

TOTAL ASSESSMENT GUIDE

Chapter 2

Research Methods in Psychology

Topic		Factual	Conceptual	Applied
The Process of Research	Multiple Choice	1, 7-8, 11, 15-16, 22, 26, 28-29, 33-34, 44, 49-50, 55, 58	2-3, 6, 14, 20-21, 27, 32, 37-39, 54, 57	4-5, 9-10, 12-13, 17-19, 23-25, 30-31, 35-36, 40-43, 45-48, 51-53, 56, 59-60
	True/False	1, 8, 10, 12	2, 5-7, 9, 11	3-4
	Fill-Ins	6-8	1-3, 5, 9	4
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Psychological Measurement	Multiple Choice	70-71, 80	61, 64-65, 79,	62-63, 66-69, 72-78, 81,
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Ethical Issues in Human and Animal Research	Multiple Choice	83, 85, 87-88, 90		82, 84, 86, 89, 91-92
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Chapter 2: Research Methods in Psychology

Multiple Choice Questions

2.1-1. The idea that all events, physical, mental, and behavioral, are the result of, or are determined by, specific causal factors is known as

- a. hypothesis.
- b. replication.
- c. generalization.
- d. determinism.

Difficulty: 2

Question ID: 2.1-1

Page Ref: 21-22

Topic: The Process of Research

Skill: Factual

Answer: d. determinism.

% correct 80 a= 6 b= 3 c= 10 d= 80 r = .53

2.1-2. Which of the following is most likely to be an assumption of individuals conducting psychological research?

- a. Human behavior is unpredictable and random.

Incorrect: On the contrary, the assumption of determinism suggests that behavior follows predictable patterns.

- b. Behavior follows discoverable, lawful patterns.

Correct: Lawful patterns exist in behavior and in mental processes and are discovered and revealed through research.

- c. All explanations of behavior are to be found in the environment.

- d. Human behavior is the result of predetermined forces acting upon the individual.

Difficulty: 2

Question ID: 2.1-2

Page Ref: 22

Topic: The Process of Research

Skill: Conceptual

Answer: b. Behavior follows discoverable, lawful patterns.

2.1-3. Psychological theories should

- a. be simple.
- b. be complex.

Incorrect: In fact, some of the best psychology theories are some of the simplest.

c. avoid making claims about causal forces.

d. generate new ideas and hypotheses.

Correct: Theories account for known facts; they are a set of concepts that explain something. Through the process of research, theories also suggest new ideas for relationships between causes and consequences.

Difficulty: 2

Question ID: 2.1-3

Page Ref: 22

Topic: The Process of Research

Skill: Conceptual

Answer: d. generate new ideas and hypotheses.

2.1-4. “If an athlete imagines having a good performance, then that athlete is more likely to be successful in an event.” This statement is a description of

a. a theory.

Incorrect: A theory generates hypotheses, not the other way around.

b. determinism.

c. a hypothesis.

Correct: Hypotheses are often thought of as if-then predictions, specifying certain outcomes from specific conditions.

d. a non-causal relationship.

Difficulty: 3

Question ID: 2.1-4

Page Ref: 22

Topic: The Process of Research

Skill: Applied

Answer: c. a hypothesis.

2.1-5. A psychologist has generated a hypothesis. Now,

a. it becomes a theory.

b. researchers are bound to accept it as valid.

Incorrect: Hypotheses have to be tested by research to see if they “hold water.”

c. research is needed to verify the if-then link.

Correct: Researchers use the scientific method to test whether the if-then relationship can be verified; this will answer the question of whether the suggested if-then link in fact exists in the way that the psychologist hypothesized that it would exist.

d. researchers are likely to move on to other hypotheses.

Difficulty: 2

Question ID: 2.1-5

Page Ref: 22

Topic: The Process of Research

Skill: Applied

Answer: c. research is needed to verify the if-then link.

2.1-6. There is a joke among scientists about a researcher who tells others that he belongs to a secret scientific society, where no one but the researcher will ever know about the studies members are doing. This joke is humorous because it violates the principle of

- a. determinism.
- b. control groups.
- c. open-mindedness.

Incorrect: Being open-minded is not the same thing as having one's research available for scrutiny by the scientific community. The best answer to this question is public verifiability.

- d. public verifiability.

Correct: This means that other researchers must have the opportunity to inspect, criticize, or disprove the data and the methods by which the data was collected and interpreted.

Difficulty: 2

Question ID: 2.1-6

Page Ref: 22

Topic: The Process of Research

Skill: Conceptual

Answer: d. public verifiability.

2.1-7. When psychological researchers are ready to put their hypotheses to the test, they rely on

- a. intuition.
- b. the scientific method.
- c. common sense.
- d. subjective judgments.

Difficulty: 1

Question ID: 2.1-7

Page Ref: 22

Topic: The Process of Research

Skill: Factual

Answer: b. the scientific method.

2.1-8. An observer bias is

- a. an "educated guess" about what will happen.
- b. the direct result of the context of discovery.

- c. the direct result of the context of justification.
- d. an error due to personal motives and expectations.

Difficulty: 2

Question ID: 2.1-8

Page Ref: 22

Topic: The Process of Research

Skill: Factual

Answer: d. an error due to personal motives and expectations.

% correct 84 a= 8 b= 4 c= 4 d= 84 r = .56

2.1-9. A researcher believes that boys are more aggressive than girls. He goes to a playground to watch children play and finds support for his viewpoint. This researcher's data collection may be subject to

- a. observer bias.

Correct: Expectations and beliefs can have an effect on what we see and hear. The biases of the researcher acted like filters through which some things were noticed and made salient while others were ignored and made irrelevant. In this case, any aggressive behavior by boys was much more likely to be noticed than was aggressive behavior by girls.

- b. standardization.

- c. dependent variables.

Incorrect: Dependent variables are the situation or circumstance under observation and measurement in an experiment.

- d. independent variables.

Difficulty: 2

Question ID: 2.1-9

Page Ref: 22-23

Topic: The Process of Research

Skill: Applied

Answer: a. observer bias.

