

Chapter 2

Research Ethics

Chapter Overview

Researchers carefully treat subjects who participate in their studies. Federal law regulates several aspects of psychological research, including the establishment of an *institutional review board (IRB)* and *institutional animal care and use committee (IACUC)*.

An IRB evaluates proposed studies using human participants and determines whether they place subjects *at risk*. When a subject is more likely to be harmed by participating in a study than by not participating, an IRB performs a *risk/benefit analysis* to determine whether the study is justifiable. Federal statutes strongly influenced the American Psychological Association's (1992) *Ethical Principles of Psychologists and Code of Conduct*. APA standards for *informed consent*, *full disclosure*, *deception*, *debriefing*, *anonymity*, and *confidentiality* protect participants' rights. Participants must be debriefed whenever an experiment involves deception.

An IACUC evaluates proposed studies to ensure that researchers have carefully researched alternatives to animal research and have decided to use a minimum number of animals. The amended Animal Welfare Act of 1966 and professional organizations, such as the AALAS and AAALAC, have contributed to uniform animal care standards and self-policing by the scientific community. Researchers must promote *animal welfare* whenever they use animal subjects. Despite allegations by critics of animal research, there is little evidence of animal abuse in psychological research. While some critics advocate *animal rights*, the position that all species are equally valued and have equal rights, most people support animal experimentation because of its contribution to human welfare.

Scientific *fraud* encompasses fabrication and falsification of data, and plagiarism, is unethical, and can result in severe personal and institutional consequences. There are diverse reasons for scientific fraud. Peer review, replication, and academic competition help control fraud. *Plagiarism*, representing someone else's work as your own, is a type of fraud. Researchers must credit others who contributed words or ideas to their work through citations. In *ethical reports*, those listed as report authors must have made important contributions to the research. Researchers may only republish previously published data if they cite the original publication where the data first appeared.

Chapter Outline

Research Ethics

The Evolution of Ethics in Research

The American Psychological Association Guidelines

Deception and Full Disclosure

Anonymity and Confidentiality

Protecting the Welfare of Animal Subjects

The Animal Rights Movement

Fraud in Science

Plagiarism

Ethical Reports

Summary

Key Terms

Review and Study Questions

Critical Thinking Exercise

Online Resources

Key Terms

Animal rights

Animal welfare

At risk

Debriefing

Fraud

Informed Consent

Institutional animal care and use committee (IACUC)

Institutional review board (IRB)

Minimal risk

Plagiarism

Risk/benefit analysis

Teaching Suggestions

Cengage Online Workshop Exercises

http://www.wadsworth.com/psychology_d/templates/student_resources/workshops/res_methd/ethics/ethics_01.html

This Research Methods workshop deals specifically with ethical issues. After working through it, students should be able to answer the following:

List four ethical issues that are relevant to psychological research.

Give an example of a *psychological* risk one might encounter in an experiment.

What is an IRB?

What special considerations are there when an experiment involves deception?

How is anonymity in a study different from confidentiality?

http://www.wadsworth.com/psychology_d/templates/student_resources/workshops/res_methd/debrief/debrief_1.html

This workshop discusses debriefing practices. After studying it, your students should be able to answer these questions:

Why is debriefing important?

What special debriefing issues are necessary when deception is involved?

Describe the elements of an effective and appropriate debriefing?

Additional Web Resources

<http://www.apa.org/ethics/code/index.aspx>

This is the full code of conduct of the American Psychological Association. Section 8 is of greatest relevance to researchers.

<http://phrp.nihtraining.com/users/login.php>

The National Institutes of Health Office of Extramural Research offers an online training program on Protecting Human Research Participants that does an excellent job explaining the need for and history of ethics in human research. The program is free, doesn't take more than an hour or two, and students get a certificate upon completion.

<http://www.plagiarism.org/>

This site bills itself as the world's leading online plagiarism prevention resource. It is related to Turnitin.com, a site which scans submitted papers for plagiarism.

<http://www.gpoaccess.gov/cfr/>

The National Archives and Records Administration lists on its website the Code of Federal Regulations. Going to this site and searching for "protection of human subjects" will lead you to the most up-to-date federal guidelines.

<http://www.oakland.edu/?id=9074&sid=177>

<http://irb.truman.edu/>

Chapter 2

Listed above are IRB pages for Oakland University and Truman State University, the institutions at which your text's author and the authors of this manual teach. Your own institution likely has a webpage for IRB information that you can refer students to.

<http://www.peta.org>

Here is the website for the well-known animal rights group People for the Ethical Treatment of Animals.

Classroom/Homework Exercises

Animal Research

Table 2-1 in Chapter 2 lists several accusations made by animal rights activists that have been shown to be inaccurate. The following exercise complements the points made in this table and improves your students' library skills as well. It will help your students if you identify in advance all of your library's journals that deal with animal research.

Have each student identify a published article in which animals served as subjects. Ask them to list all of the ways in which the study observed the ethical guidelines for treatment of animals. To really make your point, challenge them to find a single instance of unethical behavior. This may lead to an interesting (and impassioned) discussion of what is/is not part of the greater good.

Fraud in Science

Ask your students to conduct a web search for "scientific fraud" and bring an example in to class the next day. My Google search netted over a million hits, so you may wish to limit them to stories that have some psychological relevance. Ask students to identify the motivations behind those found to be guilty of scientific fraud.

