a hot meal each time they came to the



clinic, and a promise that the government would cover their burial expenses. Two-thirds of the subjects had evidence of tertiary syphilis when they were recruited; many of the control subjects acquired the disease during the course of the study.

# Roles and Responsibilities

Three parties involved in the research process have their own separate, but interrelated, responsibilities:

- the Investigator (and other research staff)
- the Institutional Review Board
- the University

# Investigator

The Investigator bears *primary responsibility* for the protection of human subjects in the study



## Investigator responsibilities *(continued)*

- Ensures the confidentiality of subject data
- Immediately suspends research if any subject is injured, or if previously-unanticipated risks are identified; obtains IRB approval before proceeding
- Applies to the IRB for approval of changes to previously-approved protocols

# Institutional Review Board

The IRB must understand and apply the University's rules and federal, state, and local regulations on the use of human subjects in research



# IRB Responsibilities

- Reviews, and has the authority to approve, require modification of, or disapprove, all human subjects research activities, including proposed changes to previously-approved research.
- Works with investigators to develop ethically-sound protocols
- Provides training and education as needed and requested on the use of human subjects in research.

# On Being a Scientist

<http://www.nap.edu/readingroom/books/obas/>

- The Social Foundations of Science
- Experimental Techniques and the Treatment of Data
- Values in Science
- Conflicts of Interest
- Publication and Openness
- The Allocation of Credit - Authorship Practices
- Error and Negligence in Science
- Misconduct in Science
- Responding to Violations of Ethical Standards
- The Scientist in Society

# **WHO SHOULD GET CREDIT FOR THE DISCOVERY OF PULSARS?**

- **A much-discussed example of the difficulties associated with allocating credit between junior and senior researchers was the 1967 discovery by Jocelyn Bell, then a 24-year-old graduate student, of pulsars. Over the previous two years, Bell and several other students, under the supervision of Bell's thesis advisor, Anthony Hewish, had built a 4.5-acre radiotelescope to investigate scintillating radio sources in the sky. After the telescope began functioning, Bell was in charge of operating it and analyzing its data under Hewish's direction. One day Bell noticed "a bit of scruff" on the data chart. She remembered seeing the same signal earlier and, by measuring the period of its recurrence, determined that it had to be coming from an extraterrestrial source. Together Bell and Hewish analyzed the signal and found several similar examples elsewhere in the sky. After discarding the idea that the signals were coming from an extraterrestrial intelligence, Hewish, Bell, and three other people involved in the project published a paper announcing the discovery, which was given the name "pulsar" by a British science reporter.**

## Pulsar credit (continued)

- **Many argued that Bell should have shared the Nobel Prize awarded to Hewish for the discovery, saying that her recognition of the signal was the crucial act of discovery. Others, including Bell herself, said that she received adequate recognition in other ways and should not have been so lavishly rewarded for doing what a graduate student is expected to do in a project conceived and set up by others.**

# Misconduct in Science

- Beyond honest errors and errors caused through negligence are a third category of errors: those that involve deception. Making up data or results (fabrication), changing or misreporting data or results (falsification), and using the ideas or words of another person without giving appropriate credit (plagiarism)- all strike at the heart of the values on which science is based. These acts of scientific misconduct not only undermine progress but the entire set of values on which the scientific enterprise rests. Anyone who engages in any of these practices is putting his or her scientific career at risk. Even infractions that may seem minor at the time can end up being severely punished.

# Misconduct (continued)

- The ethical transgressions discussed in earlier sections—such as misallocation of credit or errors arising from negligence—are matters that generally remain internal to the scientific community. Usually they are dealt with locally through the mechanisms of peer review, administrative action, and the system of appointments and evaluations in the research environment. But misconduct in science is unlikely to remain internal to the scientific community. Its consequences are too extreme: it can harm individuals outside of science (as when falsified results become the basis of a medical treatment), it squanders public funds, and it attracts the attention of those who would seek to criticize science. As a result, federal agencies, Congress, the media, and the courts can all get involved.

# Ethical guidelines - summary

- Be honest
- Be fair
- Be accurate