2.1-10. In an anecdote presented in the textbook, Hugo Munsterberg, a leading psychologist around the beginning of the 20th century, describes the various reported reactions to a speech he gave on peace. The reactions illustrate

- a. the potential effect of observer bias.

Correct: Reporters saw and heard the same speech in very different ways and reported it very differently from one another. This was likely based on the preconceived ideas they had about the speaker and the subject of his speech.

- b. the rationale for the use of operational definitions.

- c. how Munsterberg got the idea for the scientific method.

- d. the importance of the within-subjects design.

Incorrect: There is nothing in this example that distinguishes between a within-subjects and between-subjects design.

Difficulty: 2

Question ID: 2.1-10

Page Ref: 23

Topic: The Process of Research

Skill: Applied

Answer: a. the potential effect of observer bias.

2.1-11. In the research study described by your authors where married couples were asked how sure they were about the future of their relationship, what was demonstrated?

- a. Outside observers were able to determine accurately how certain each partner was based on the amount of eye contact that they made during their conversation.
- b. Men were more “certain” of the future of their relationship if both partners rated their sexual interactions favorably.
- c. Women were more dominating of conversations that included emotional questions.
- d. A person’s assessment of their partner’s behavior was influenced by the level of certainty they felt about their relationship.

Difficulty: 2

Question ID: 2.1-11

Page Ref: 23

Topic: The Process of Research

Skill: Factual

Answer: d. A person’s assessment of their partner’s behavior was influenced by the level of certainty they felt about their relationship.

2.1-12. A research assistant who is working in a psychologist’s laboratory learns the importance of keeping complete records of observations and data analyses. Such procedures are followed in order to

- a. increase objectivity.

Correct: Conclusions must be uninfluenced by researcher’s emotions or biases. The best way to be objective is to use standard or uniform and consistent procedures in all phases of data collection

- b. increase subjectivity.

Incorrect: In order for research to be as pure as possible, it must reduce subjectivity and increase objectivity.

- c. increase observer bias.
- d. prevent other researchers from replicating a study.

Difficulty: 2

Question ID: 2.1-12

Page Ref: 23
Topic: The Process of Research
Skill: Applied
Answer: a. increase objectivity

2.1-13. Imagine a situation in which a researcher is hired by a pharmaceutical company to test a new cancer drug. The researcher finds the drug to be effective, but other scientists cannot replicate the original findings. One possible explanation for the original results that should be considered is

a. debriefing.

Incorrect: This refers to the fact that research participants who are deceived as part of the data collection are given a full description of the true nature of the research after their participation is complete.

b. determinism.

c. observer bias.

Correct: The first researcher may have a commitment to a particular hypothesis because of prior experiences; without realizing it, he/she may influence the results of the current research by considering certain data relevant and discounting other data.

d. public verifiability.

Difficulty: 2
Question ID: 2.1-13
Page Ref: 23
Topic: The Process of Research
Skill: Applied
Answer: c. observer bias.

2.1-14. In carrying out psychological research, the basic concept underlying the use of standardization is that

a. all research participants are treated uniformly.

Correct: All research participants should experience exactly the same experimental conditions. Standardization means asking questions of every subject in the same way and scoring all responses according to pre-established rules.

b. each research participant has a unique experience.

Incorrect: On the contrary, it is necessary that each participant have the “same” experience, except in their receipt of an independent variable.

c. operational definitions are successfully avoided.

d. each research procedure uses both an independent variable and a dependent variable.

Difficulty: 2
Question ID: 2.1-14
Page Ref: 23

Topic: The Process of Research

Skill: Conceptual

Answer: a. all research participants are treated uniformly.

% correct 81 a= 81 b= 0 c= 2 d= 17 r = .46

2.1-15. If a researcher defines variables or conditions in terms of the specific procedures used to determine their presence, he or she is using a(n) _____ definition.

- a. biased
- b. confounded
- c. operational
- d. hypothetical

Difficulty: 2

Question ID: 2.1-15

Page Ref: 23

Topic: The Process of Research

Skill: Factual

Answer: c. operational

% correct 81 a= 12 b= 5 c= 81 d= 2 r = .51

2.1-16. When carrying out an experiment, the factor that the researcher manipulates is known as the _____ variable; the researcher measures the _____ variable.

- a. dependent; dependent
- b. dependent; independent
- c. independent; dependent
- d. independent; independent

Difficulty: 2

Question ID: 2.1-16

Page Ref: 23

Topic: The Process of Research

Skill: Factual

Answer: c. independent; dependent

% correct 74 a= 0 b= 3 c= 74 d= 22 r = .43

2.1-17. A psychologist believes that music affects a person's mood. He has some participants listen to waltzes and others listen to military marches, and then measures each participant's mood with a paper-and-pencil test. What are the independent and dependent variables?

- a. The waltz music is the independent variable and the military march music is the dependent variable.

- b. The type of music is the independent variable and the participant's mood is the dependent variable.

Correct: The type of music the participants listen to is manipulated by the experimenter; this is the causal part of the experiment (the independent variable). The measured mood after listening is the effect (the dependent variable) and depends directly on the type of music played (the independent variable).

- c. The participant's mood is the independent variable and the type of music is the dependent variable.

Incorrect: This is the opposite of the correct answer.

- d. The participant's mood is the independent variable and the scores on the paper-and-pencil test are the dependent variable.

Difficulty: 3

Question ID: 2.1-17

Page Ref: 23

Topic: The Process of Research

Skill: Applied

Answer: b. The type of music is the independent variable and the participant's mood is the dependent variable.

2.1-18. A store owner is trying to determine how much advertising increases her overall profit. If she conducted an experiment, amount of advertising would be the _____ variable.

- a. dependent

Incorrect: The store owner can calculate the effect of the advertising on her profit (the dependent variable.)

- b. independent

Correct: The store owner creates the advertising and decides how much of it she will do (she manipulates the advertising, which is the independent variable.)

- c. operational

- d. confounding

Difficulty: 2

Question ID: 2.1-18

Page Ref: 23

Topic: The Process of Research

Skill: Applied

Answer: b. independent

2.1-19. Suppose you wanted to test the hypothesis that viewing pornographic material increases aggressive behavior. The dependent variable would be

- a. aggressive behavior.