Handout 2-1: Risk/Benefit Analyses

A risk/benefit analysis is fairly easy to understand in theory, but fairly difficult to conduct in practice. Conduct a risk/benefit analysis on each of the following experiment proposals. Assume you are responsible for deciding whether or not to approve each experiment. You must justify each decision. Suggest ways to improve each proposal.

- 1) Mickey wants to study how food deprivation affects learning in mice. He believes that animals have a survival instinct to learn more quickly when food is scarce. He proposes an experiment in which mice are given only water for 1, 2, 5, or 10 days. He then plans to measure the speed with which they learn to navigate a complicated maze.

- 2) Barbara believes that people will shift from using paper towels to using electric air dryers in public restrooms if they are told about the amount of paper waste in landfills. She proposes a study in which a sign is posted in some bathrooms explaining the pollution problem, but is not posted in other bathrooms. She will use hidden videocameras to record people's use of either the paper towel dispenser or electric air dryer in each of the two bathroom conditions.

- 3) Lucy believes that our self-image affects how we rate the appearance of others. She proposes an experiment in which participants rate the attractiveness of various models. Unbeknownst to the participants, a confederate will be loitering in the hallway outside the experiment room. As volunteers arrive for the experiment, the confederate will either compliment ("you look nice in that outfit") or insult ("that outfit makes you look fat") the participant. Lucy will then compare the model ratings from complimented and insulted participants.

Handout 2-2: Identifying Ethics Violations

Identify as many ethical violations as you can in the following scenario. Explain each of the violations you find.

Mark decided that participants in this study will not be at risk, and therefore, he didn't bother the IRB with his proposal. His study investigates the amount of discomfort people are willing to put up with in order to earn a large sum of money. He recruits students by posting ads about a "contest in which you can earn \$1000." Everyone who shows up is told that they must do whatever he tells them to do for the next several hours and that the last person to comply will earn the money. He then makes the participants eat disgusting food combinations, rub permanent markers on their own faces, and mail insulting messages to their professors. After two hours he stops the "contest," informs everyone that it was actually an experiment, and explains that there is no prize money. Before participants leave, he gets them to sign an informed consent form to acknowledge that they "were free to leave at any time."

Key to Review and Study Questions

1. Explain why IRBs are necessary and what their major functions are.

An *IRB* evaluates proposed human research studies before they are conducted. The main responsibility of an IRB is to protect subject safety. An IRB's first task is to determine whether a proposed study places subjects "at risk." If an IRB decides that participation in a study will increase the risk of subject injury, it must conduct a *risk/benefit analysis* to determine whether risks to individuals are outweighed by potential benefits or knowledge gained. An IRB also safeguards the rights of subjects in *at risk studies* by ensuring that researchers obtain informed consent.

2. What is informed consent?

Informed consent means that a subject agrees to participate following a complete explanation of the nature and purpose of a study. It is required for all human research studies. Consent forms must be written in lay language at a reading level subjects can understand. Researchers should verbally explain information that is important for subjects. Subjects who agree to participate in a study should sign the consent form and then receive a copy for their records.

The following aspects of informed consent are important in psychological research:

1. subjects must give their consent freely
2. subjects must be free to leave an experiment at any time
3. researchers must fully explain experimental procedures and answer any questions about them
4. researchers must explain potential risks and benefits
5. researchers must assure subjects that all data will remain private and confidential
6. subjects may not be asked to release the researchers from liability or to waive their legal rights in the case of negligence

How is it related to *respect for persons* in the Belmont Report?

Informed consent derives from the principle of *respect for persons* contained in the 1979 Department of Health, Education, and Welfare Belmont Report. *Respect for persons* means that individuals should be free to make their own decisions about research participation and that we must provide extra protection for vulnerable populations and persons with diminished capacity while respecting their self-determination.

3. When is it appropriate to use deception?

Deception is appropriate when it is an experimenter's only means of testing an experimental hypothesis.

When is it not appropriate?

APA Standard 6.15 (b) prohibits deception that would influence a subject's decision to participate in the study.

How can the negative effects of deception be eliminated?

We can eliminate the negative effects of deception by thorough debriefing as required by APA Standard 6.15 (c): "Any other deception that is an integral feature of the design and conduct of an experiment must be explained to participants as early as is feasible, preferably at the conclusion of their participation, but no later than at the conclusion of the research."

4. At the end of the semester, all students in a general psychology course are told they will not receive credit for the course unless they take part in the instructor's research project. Students who refuse to participate are given "Incompletes" and do not get credit for the course. How has the ethical principle of informed consent been violated?

The instructor's requirement is unethical because it constitutes coercion and thereby violates three sections of APA Standard 6.11. The requirement violates APA standard 6.11 (b) which requires that psychologists "inform participants that they are free to participate or to decline to participate." It violates APA Standard 6.11 (c): "When psychologists conduct research with individuals such as students or subordinates, psychologists take special care to protect the prospective participants from adverse consequences of declining or withdrawing from participation." Finally, it violates APA Standard 6.11 (d): "When research participation is a course requirement or opportunity for extra credit, the prospective participant is given the choice of equitable alternative activities."