Correct: The hypothesis is that the amount of aggressive behavior displayed will depend on the pornographic materials viewed (the cause). Aggression is the effect part of the cause-and-effect relationship.

b. the age of the participants.

c. viewing pornographic material.

Incorrect: This would be the manipulated variable, so that would make it an independent variable in this study.

d. whether men or women served as participants.

Difficulty: 3

Question ID: 2.1-19

Page Ref: 23

Topic: The Process of Research

Skill: Applied

Answer: a. aggressive behavior.

% correct 58 a= 58 b= 3 c= 29 d= 10 r = .32

2.1-20. Which statement best captures the basic idea underlying the experimental method?

a. Sample participants carefully observe their behavior and report the results.

b. One should describe and measure behavior under a wide variety of uncontrolled conditions.

c. It is important to manipulate an independent variable to look for an effect on a dependent variable.

Correct: The goal of this method is to make strong causal claims about the impact of one variable on the other.

d. A researcher manipulates a dependent variable to look for an effect on an independent variable.

Incorrect: This is the opposite of the correct answer.

Difficulty: 3

Question ID: 2.1-20

Page Ref: 23

Topic: The Process of Research

Skill: Conceptual

Answer: c. Manipulate an independent variable to look for an effect on a dependent variable.

% correct 88 a= 0 b= 2 c= 88 d= 10 r = .28

2.1-21. The main reason that psychological researchers use the experimental method is to

a. make claims concerning causality.

Correct: In an experimental setting, researchers most often wish to demonstrate a cause-and-effect relationship between two variables. The independent variable can be manipulated in this setting to demonstrate the effect that it has on participants

b. eliminate operational definitions.

c. suggest possible confounding variables.

d. determine whether two variables are related.

Incorrect: The best type of research to examine a simple, non-causal relationship between two variables is correlational research.

Difficulty: 2

Question ID: 2.1-21

Page Ref: 23

Topic: The Process of Research

Skill: Conceptual

Answer: a. make claims concerning causality.

2.1-22. The results of a research study would be confounded if

- a. the experimenter's interpretation of the data has been supported.
- b. participants do not respond in the way the experimenter has expected.
- c. a participant's behavior has resulted solely because of the independent variable.
- d. a variable other than the independent variable has influenced a participant's behavior.

Difficulty: 2

Question ID: 2.1-22

Page Ref: 25

Topic: The Process of Research

Skill: Factual

Answer: d. a variable other than the independent variable has influenced a participant's behavior.

% correct 77 a= 10 b= 10 c= 4 d= 77 r = .59

2.1-23. A researcher theorizes that people are likely to perspire more when telling embarrassing stories than when telling funny stories. Volunteers are asked to record a memory of an embarrassing or a funny incident and their perspiration is measured. On some days, but not others, the lab where the recordings are done is very hot. Based on this information, the researcher should be concerned most about

- a. placebo effects.
- b. expectancy effects.
- c. the presence of a confounding variable.

Correct: The heat in the laboratory is just as likely to be causing perspiration as is the memory of the embarrassing or funny story. The heat is confounding or confusing the cause-effect relationship.

- d. coming up with an operational definition of embarrassment.

Incorrect: It is necessary to come up with an operational definition of variables in question prior to conducting the research. This question examines a problem during the research.

Difficulty: 3

Question ID: 2.1-23

Page Ref: 25

Topic: The Process of Research

Skill: Applied

Answer: c. the presence of a confounding variable.

% correct 98 a= 0 b= 0 c= 98 d= 2 r = .36

2.1-24. To measure the effects of task complexity on an individual's perception of time, a researcher has one group of participants do simple addition problems and another group solve complex mathematical formulas. Both groups are then asked to estimate the time elapsed since they began the task. Later, the researcher finds out that the participants given the complex task were in a room with higher noise levels than the other group. In this study, the noise level would be considered an example of

- a. the placebo effect.
- b. a dependent variable.

Incorrect: A dependent variable refers to the situation being monitored or measured in an experiment. The noise level is not of immediate interest to these experimenters.

- c. a confounding variable.

Correct: It will be difficult to tell which variable affected the perception of time for those who did the complex task, the task itself or the noise level. The noise level is confusing or confounding measurement of the cause-and-effect relationship.

- d. an independent variable.

Difficulty: 3

Question ID: 2.1-24

Page Ref: 25

Topic: The Process of Research

Skill: Applied

Answer: c. a confounding variable.

2.1-25. Imagine that you have been hired to assist in an experiment investigating the verbal abilities of boys and girls. In preparing for the experiment, you read a research study that found higher verbal abilities in girls than boys. If this information about gender leads you somehow to communicate to the girls in the experiment that they should do better than the boys, we say that the _____ effect is operating.

- a. placebo
- b. expectancy

Correct: Expectancy effects occur when a researcher or observer subtly communicates to the participants the behavior he or she expects to find, thereby producing the desired reaction (higher verbal abilities in girls than in boys). The experimenter's expectations (that girls will do better than boys) rather than the independent variable (gender) may actually have triggered the demonstration of higher ability levels in girls.

- c. double-blind

Incorrect: Double-blind research occurs when both the experiment and the participants are kept unaware as to who is in an experiment group and who is in a control group.

d. between-subjects

Difficulty: 2

Question ID: 2.1-25

Page Ref: 25

Topic: The Process of Research

Skill: Applied

Answer: b. expectancy

2.1-26. In Robert Rosenthal's study of the effects of expectations, some students were led to believe that the rats they were training were maze-bright and other students were told their rats were maze-dull, although the rats were actually all the same. What did Rosenthal find in the study?

- a. The rats labeled bright were found to be much better learners.
- b. The students immediately became suspicious of how the rats were labeled.
- c. Surprisingly, the rats labeled dull were found to be much better learners.
- d. There was no relationship between the way the rats were labeled and whether students found their rats to be good or bad learners.

Difficulty: 2

Question ID: 2.1-26

Page Ref: 25

Topic: The Process of Research

Skill: Factual

Answer: a. The rats labeled bright were found to be much better learners.

2.1-27. A placebo effect occurs when

- a. an experimenter finds what he or she expected to discover.
Incorrect: This can refer to observer bias, not a placebo effect.
- b. participants have not been randomly assigned to experimental and control conditions.
- c. participants change their behavior because of their belief that a treatment has an effect.
Correct: In this case, the participants' behavior changes because they believe something has been manipulated that will change their behavior. Actually, there has been no type of experimental manipulation.
- d. both participants and experimental assistants are unaware of which participants get which treatment.

Difficulty: 2

Question ID: 2.1-27

Page Ref: 25

Topic: The Process of Research

Skill: Conceptual

Answer: c. participants change their behavior because of their belief that a treatment has an effect.

% correct 84 a= 163 b= 84 c= 0 d= 0 r= .55

2.1-28. In the context of conducting psychological research, control procedures are intended to

- a. increase the likelihood that the experimenter's hypothesis will be supported.
- b. hold constant variables and conditions other than those related to the hypothesis.
- c. encourage participants to respond in a manner consistent with their own expectations.
- d. ensure that participants are affected equally by both independent and dependent variables.

Difficulty: 3

Question ID: 2.1-28

Page Ref: 25

Topic: The Process of Research

Skill: Factual

Answer: b. hold constant variables and conditions other than those related to the hypothesis.

% correct 78 a= 4 b= 78 c= 6 d= 12 r= .48

2.1-29. When neither research participants nor research assistants are aware of which participants receive which treatment, researchers have employed a

- a. placebo control.
- b. between-subjects design.
- c. single-blind control technique.
- d. double-blind control technique.

Difficulty: 3

Question ID: 2.1-29

Page Ref: 25-26

Topic: The Process of Research

Skill: Factual

Answer: d. double-blind control technique.

% correct 98 a= 2 b= 0 c= 0 d= 98 r= .40

2.1-30. A psychologist is doing research for a pharmaceutical company. The drugs he is testing are numbered so that he does not know what they are, nor does he know which participants are receiving which drugs. Participants are also unaware of differences in treatments. The control that is being used in this study is called a

- a. within-subjects control.
- b. correlational method.

Incorrect: Correlational research is separate and different from a true experiment, so the two would not appear in the same study.

c. double-blind control.

Correct: In this case, bias can be eliminated to the fullest extent possible by not allowing the experimenter or the participants to know who is receiving which treatment.

d. random assignment by chance procedure.

Difficulty: 3

Question ID: 2.1-30

Page Ref: 25-26

Topic: The Process of Research

Skill: Applied

Answer: c. double-blind control.

% correct 90 a= 3 b= 3 c= 90 d= 3. r = .46

2.1-31. A researcher is testing whether caffeine makes people more talkative. Some of his study participants are given regular coffee to drink and some are given warm milk. His assistant then interviews the participants and counts the number of words each speaks during the interview. What seems to be missing from the design?

a. a hypothesis

b. a placebo control

Correct: A placebo control would include participants who drank decaffeinated coffee without knowledge that it had no caffeine. Measure of the number of words spoken by this group would help the researchers understand how much difference the caffeine really makes. This control provides a baseline of response with which the other groups' responses can be compared.

c. a dependent variable

d. an independent variable

Incorrect: The independent variable in this case is the amount of caffeine given to each participant.

Difficulty: 3

Question ID: 2.1-31

Page Ref: 26

Topic: The Process of Research

Skill: Applied

Answer: b. a placebo control

2.1-32. Research designs often include a control condition

a. to increase the number of participants in the experiment.

b. to serve as a baseline against which the experimental effect is evaluated.

Correct: Because control participants do not experience the experimental manipulations, they provide a baseline to assess the effects of those manipulations.

c. to function as a backup to the experimental condition if something goes wrong.

d. so that if some participants refuse to continue, they can be replaced by members of the control group.

Incorrect: While attrition is a problem for some research, control groups are not put in place to account for this problem.

Difficulty: 2

Question ID: 2.1-32

Page Ref: 26

Topic: The Process of Research

Skill: Conceptual

Answer: b. to serve as a baseline against which the experimental effect is evaluated.

2.1-33. One study described in your book examined the effects of ginkgo biloba as an answer to one's memory problems. The study highlighted the importance of utilizing which one of the following controls?

- a. single-blind control
- b. double-blind control
- c. placebo control
- d. counter-balancing control

Difficulty: 3

Question ID: 2.1-33

Page Ref: 26

Topic: The Process of Research

Skill: Factual

Answer: c. placebo control

2.1-34. In a between-subjects design, participants in the _____ condition are NOT exposed to the experimental treatment.

- a. control
- b. experimental
- c. within-subjects
- d. randomly-assigned

Difficulty: 2

Question ID: 2.1-34

Page Ref: 26

Topic: The Process of Research

Skill: Factual

Answer: a. control

2.1-35. When planning a study, you determine that of the one hundred participants, fifty will have to be randomly assigned to the experimental condition and the other fifty to the control condition. The type of experimental design you are using is known as a _____ design.

- a. placebo control
- b. single-subject
- c. within-subjects

Incorrect: In this study there is no indication that participants are being used as their own control groups, so this is not a within-subjects design.

- d. between-subjects

Correct: In this type of study, different groups of participants are assigned by chance procedures (randomly assigned) to an experimental condition in which they are exposed to the experimental treatment or to a control condition in which they are not exposed to the treatment.

Difficulty: 2

Question ID: 2.1-35

Page Ref: 26

Topic: The Process of Research

Skill: Applied

Answer: d. between-subjects

2.1-36. To save time, you assign the first fifty people who sign up to participate in your study to the experimental condition and the next fifty to the control condition. The interpretations you could draw from the study will be severely limited because

- a. you needed to carry out a within-subjects design.
- b. you failed to use random assignment to conditions.

Correct: Random assignment helps ensure that variables other than the independent variable are distributed evenly across groups; it helps eliminate confounding variables.

- c. you did not have enough participants to conduct your study.
- d. you need to include another control condition to draw accurate conclusions.

Incorrect: It is not necessarily required that there be more than one control group in a given study. This is not the main problem with this project.

Difficulty: 3

Question ID: 2.1-36

Page Ref: 26

Topic: The Process of Research

Skill: Applied

Answer: b. you failed to use random assignment to conditions.