5. An experimenter studying the effects of stress gave subjects a series of maze problems to solve. The subjects were led to believe that the problems were all quite easy. In fact, several had no solution. Some of the subjects were visibly upset by their inability to solve the problems. At the end of the study, the experimenter did not explain the procedures. What ethical principles apply in this case?

Chapter 2

The experimenter violated APA Standard 6.11 (c): "...they inform participants of significant factors that may be expected to influence their willingness to participate (such as risks, discomfort, adverse effects, or limitations in confidentiality, except as provided in Standard 6.15, Deception in Research)." The experimenter violated APA Standard 6.15 (c): "Any other deception that is an integral feature of the design and conduct of an experiment must be explained to participants as early as is feasible, preferably at the conclusion of their participation, but no later than at the conclusion of the research."

Finally, the experimenter violated APA Standard 6.15 (b): "Psychologists never deceive research participants about significant aspects that would affect their willingness to participate, such as physical risks, discomfort, or unpleasant emotional experiences."

What should the experimenter have done?

The experimenter should have warned subjects about the difficulty and potential stress of the maze problems, and should have immediately debriefed them after they completed the study.

6. In a questionnaire study of sexual attitudes, a student experimenter finds that Pat, a friend's spouse, has responded yes to the question, "Have you ever had an extramarital affair?" The student is sure that the friend is unaware of Pat's behavior. The student decides to show Pat's answers to the friend. What ethical principles have been violated?

The student experimenter failed to maintain *anonymity* (subject names were on data sheets) and *confidentiality* (the security of the data was violated).

How could this situation have been avoided?

The experimenter should have coded data sheets so that Pat's answers remained anonymous. Furthermore, the experimenter should not have shared experimental data with a friend.

7. What ethical principles apply when we propose and conduct research with animals?

APA Standard 6.20 outlines the requirements for ethical animal research. Researchers must protect animal welfare whenever they use animal subjects. These guidelines concern:

1. humane treatment of animal subjects
2. compliance with federal, state, and local laws and regulations, and relevant professional standards
3. training of all individuals using animals in research methods and in the care, maintenance, and handling of the species being used

Chapter 2

4. staff competence to fulfill their responsibilities and activities
5. minimizing the discomfort, infection, illness, and pain of animal subjects
6. subjecting animals to pain, stress, or privation only when there are no satisfactory alternatives and the animals' distress is justified by the study's potential value
7. use of anesthesia during surgery and techniques to avoid infection and minimize pain
8. termination of an animal's life using an accepted, rapid method that minimizes pain

8. What is the difference between animal welfare and animal rights?

Animal welfare is the humane care and treatment of animals, which is regulated by federal and state statutes and the ethical standards of professional organizations.

Animal rights is the idea that all sensate species, especially those that feel pain, are of equal value to humans and should have the same subject rights as humans.

9. To study the effect of a new drug to reduce depression, researchers must sacrifice animal subjects and dissect their brains. Discuss the ethical pros and cons of this line of research.

APA Standard 6.20 defines the ethical standards for animal research. An institutional animal care and use committee (IACUC) must first determine that there are no satisfactory alternatives to animal experimentation and that the number of animals used in the study has been minimized. An IACUC would approve the study if it promises to contribute to mental health and follows APA guidelines for the humane termination of an animal's life.

This question implies the broader philosophical question of whether animals should be sacrificed for the sake of human welfare. Students are likely to endorse divergent positions as they grapple with the issue of animal rights. In this context, the pros are that animal research is indispensable in psychopharmacological research, can help save human lives, and can improve depressed patients' quality of life. The con is that the lives of members of a sensate species will be sacrificed.

10. What is fraud?

Fraud includes falsifying or fabricating data, and plagiarism.

Describe the external pressures that can produce fraud.

Competition in academic psychology may be a primary cause of fraud. Researchers frequently compete for tenure, promotion, departmental resources, and grant funds based on their publication records. The pressure is most intense in "publish or perish" institutions and for individuals who have experienced a series of

Chapter 2

research setbacks.

Describe the safeguards that keep it in check.

Peer review is the first safeguard since reviewers closely scrutinize submitted manuscripts and are likely to detect suspect findings. *Replication* is the second safeguard, since fraudulent findings are not likely to be replicated. Finally, academic competition for scarce resources like grants increases vigilance against fraud by colleagues in a specialty area.

What are the possible penalties for scientific misconduct?

The penalties for scientific misconduct depend on the offense and who determines guilt and punishment. Penalties imposed by a university could range from a reprimand to firing, while criminal court penalties could be as severe as imprisonment. An institution's reputation could be harmed by a researcher's misconduct and it could be forced to return funds or prevented from receiving future grant funds.

11. Lee had put off doing a lab report until the end of the term. He was badly pressed for time. His roommate said, "No problem. I took that course last year. You can use my report. Just put your name on it." Lee decides it is all right to use the paper since he has the author's consent. Is this ethical according to the APA? Why or why not?

No. Lee committed *plagiarism* since he misrepresented his roommate's work as his own. His roommate's encouragement only made him complicit in Lee's misconduct.

Test Questions

Multiple Choice

1. (F) Introduction
Although scientists bring their own values, ethics, morals, and sense of right and wrong to their work, science is commonly perceived as
- * a. amoral.
b. immoral.
c. moral.
d. unethical.