2.1-37. Random assignment of participants to the experimental and control groups increases the likelihood that

- a. the two groups will be similar.

Correct: It helps eliminate confounding variables related to individual differences among the research participants. Each group is likely to be similar because each participant has the same chance of being assigned to either group. For instance, using random assignment makes it unlikely that the groups will be divided so that one has all males and the other has all females; the groups are likely to be a mixture of males and females.

- b. the two groups will be different.

Incorrect: In fact, a lack of random assignment to groups would cause the different participant groups to be fundamentally different, and this would pose a large problem for the research.

- c. the independent variable will not have a strong effect.

- d. if outcome differences are found, we can be confident they were caused by preexisting differences.

Difficulty: 3

Question ID: 2.1-37

Page Ref: 26

Topic: The Process of Research

Skill: Conceptual

Answer: a. the two groups will be similar.

% correct 34 a= 34 b= 26 c= 6 d= 34 r = .34

2.1-38. Sample is to population as

- a. part is to whole.

Correct: Only a small part of the whole of any identified population can be brought into the laboratory or otherwise included in collection of data.

- b. large is to small.

- c. valid is to invalid.

- d. representative is to not representative.

Incorrect: A sample must be representative of the population from which it is drawn, but the second half of this answer is inaccurate.

Difficulty: 2

Question ID: 2.1-38

Page Ref: 26

Topic: The Process of Research

Skill: Conceptual

Answer: a. part is to whole.

2.1-39. Since we normally cannot have access to the full population of interest, researchers are faced with taking a representative sample of the population. Which of the following is NOT true of a representative sample?

- a. One can only generalize from the sample to the population it adequately represents.

b. The representative sample has to closely match the overall characteristics of the population of interest.

Incorrect: This is, in fact, the definition of a “representative” sample, and thus it *is* a true statement.

c. A representative sample must include members of different racial groups, even when the target population is of one race.

Correct: A representative sample closely matches the characteristics of the group being studied.

d. A representative sample is a way by which one can generalize to the population of interest without having access to the full population.

Difficulty: 3

Question ID: 2.1-39

Page Ref: 26

Topic: The Process of Research

Skill: Conceptual

Answer: c. A representative sample must include members of different racial groups, even when the target population is of one race.

2.1-40. A psychologist has collected data on the physical agility of young adults and now wishes to collect similar responses from elderly people. On the basis of sampling theory, he should attempt to recruit research participants from

a. his elderly friends.

b. elderly people who are athletic.

c. only people that he does not know.

Incorrect: While it may be better for the researcher to have no acquaintance with any of the research participants, there is no “rule” that requires this to be the case.

d. a representative sample of elderly people.

Correct: A representative sample matches as closely as possible the characteristics of the whole of the population being studied.

Difficulty: 2

Question ID: 2.1-40

Page Ref: 26

Topic: The Process of Research

Skill: Applied

Answer: d. a representative sample of elderly people.

2.1-41. A classmate has missed class again and is copying your notes. Unfortunately, she can’t figure out which research design uses each participant as his or her own control. Which should you tell her?

a. double-blind

b. within-subjects

Correct: This research design allows researchers to study the behavior of each participant in the study before getting the treatment and after.

c. between-subjects

Incorrect: Between-subjects designs use separate groups of participants for experimental and control groups.

d. randomly assigned

Difficulty: 3

Question ID: 2.1-41

Page Ref: 26

Topic: The Process of Research

Skill: Applied

Answer: b. within-subjects

2.1-42. Imagine that you have volunteered to participate in an experiment. First, you are asked to rate how angry a person appears in a photograph. Then you are asked to think of angry thoughts and to rate the same photograph again. Because you are serving as your own control, psychologists would refer to this as a _____ design.

a. control

b. no-subjects

c. within-subjects

Correct: Each individual participant's reaction before thinking angry thoughts can be compared with his/her behaviors after thinking angry thoughts. Strong conclusions can then be drawn about the effect of angry thoughts on perception of anger.

d. between-subjects

Incorrect: Because the participants are compared to themselves at different times, this is a within-subjects design.

Difficulty: 3

Question ID: 2.1-42

Page Ref: 26

Topic: The Process of Research

Skill: Applied

Answer: c. within-subjects

2.1-43. Which of the following illustrates the use of a within-subjects design?

a. The artistic abilities of males are compared to the artistic abilities of females.

Incorrect: In this example, separate people are compared to each other. Therefore it is a between-subjects design.

b. Children at three different age levels are given a test of their motor coordination.

c. Participants are given a spelling test, asked to meditate for ten minutes, and then given another spelling test.

Correct: The effects of meditation on the spelling test can be calculated for each individual by comparing how each individual did prior to meditation and after meditation.

- d. One group of participants is given a compliment before solving problems and a second group is criticized before solving problems.

Difficulty: 3

Question ID: 2.1-43

Page Ref: 26

Topic: The Process of Research

Skill: Applied

Answer: c. Participants are given a spelling test, asked to meditate for ten minutes, and then given another spelling test.

% correct 56 a= 0 b= 23 c= 56 d= 21 r = .39

2.1-44. Which of the following is true of the within-subjects experimental design?

- a. It is a type of between-subjects design.
- b. There are no comparison conditions in this design.
- c. There are two experimental groups and one control group.
- d. Each participant serves in all conditions of the experiment.

Difficulty: 2

Question ID: 2.1-44

Page Ref: 26

Topic: The Process of Research

Skill: Factual

Answer: d. Each participant serves in all conditions of the experiment.

2.1-45. A teacher is trying to see whether smiling at her students will increase the number of questions they ask. In the first and third week of the study, the number of questions students ask is recorded. In the second week, the teacher smiles a lot at her students, and the number of questions is also recorded. What type of research design is being used?

- a. within-subjects

Correct: Each student is used as his or her own control; each participates in the baseline phase, when questions are asked without smiling. In the test phase, the teacher smiles a lot at all the children as she asks questions. Calculation is made of each child's responses prior to the test phase and during the test phase.

- b. correlational
- c. placebo control
- d. between-subjects

Incorrect: In this example participants' responses are compared to their own responses at a different time. This is a within-subjects design.

Difficulty: 3

Question ID: 2.1-45

Page Ref: 26
Topic: The Process of Research
Skill: Applied
Answer: a. within-subjects

2.1-46. As an assignment for your Experimental Psychology class you have been asked to conduct a study that will yield a causal relationship between the independent and dependent variables. To complete this assignment, you must use the _____ method.

a. experimental

Correct: The experimental method calculates the cause-and-effect relationship between the independent variable (the cause) and the dependent variable (the effect).

b. observational

c. correlational

Incorrect: In correlational research, cause-and-effect conclusions cannot be obtained.

d. correlational or experimental

Difficulty: 2
Question ID: 2.1-46
Page Ref: 27
Topic: The Process of Research
Skill: Applied
Answer: a. experimental
% correct 50 a= 50 b= 4 c= 19 d= 27 r = .29

2.1-47. A researcher is interested in the relationship between brain damage and the ability of humans to plan their behavior. This research is an example of a(n) _____ design.

a. placebo control

b. experimental

Incorrect: In experimental research, the goal is cause-and-effect conclusions. In this example, a simple relationship between two variables is being sought. Therefore it is a correlational design.

c. correlational

Correct: When questions involve variables that cannot be manipulated by the experimenter, a correlational design is used. These designs help researchers determine to what extent two variables, traits, or attributes are related.

d. within-subjects

Difficulty: 3
Question ID: 2.1-47
Page Ref: 27
Topic: The Process of Research
Skill: Applied
Answer: c. correlational

2.1-48. Imagine that your instructor asks you to determine whether there is a relationship between musical ability and mathematical ability. The type of design best suited to this task would be a(n)

- a. between-subjects experiment.
- b. case study.

Incorrect: There is nothing in this study that suggests that a single incident of some unusual case is being used for extensive data gathering, so it is not a case study.

- c. correlational study.

Correct: Psychologists use correlational methods to compute the correlation coefficient when they want to determine the degree to which two attributes such as this are related to one another.

- d. naturalistic observation.

Difficulty: 3

Question ID: 2.1-48

Page Ref: 27

Topic: The Process of Research

Skill: Applied

Answer: c. correlational study.

% correct 74 a= 13 b= 3 c= 74 d= 10 r = .38

2.1-49. Which correlation coefficient must be a mistake?

- a. 0.0
- b. -0.7
- c. +1.0
- d. +1.4

Difficulty: 3

Question ID: 2.1-49

Page Ref: 27

Topic: The Process of Research

Skill: Factual

Answer: d. +1.4

2.1-50. Given the following correlation coefficients, select the weakest correlation.

- a. +0.10
- b. -0.06
- c. -0.10
- d. -0.60

Difficulty: 3

Question ID: 2.1-50

Page Ref: 27
Topic: The Process of Research
Skill: Factual
Answer: b. -0.06
% correct 56 a= 6 b= 56 c= 2 d= 37 r = .24

2.1-51. You would expect the correlation between height and weight to be

- a. zero.
- b. positive.

Correct: A positive correlation means that as one variable increases, the other also increases. It also means that as one variable decreases, the other decreases. In this case, we would expect that as people get taller, they also weigh more.

- c. negative.

Incorrect: Because these variables would be expected to move in the same direction, it is a positive correlation.

- d. a perfect negative correlation.

Difficulty: 2
Question ID: 2.1-51
Page Ref: 27
Topic: The Process of Research
Skill: Applied
Answer: b. positive.

2.1-52. You read in a health magazine that the more people drink and smoke, the greater the number of emotional problems they have. This relationship illustrates

- a. cause and effect.
- b. a zero correlation.
- c. a positive correlation.

Correct: A positive correlation is demonstrated when whatever is being studied varies in the same direction; the variables both increase or decrease. In this case, both variables increase.

- d. a negative correlation.

Incorrect: Because these variables would be expected to move in the same direction, it is a positive correlation.

Difficulty: 2
Question ID: 2.1-52
Page Ref: 27
Topic: The Process of Research
Skill: Applied
Answer: c. a positive correlation.
% correct 32 a= 29 b= 3 c= 32 d= 32 r = .49

2.1-53. After you present your excuse for missing class, your instructor tells you that she has found that the more classes students miss, the lower their test grades tend to be. This relationship illustrates a(n)

- a. expectancy effect.
- b. positive correlation.

Incorrect: Because these variables would be expected to move in the opposite direction, it is a negative correlation.

- c. negative correlation.

Correct: A negative correlation is demonstrated when the sets of scores go in opposite directions. In this case, as absences increase, scores decrease.

- d. correlation coefficient.

Difficulty: 2

Question ID: 2.1-53

Page Ref: 27

Topic: The Process of Research

Skill: Applied

Answer: c. negative correlation

2.1-54. It is quite likely that the correlation between shoe size and intelligence in human adults would be

- a. near zero.

Correct: When a weak relationship exists between variables, or no relationship at all, a zero or close to zero correlation exists.

- b. strongly negative.
- c. strongly positive.
- d. impossible to determine.

Incorrect: A lack of relationship between two variables is not impossible to determine. It would be revealed as a correlation at or near zero.

Difficulty: 2

Question ID: 2.1-54

Page Ref: 27

Topic: The Process of Research

Skill: Conceptual

Answer: a. near zero.

2.1-55. A researcher computes a correlation coefficient and determines that it is zero. This finding indicates that

- a. a perfect correlation exists.

- b. there is no relationship between the variables.
- c. the researcher has made an error in the computation.
- d. as one variable increases, the other variable decreases.

Difficulty: 2

Question ID: 2.1-55

Page Ref: 27

Topic: The Process of Research

Skill: Factual

Answer: b. there is no relationship between the variables.

2.1-56. In company A, the relationship between motivation and worker productivity is $+0.60$, while in company B, the relationship between motivation and worker productivity is -0.90 . Based upon this knowledge, which of the following observations is true?

- a. The capacity to accurately predict worker productivity from worker motivation is greater in company A.
- b. The capacity to accurately predict worker productivity from worker motivation is greater in company B.