Chapter 2

2. (C) Introduction
From a scientific perspective, facts discovered through science are
- a. ethical.
 - b. immoral.
 - c. moral.
 - * d. neither moral nor immoral.
3. (C) Research Ethics
Research ethics
- a. apply only to research with human subjects.
 - b. are value neutral.
 - * c. articulate scientists' sense of right and wrong.
 - d. must be weighed against the benefits of research.
4. (F) Research Ethics
Which of these must be established by institutions engaging in research with human subjects?
- a. human research review committee
 - b. institutional animal care and use committee
 - * c. institutional review board
 - d. subjects use committee
5. (A) Research Ethics
Samantha has developed an original research proposal. Since her psychology experiment involves human subjects, she will have to submit it to the campus
- a. human research review committee.
 - b. institutional animal care and use committee.
 - * c. institutional review board.
 - d. subjects use committee.
6. (F) Research Ethics
A researcher could be sued for damages if an experiment injured a subject and the injury was
- a. accidental.
 - b. intentional.
 - c. psychological.
 - * d. accidental, intentional, or psychological.
7. (F) Research Ethics

Chapter 2

Federal law requires that an institutional review board be comprised of

- a. laypeople.
- b. researchers.
- c. subjects.
- * d. both laypeople and researchers.

8. (F) Research Ethics

The primary concern of an institutional review board is to

- a. determine whether deception is necessary.
- b. determine whether informed consent will be obtained.
- * c. ensure that the safety of research participants is adequately protected.
- d. evaluate the scientific merit of a proposed study.

9. (A) Research Ethics

Which human experiment could not be justified, regardless of the knowledge that might be gained?

- a. studying the effectiveness of subliminal advertising on product recognition
- * b. studying the effectiveness of a drug that produces complete muscular paralysis in treating alcohol addiction
- c. studying the effect of mild sleep deprivation on cognitive performance
- d. studying the effect of shift rotation schedules on employee absenteeism

10. (F) Research Ethics

The first task of a board reviewing human subject research is to decide whether

- a. deception is necessary.
- b. human subjects are necessary.
- c. informed consent will be obtained.
- * d. the proposed study places subjects at risk.

11. (F) Research Ethics

Under Federal law, "subject at risk" means that an individual may be exposed to the possibility of _____ injury.

- a. physical
- b. psychological
- c. social
- * d. physical, psychological, or social

12. (C) Research Ethics

Chapter 2

Which statement about “at risk” studies is correct?

- a. panels should always approve these studies as long as researchers obtain informed consent
- b. panels should reject these studies due to possible subject injury
- c. panels should require that researchers revise these studies until risks are eliminated
- * d. panels should only approve these studies if potential benefits outweigh risks to subjects

13.(F) Research Ethics

When a panel determines whether the potential benefits of a study outweigh risks to subjects, they are performing a

- * a. risk/benefit analysis.
- b. risk determination.
- c. subject risk assessment.
- d. survival analysis.

14.(F) Research Ethics

IRBs perform a risk/benefit analysis for ____ studies.

- * a. all studies involving animal and human subjects
- b. “at risk” studies
- c. “minimal risk” studies
- d. “at risk” and “minimal risk” studies

15.(A) Research Ethics

Select the study that would be most likely to place subjects “at risk.”

- a. a study of whether talking on cell phones increases driving simulator errors
- b. a study of whether classical music improves working memory
- * c. a study of whether exposure to violent pornography increases male acceptance of the “rape myth”
- d. a study of whether a person in a wheelchair will receive more assistance on campus than in a shopping mall

16.(F) Ethics Research

The law generally does not require ____ to establish an IRB.

- a. K-12 public school systems
- b. private organizations
- c. private clinics
- * d. any of these

17.(F) Research Ethics

Whom do commercial IRBs mainly serve?

Chapter 2

- a. universities
 - b. non-profit organizations
 - * c. pharmaceutical companies
 - d. public school systems

- 18. (F) Research Ethics
Informed consent must be obtained
 - a. if an institutional review board recommends it.
 - * b. in all “at risk” psychological studies using human subjects .
 - c. only in experiments that use deception.
 - d. only in research funded by Federal grants.

- 19. (C) Research Ethics
Rosenthal has argued that poorly designed research can be unethical because
 - a. it diverts student, teacher, and administrator time from potentially more beneficial educational experiences.
 - b. poorly designed research can lead to unwarranted and inaccurate conclusions that may harm society.
 - c. poor-quality science diverts finite time and money from better-quality research.
 - * d. all of these

- 20. (F) Research Ethics
Informed consent means that
 - a. subjects agree to allow the experimenter to use their data for approved purposes.
 - * b. subjects agree to participate in a study after receiving complete information about the nature and purpose of the study.
 - c. subjects agree to participate in a study after receiving complete information about the nature, purpose, and hypothesis of the study.
 - d. the institutional review board has agreed to allow the researcher to recruit subjects for an approved experiment.

- 21. (F) Research Ethics
In Mann’s study of informed consent, fewer than ____ of the subjects understood the procedures or how injuries would be treated.