Correct: Despite indications that in company B the relationship between motivation and productivity is a negative correlation, the correlation is stronger because -0.90 is closer to -1.0 than $+0.60$ is to $+1.0$.

- c. The capacity to accurately predict worker productivity from worker motivation will be the same in both companies.

Incorrect: Because there are two different correlational magnitudes, the predictive ability would not be the same in both cases.

- d. One cannot predict worker productivity from worker's motivation using correlational data.

Difficulty: 3

Question ID: 2.1-56

Page Ref: 27

Topic: The Process of Research

Skill: Applied

Answer: b. The capacity to accurately predict worker productivity from worker motivation is greater in company B.

2.1-57. One of the most important functions of correlational methods is that their use allows researchers to

- a. be certain about the causes of behavior.

Incorrect: In correlational research, there is no ability to draw conclusions about cause-and-effect relationships.

- b. draw conclusions based on exceptionally weak data.
- c. observe humans' behavior as it takes place in the natural environment.

d. make predictions about one variable based on information from another variable.

Correct: The correlation coefficient allows researchers to see how strongly one variable is related to another and whether that relationship is positive or negative. Based on this information, predictions about one variable can be made from information about the other variable. For instance, if height and weight are strongly positively correlated, researchers can predict that as height increases, weight will also increase.

Difficulty: 3

Question ID: 2.1-57

Page Ref: 27

Topic: The Process of Research

Skill: Conceptual

Answer: d. make predictions about one variable based on information from another variable.

% correct 75 a= 13 b= 8 c= 4 d= 75 r = .26

2.1-58. In the research study described by your authors, which of the following factors was shown to be associated with an increase in sleep-related problems in children?

- a. one extra hour of nighttime media usage by children
- b. regularly watching violent media after dinner time
- c. watching media with a siblings present but no parents in the room
- d. watching adult news broadcasts instead of children's programming

Difficulty: 1

Question ID: 2.1-58

Page Ref: 27

Topic: The Process of Research

Skill: Factual

Answer: a. one extra hour of nighttime media usage by children

2.1-59. A seafood distributor hires a researcher to determine whether eating oysters makes one more passionate. The researcher collects data that show that the people who eat the most oysters have the most active love lives. What can be concluded from this research?

- a. Eating oysters makes one passionate.

Incorrect: This answer indicates a determined cause-and-effect relationship, which cannot happen when conducting a correlational study. One would need to conduct an experiment to draw this conclusion.

- b. Being passionate causes a craving for oysters.

- c. People with active love lives consume more oysters.

Correct: The correlation indicates only that the number of oysters consumed is greater for those who have active love lives. It does not ensure that one variable causes the other. (It does not show that eating more oysters causes a more active love life or that having a more active love life causes one to eat more oysters!). Correlation does not show cause and effect.

- d. Nothing can be concluded from this study about the relationship between eating oysters and being passionate.

Difficulty: 3

Question ID: 2.1-59

Page Ref: 28

Topic: The Process of Research

Skill: Applied

Answer: c. People with active love lives consume more oysters.

2.1-60. After collecting data, a researcher determines that states that have instituted a death penalty have shown a decrease in murders. Assuming that the data are accurate, what can you safely conclude?

- a. The relationship has been brought about by another variable.

Incorrect: It may very well be that a third variable explains the relationship that was found, but there is nothing in this question that specifically demonstrates this situation.

- b. States that do not have a death penalty should institute one as a deterrent to violent crime.

- c. There are fewer murders in states that have a death penalty.

Correct: There is no cause and effect demonstrated. A positive correlation between the death penalty and fewer murders only indicates that the two sets of data are related in a systematic way.

- d. It is likely that violent criminals have moved to states that do not yet have a death penalty.

Difficulty: 3

Question ID: 2.1-60

Page Ref: 28

Topic: The Process of Research

Skill: Applied

Answer: c. There are fewer murders in states that have a death penalty.

2.1-61. Which of the following terms is closest to the concept of psychological measurement?

- a. control

Incorrect: Control refers to a type of participant group in which an independent variable is not received by participants. It is not related to the concept of psychological measurement.

- b. validation

- c. qualification

- d. quantification

Correct: One task of the psychological researcher is to make the unseen visible; operational definitions provide procedures for assigning numbers to (or quantifying) variables. In this way, different sizes, levels, intensities or amounts of any variable can be quantified and thus studied in a systematic way by researchers.

Difficulty: 3
Question ID: 2.1-61
Page Ref: 29
Topic: Psychological Measurement
Skill: Conceptual
Answer: d. quantification
% correct 28 a= 14 b= 42 c= 16 d= 28 r = .28

2.1-62. A researcher who is trying to develop a test of musical aptitude is overheard to say, “I want to make sure that the test that I am developing gives similar results time after time.” In the language of psychological measurement, this researcher is determined to develop a test that has high

a. validity.

Incorrect: Validity refers to the accuracy of a given set of findings. The consistency being sought in this example refers to reliability.

b. reliability.

Correct: Reliability refers to consistency of results over time; we can have confidence that what the test shows us will not vary significantly from one administration to the other.

c. applicability.

d. standardization.

Difficulty: 2
Question ID: 2.1-62
Page Ref: 30
Topic: Psychological Measurement
Skill: Applied
Answer: b. reliability.

2.1-63. You are about to take your first test in an introductory psychology class. Much to your surprise, the instructor hands you a test that contains ten analytical geometry problems. You would probably be able to argue that the test is not

a. valid.

Correct: The test does not measure what it is intended to measure (progress in learning psychology concepts).

b. reliable.

Incorrect: There is nothing in this example that speaks to the consistency, or reliability, of the findings of this study.

c. accurate.

d. reliable or valid.

Difficulty: 3
Question ID: 2.1-63
Page Ref: 30

Topic: Psychological Measurement

Skill: Applied

Answer: a. valid.

% correct 45 a= 45 b= 13 c= 6 d= 35 r = .47

2.1-64. The concept of reliability applies not only to tests but also to experiments. Therefore, if the results of an experiment are reliable, this means that

a. the experiment measured what it was intended to measure.

Incorrect: This answer addresses the validity, or accuracy, of a study, not its reliability.

b. it has been certified as valid by the scientific community.

c. if the experiment is repeated, you will get the same results.