Chapter 2

- a. 25%
 - b. 35%
 - * c. 50%
 - d. 75%

- 22. (F) Research Ethics
The Tuskegee syphilis study violated the principle of justice because researchers
 - a. infected the subjects with syphilis.
 - b. treated the subjects with unconventional medical treatments.
 - c. quarantined subjects against their will.
 - * d. withheld penicillin treatment from poor, rural black men, but not from their wealthy, urban white counterparts.

- 23. (C) Research Ethics
Researchers who follow the Belmont report's principle of justice do not select subjects simply because they are
 - a. disadvantaged.
 - b. readily available.
 - c. easily manipulated.
 - * d. all of these

- 24. (F) Research Ethics
In which of these might informed consent be unnecessary but desirable?
 - a. observation of couples' public displays of affection
 - b. anonymous questionnaires about academic dishonesty
 - c. some archival studies
 - * d. all of these

- 25. (F) Research Ethics
Who paralyzed subjects using Scoline in a classical conditioning study that predated modern ethical guidelines for research?
 - a. Bramel
 - * b. Campbell, Sanderson, and Lavery
 - c. Donnerstein, Linz, and Penrod
 - d. Milgram

- 26. (C) Research Ethics
Why would an IRB reject the Campbell, Sanderson, and Lavery (1964) study if it were proposed today?

Chapter 2

- a. debriefing may not have corrected the harmful effects of false heart rate feedback
 - b. subjects were deceived about whether they were administering dangerous electric shocks
 - * c. subjects were paralyzed and believed they were dying
 - d. subjects were provoked by a confederate
- 27.(F) Research Ethics
- All of these are aspects of informed consent except
- * a. if the subject is a minor or impaired, consent must be obtained from a judge.
 - b. informed consent must be given without the use of force, duress, or coercion.
 - c. researchers must give subjects a full explanation of the procedures to be followed.
 - d. researchers must make clear the potential risks and benefits of the experiment.
- 28.(F) Research Ethics
- All of these are aspects of informed consent except
- a. informed consent must be given without the use of force, duress, or coercion.
 - * b. a researcher may ask subjects to waive their legal rights in the case of negligence and to release the researcher from liability.
 - c. researchers must make clear the potential risks and benefits of the experiment.
 - d. researchers must provide assurances that all data will remain private and confidential.
- 29.(A) Research Ethics
- After an experimenter explained Alex's rights as a subject and the potential risks and benefits of participating in the research study, Alex signed a form containing this information. These steps are essential elements of
- a. anonymity.
 - b. confidentiality.
 - c. debriefing.
 - * d. informed consent.
- 30.(F) Research Ethics
- Which of these statements describes informed consent?
- a. consent forms should be written in lay language at the subjects' reading level

Chapter 2

- b. consent should be obtained in writing
 - c. subjects should receive a copy of the consent form to keep
 - * d. all of these

- 31.(F) Research Ethics
Experimenters should obtain informed consent
 - a. after each subject completes the experiment.
 - b. after the experiment is concluded.
 - * c. in writing.
 - d. through verbal agreement .

- 32. (F) Research Ethics
Mann's (1994) study of subject comprehension of consent forms showed that most participants
 - a. believed they had given up their right to sue.
 - b. did not remember the provisions of the form they had signed .
 - c. did not understand the procedures designed to protect them in case of injury.
 - * d. all of these

- 33. (F) Research Ethics
Which conclusion should be drawn from Mann's (1994) study of informed consent?
 - a. allowing subjects to read and sign an informed consent form ensures that most subjects will understand what they are signing
 - b. most subjects understand research procedures outlined in the informed consent form
 - c. most subjects understand that they do not give up their rights by signing an informed consent form
 - * d. researchers need to verbally reinforce information contained in an informed consent form

- 34.(F) The American Psychological Association Guidelines
The ____ publishes the code of ethical principles that apply to psychologists and students who conduct research.
 - a. American Association for the Advancement of Science

Chapter 2

- *
 - b. American Psychiatric Association
 - c. American Psychological Association
 - d. Psychonomic Society

- 35.(F) The American Psychological Association Guidelines
When a researcher has questions about research ethics, she should
 - a. design another experiment.
 - * b. seek advice from an IRB or colleagues and employ all possible safeguards to protect research subjects.
 - c. seek approval to conduct the experiment from the American Psychological Association.
 - d. use her own best judgment as to whether to proceed with the experiment.

- 36.(F) The American Psychological Association Guidelines
Final responsibility for conducting ethical research rests with the
 - a. American Psychological Association.
 - b. institutional review board.
 - c. person who actually collects the experimental data.
 - * d. principal researcher.

- 37.(F) The American Psychological Association Guidelines
In some studies, subjects may be considered to be at “minimal risk.” This means that
 - a. fewer than 10% of the subjects are likely to be injured.
 - * b. participation does not alter the participants’ odds of being harmed.
 - c. the researcher does not have to obtain informed consent.
 - d. the risk is psychological instead of physical.

- 38.(A) The American Psychological Association Guidelines
All of these could be “minimal-risk” studies except
 - * a. a study of how amphetamine affects long-term memory.
 - b. a study of the frequency of texting in a library.
 - c. a study of the seating patterns of specific ethnic groups in a dormitory cafeteria.
 - d. an anonymous questionnaire regarding personal preference for wearing boxers or briefs.

- 39.(F) The American Psychological Association Guidelines
According to Sieber and colleagues, in 1992 some form of deception was

Chapter 2

- used in ____ of studies published in the *Journal of Personality & Social Psychology*.
- a. 15%
 - b. 25%
 - * c. 47%
 - d. 65%
- 40.(F) The American Psychological Association Guidelines
In a study of obedience by ____, subjects were deceived about whether they were administering dangerous shocks to learners.
- a. Brady
 - b. Bramel
 - * c. Donnerstein, Linz, and Penrod
 - d. Milgram
- 41.(F) The American Psychological Association Guidelines
In a study of negative ions and aggression by ____, a student accomplice of the experimenter provoked half of the subjects with scripted nasty comments.
- * a. Baron, Russell, and Arms
 - b. Donnerstein, Linz, and Penrod
 - c. Mann
 - d. Milgram
- 42.(A) The American Psychological Association Guidelines
In psychological research, a confederate
- a. analyzes experimental data.
 - b. collects data for the experimenter.
 - * c. helps deceive research subjects.
 - d. runs subjects for the experimenter.
- 43.(A) The American Psychological Association
Dawn is studying attitudes about using “morning after” contraceptives. She is afraid that if she reveals her experimental hypothesis, she will distort subject responses. If she withholds information about this study, she must be sure that
- a. she extensively debriefs subjects at the end of the experiment.
 - b. she obtains informed consent from the subjects.
 - c. subjects can withdraw from the experiment at any time.
 - * d. the information withheld will not affect the subjects’ decision to participate.
- 44.(F) The American Psychological Association Guidelines

Chapter 2

According to Christensen's (1988) review of subject attitudes towards deception, most subjects

- *
 - a. believe that deception studies can be personally harmful.
 - b. consider deception studies more beneficial than nondeception studies.
 - c. consider nondeception studies more enjoyable than deception studies.
 - d. consider deception studies and nondeception studies equally enjoyable and beneficial.

45.(F) The American Psychological Association Guidelines

All of these statements describe Christensen's (1988) findings on subject attitudes towards deception except

- a. most subjects believe that deception studies are more beneficial than nondeception studies.
 - b. most subjects find deception studies more enjoyable than nondeception studies.
 - *
 - c. most subjects believe that deception studies can be personally harmful.
 - d. most subjects do not mind being misled.

46.(C) The American Psychological Association Guidelines

The guideline concerning ____ may be violated whenever deception is used in a psychological experiment.

- a. anonymity of subject information
 - b. confidentiality of subject information
 - *
 - c. informed consent
 - d. subject debriefing

47.(F) The American Psychological Association Guidelines

Deliberate deception may be acceptable in a psychology experiment if

- a. researchers obtain informed consent.
 - b. subjects are allowed to withdraw at any time.
 - c. subjects are at least 18 years old.
 - *
 - d. the experimental hypothesis cannot be tested without misleading research subjects.

48.(F) The American Psychological Association Guidelines

Chapter 2

If researchers intentionally mislead subjects in an experiment, ethical guidelines require that deception be limited to the study's

- a. potential benefits.
- b. potential risks.
- c. potential risks and benefits.
- d. purpose and procedure.

*

49.(F) The American Psychological Association Guidelines

The term, _____, refers to a researcher's responsibility to explain the nature and purpose of a study to subjects at the end of an experiment.

- a. confidentiality
- b. debriefing
- c. interrogation
- d. nondisclosure

*

50.(F) The American Psychological Association Guidelines

Full disclosure, by completely debriefing subjects at the end of an experiment, is required whenever psychology experiments

- a. collect personally-sensitive information.
- b. employ deception.
- c. place subjects "at risk."
- d. use human subjects.

*

51.(A) The American Psychological Association Guidelines

After Rebecca participated in a psychology experiment, the researcher explained the study's nature and purpose to her. This procedure is called

- a. confidentiality.
- b. debriefing.
- c. interrogation.
- d. nondisclosure.

*

52.(C) The American Psychological Association Guidelines

The most serious ethical problem in debriefing subjects in a psychology study is whether

- a. debriefing might damage subject self-esteem when they learn that they were easily deceived.
- b. debriefing will reverse all of an experiment's negative effects.
- c. researchers should ask subjects if they were deceived by the experimental procedure.
- d. subjects will reveal the true purpose of a study to prospective subjects.

*

53.(F) The American Psychological Association Guidelines

Chapter 2

- Male subjects received false heart rate feedback about their sexual arousal in the study by
- * a. Baron, Russell, and Arms.
 - b. Bramel.
 - c. Donnerstein, Linz, and Penrod.
 - d. Milgram.
- 54.(C) The American Psychological Association Guidelines
The most critical ethical problem in the Bramel (1963) study on projection was that
- * a. full disclosure may not have reversed the effects of false feedback.
 - b. male subjects may have been uncomfortable viewing photographs of nude males.
 - c. researchers did not obtain informed consent.
 - d. researchers did not provide complete disclosure.
- 55.(C) The American Psychological Association Guidelines
What was the deception in the Bramel (1963) study?
- a. subjects believed that the confederate who insulted them was another subject
 - b. subjects believed that they administered painful shocks to the learners
 - c. subjects believed that they administered unpleasant bursts of heat to the learners
 - * d. subjects believed that they received heart rate feedback about their sexual arousal to pictures of nude males
- 56.(A) The American Psychological Association Guidelines
Puck returned from an experiment looking slightly betrayed. He cornered his roommate and said, "You know that study with hot pictures you told me to sign up for? Those photos weren't from the *Sports Illustrated* Swimsuit issue." In which study might Marty have participated?
- * a. Baron, Russell, and Arms
 - b. Bramel
 - c. Campbell, Sanderson, and Laverty
 - d. Milgram
- 57.(C) The American Psychological Association Guidelines

Chapter 2

- Which pair of studies raised the concern that simple debriefing may not reverse the negative effects of an experiment?
- * a. Baron, Russell, and Arms; Christensen
 - b. Bramel; Donnerstein, Linz, and Penrod
 - c. Mann; Milgram
 - d. Milgram; Baron, Russell, and Arms
58. (F) The American Psychological Association Guidelines
The ____ study showed that when male undergraduates are exposed to high levels of violent pornography in a psychology experiment, they become more accepting of the “rape myth” than nonexposed men.
- a. Baron, Russell, and Arms
 - b. Bramel
 - * c. Donnerstein, Linz, and Penrod
 - d. Milgram
59. (C) The American Psychological Association Guidelines
A critical finding of the Donnerstein, Linz, and Penrod (1987) study of the effects of violent pornography on male undergraduates was that
- a. exposure to high levels of violent pornography did not affect acceptance of the “rape myth.”
 - b. exposure to high levels of violent pornography briefly increased acceptance of the “rape myth.”
 - * c. extensive debriefing was required to counter the harmful beliefs created by the films.
 - d. simple debriefing at the end of the experiment corrected the harmful beliefs created by the films.
60. (A) The American Psychological Association Guidelines
Katie was shocked by the sudden transformation of her boyfriend Jay. After participating in a single experiment involving violent pornography, roommates overheard him making outrageous statements like, “Women really want to be raped,” and “I’d rape a woman in a second if I knew that I would never be caught.” In which study might Jay have participated?
- a. Baron, Russell, and Arms
 - b. Bramel
 - * c. Donnerstein, Linz, and Penrod
 - d. Milgram
61. (F) The American Psychological Association Guidelines
What did Misra (1992) recommend that researchers provide following

Chapter 2

- participation in a deception study?
- *
 - a. education about the persistence of false beliefs
 - b. extensive postexperimental debriefing
 - c. simple postexperimental debriefing
 - d. stronger safeguards to protect subject anonymity
62. (F) The American Psychological Association Guidelines
Researchers identify subjects by code numbers and report group data to maintain
- *
 - a. anonymity.
 - b. confidentiality.
 - c. informed consent.
 - d. subject safety.
63. (A) The American Psychological Association Guidelines
Dr. Breault reprimanded students in her Psychological Research class after she discovered data sheets containing subject names and personality test scores. Her students failed to protect
- *
 - a. anonymity.
 - b. confidentiality.
 - c. informed consent.
 - d. subject safety.
64. (F) The American Psychological Association Guidelines
Researchers securely store experimental data and only use this information for purposes explained to the subjects to ensure
- *
 - a. anonymity.
 - b. confidentiality.
 - c. informed consent.
 - d. subject safety.
65. (F) The American Psychological Association Guidelines
Which steps should an experimenter take to protect confidentiality?
- *
 - a. use discretion when sharing data with colleagues
 - b. store data in a secure place
 - c. only use data for purposes explained to the subjects
 - d. all of these
66. (F) Protecting the Welfare of Animal Subjects
Which of the following is required by institutions engaged in animal research?
- a. committee on animal research ethics (CARE)

Chapter 2

- b. laboratory animal oversight committee (LAOC)
 - * c. institutional animal care and use committee (IACUC)
 - d. institutional review board (IRB)

- 67.(F) Protecting the Welfare of Animal Subjects
The ____ regulates the care and treatment of animals in research.
 - * a. Animal Welfare Act
 - b. Biomedical Research Act
 - c. Laboratory Animal Care Act
 - d. Protection of Laboratory Animals Act

- 68.(F) Protecting the Welfare of Animal Subjects
An institutional animal care and use committee must decide that ____ before it approves animal experimentation.
 - a. harm to animals will be outweighed by potential gains in knowledge
 - b. the researcher has provided adequate facilities and veterinary care
 - c. the study will not place animals “at risk”
 - * d. there are no alternatives to animal experimentation

- 69.(F) Protecting the Welfare of Animal Subjects
Which professional organizations monitor and inform the scientific community about the humane use and care of animals for research?
 - * a. AALAS and AAALAC
 - b. AAALAC and IACUC
 - c. CARE and AALAS
 - d. NIMH and CARE

- 70.(F) Protecting the Welfare of Animal Subjects
The 1991 revision of the Animal Welfare Act
 - a. prohibits painful shock to primates.
 - b. prohibits surgical procedures on primates.
 - * c. requires that primates be housed with other members of their species.
 - d. specifies the appropriate species to be used in specific investigations.

- 71.(F) Protecting the Welfare of Animal Subjects
Which of the following raised ethical concerns about Brady’s (1958) research with rhesus monkeys?

Chapter 2

- a. animals were deprived of food and water for more than 23 hours
 - b. animals received long-duration, high-intensity shocks
 - c. primates could not move their heads and limbs
 - * d. some animals were kept in restraining chairs for as long as 6 months
- 72.(F) Protecting the Welfare of Animal Subjects
Which study exposed rhesus monkeys to alternating 6-hour periods of shock avoidance and rest?
- * a. Brady
 - b. Coile and Miller
 - c. Milgram
 - d. Singer
- 73.(F) Protecting the Welfare of Animal Subjects
APA ethical guidelines require that the termination of an animal's life should be
- * a. completed rapidly and with minimal pain.
 - b. done immediately after an experiment.
 - c. only considered when an animal is suffering.
 - d. only performed by a veterinarian.
- 74.(F) Protecting the Welfare of Animal Subjects
Coile and Miller's (1984) review of articles reporting animal research in major psychology journals between 1979 and 1983 found that
- a. many studies seemed to be motivated by idle curiosity.
 - b. over 25% of the articles reported deprivation of food and water for over 24 hours.
 - c. over 30% of the articles reported using intense, repeated, electric shock.
 - * d. the allegations of extreme critics were not supported.
75. (F) Protecting the Welfare of Animal Subjects
_____ paralyzed a single monkey limb to demonstrate that they could be trained to reuse the limb and regrow functional sensory connections. This has resulted powerful new therapeutic techniques for treating human paralysis.
- a. Brady
 - b. Miller
 - c. Singer
 - * d. Taub
- 76.(F) Fraud in Science
All of these are examples of fraud except
- a. fabricating data.
 - b. falsifying data.

Chapter 2

- c. plagiarism.
 - * d. using deception in a research study.

- 77. (F) Fraud in Science
Who ended a promising career in social psychology by fabricating data on discrimination in three experiments?
 - a. Breuning
 - b. Burt
 - * c. Ruggiero
 - d. Tobin

- 78. (F) Fraud in Science
It is widely believed that _____ falsified results from studies of the inheritability of IQ in identical and fraternal twins.
 - a. Brady
 - b. Breuning
 - * c. Burt
 - d. Singer

- 79. (F) Fraud in Science
Who admitted to falsifying data in studies of stimulant treatment of hyperactivity?
 - a. Brady
 - * b. Breuning
 - c. Burt
 - d. Singer

- 80. (A) Fraud in Science
Misty, a graduate student, primarily designed and ran her own experiment. While her faculty supervisor and department chair did not make significant contributions to this study, her supervisor did answer a few statistics questions and the department chair provided her with laboratory space. Who should receive authorship credit?
 - * a. Misty
 - b. Misty and her department chair
 - c. Misty and her faculty supervisor
 - d. Misty and her department chair and faculty supervisor

- 81. (F) Fraud in Science
All of these are steps to avoid plagiarism except
 - a. identify direct quotations by using quotation marks.
 - b. include a complete list of references at the end of a research report.
 - * c. never paraphrase.

Chapter 2

d. take complete notes.

82. (A) Fraud in Science

Which of these practices are unethical?

*

- a. republishing previously published data as if they were original data
- b. republishing an entire previously published report listing credit for the initial publication
- c. republishing part of a previously published report listing credit for the initial publication
- d. all of these

Short Answer/Essay

1. What criteria determine if a participant is “at risk” in a study? Name two populations that we *never* assume “minimal risk” for. Explain.
2. What is an IRB? What is its primary purpose? What organizations must have one?
3. Explain how anonymity and confidentiality are maintained in psychological research.
4. Describe at least four considerations that could go into a risk/benefit analysis of a proposed experiment on “brain washing?”
5. Explain what is meant by the ethical principles of respect for individuals, beneficence, and justice. What is the name of the government policy that defined these three?
6. Why is it considered unethical to conduct poorly designed research? Describe at least three reasons.
7. Can research be conducted if it puts a participant at risk? If so, under what conditions is it acceptable?
8. Justin is conducting a psychology experiment. Describe five safeguards he must provide when obtaining informed consent from his participants.
9. What are the essential ingredients of an informed consent form?
10. Are there any research situations in which informed consent is not required? Explain.
11. Suppose you are conducting research that involves minors. What special procedures are involved in getting informed consent for this research?
12. Describe the standards covering the use of deception in psychological research.
13. In what situation(s) would deception in research never be acceptable?
14. What is involved in debriefing participants? What should the debriefing accomplish?
15. Farley is upset by the fact that animals are subjected to psychological research. Comfort him by explaining the standards implemented for protecting the welfare of animals.

Chapter 2

16. Is it considered ethical to conduct animal research that involves physically harming the animals? If so, what conditions must be met?
17. What fundamental issue is at the center of the animal rights movement? Describe the arguments used to support each side of the argument.
18. There are several safeguards built into the scientific process to protect against fraud. Describe three of them.
19. Is it possible to plagiarize without even knowing it? Justify your answer.
20. What is plagiarism? What are some precautions you should take when researching a topic to help ensure that you don't plagiarize?
21. Describe the range of penalties scientists and their universities face if found guilty of fraud in research funded by the federal government.

Chapter 2