Correct: We should be able to repeat the experiment with any new group of participants of comparable size and generate the same pattern of data.

d. the results of the experiment can be generalized to other situations.

Difficulty: 3

Question ID: 2.1-64

Page Ref: 30

Topic: Psychological Measurement

Skill: Conceptual

Answer: c. if the experiment is repeated, you will get the same results.

2.1-65. With respect to the notions of reliability and validity, it can be concluded that

a. if a test is reliable, then it also must be valid.

Incorrect: On the contrary, tests are quite often reliability (consistent) without being valid (or accurate).

b. if an experiment is reliable, then it also must be valid.

c. tests or experiments can be reliable without being valid.

Correct: A result is reliable when it is consistent and dependable whereas a result is valid if the researcher can generalize to broader circumstances, from the laboratory to the real world. Thus, a test or experiment can be reliable without being valid.

d. a test can be reliable without being valid, but not an experiment.

Difficulty: 3

Question ID: 2.1-65

Page Ref: 30

Topic: Psychological Measurement

Skill: Conceptual

Answer: c. tests or experiments can be reliable without being valid.

% correct 75 a= 4 b= 2 c= 75 d= 19 r = .19

2.1-66. Which of the following would be classified as a self-report measure?

a. whether a person laughs at a joke

Incorrect: This would probably be ascertained by doing a behavioral observation, not a self-report measure.

b. the number of errors made by a rat in a maze

c. a person's written response to a questionnaire

Correct: Self-report measures are verbal answers to the researchers' questions; the answers can either be spoken or written.

d. the speed with which a person can press a button

Difficulty: 2

Question ID: 2.1-66

Page Ref: 30

Topic: Psychological Measurement

Skill: Applied

Answer: c. a person's written response to a questionnaire

2.1-67. A researcher who is interested in documenting the relationship between internal psychological states such as a person's motivation to succeed and his or her feelings of self-confidence would most likely use a _____ measure.

a. behavioral

b. self-report

Correct: The researchers might use a survey or a questionnaire to ask questions about attitudes and feelings. Both surveys and questionnaires are self-report measures. The information might also be gathered during an interview, also a self-report measure.

c. physiological

d. naturalistic observational

Incorrect: Nothing in this question speaks to observing behaviors as they occur in their natural setting.

Difficulty: 3

Question ID: 2.1-67

Page Ref: 30

Topic: Psychological Measurement

Skill: Applied

Answer: b. self-report

2.1-68. Which of the following is an open-ended question?

a. How much did you earn last year?

b. Do you live in an urban or rural environment?

Incorrect: Because this is a question that has a fixed set of answers, it would be considered a "closed" question.

- c. Are you a Republican, Democrat, or Independent?
- d. What are the benefits of having a college education?

Correct: Open-ended questions allow people to answer freely in their own words. The alternative answers to open-ended questions are not fixed “yes”, “no,” or “undecided” responses.

Difficulty: 2

Question ID: 2.1-68

Page Ref: 30

Topic: Psychological Measurement

Skill: Applied

Answer: d. What are the benefits of having a college education?

2.1-69. Imagine that you are being taught how to conduct an interview. You are reminded that a good interviewer must try to create a positive social relationship with the respondent in order to facilitate trust and open communication. In other words, you are being trained to establish

- a. rapport.

Correct: Good interviewers are sensitive to social interaction as well as sensitive to the information revealed. Rapport is trust and positive interaction built up between the interviewer and the interviewee.

- b. empathy.

Incorrect: Empathy refers to the ability to adopt the perspective of another person. It is important in therapy, but not necessarily needed in a clinical interview.

- c. confidence.

- d. a common language.

Difficulty: 2

Question ID: 2.1-70

Page Ref: 30

Topic: Psychological Measurement

Skill: Applied

Answer: a. rapport.

2.1-70. With respect to psychological measurement, when measures yield data that are consistent or dependable they are referred to as _____, whereas the term _____ means that measures accurately reflects the variable or quality that they are intended to measure.

- a. valid; reliable
- b. reliable; valid
- c. consistent; reliable
- d. reliable or valid; consistent

Difficulty: 2

Question ID: 2.1-71

Page Ref: 30
Topic: Psychological Measurement
Skill: Factual
Answer: b. reliable; valid
% correct 86 a= 4 b= 85 c= 4 d= 6 r = .57

2.1-71. Researchers who use self-report measures need to be aware of the limits to the usefulness of such measures. Typically cited concerns include all of the following EXCEPT that

- a. participants may misunderstand the questions.
- b. people may not be completely honest in their responses.
- c. respondents may be unaware of the questionnaire's or interview's purpose.
- d. people may give misleading answers in order to create a favorable impression of themselves.

Difficulty: 3
Question ID: 2.1-72
Page Ref: 30
Topic: Psychological Measurement
Skill: Factual
Answer: c. respondents may be unaware of the questionnaire or interview's purpose.

2.1-72. Suppose an elementary school teacher is interested in measuring the amount of time a young student in her class is working productively versus chatting with classmates. It would be most appropriate for the teacher to use a

- a. questionnaire.

Incorrect: A questionnaire is a type of self-report measure. It is not a behavioral measure, where observations would be required.

- b. behavioral measure.

Correct: Behavioral measures are ways to study overt behaviors and observable, recordable reactions. The teacher can record productive work time and time spent chatting.

- c. self-report measure.
- d. face-to-face interview.

Difficulty: 2
Question ID: 2.1-73
Page Ref: 30
Topic: Psychological Measurement
Skill: Applied
Answer: b. behavioral measure.
% correct 90 a= 2 b= 90 c= 6 d= 2 r = .15

2.1-73. Suppose you were interested in the kinds of movies your friends like to watch. You develop a simple questionnaire that asks them about their attitudes toward different film genres

and then record which films they actually attend. This measurement technique is best described as a

- a. self-report measure.
- b. behavioral observation.

Incorrect: This is only partially correct, as the questionnaire also involves self-report measuring in this study.

- c. naturalistic observation.
- d. combination of self-report and behavioral observations.

Correct: Self-report measures include responses that tell researchers about the variables of interest (preferred movies); they are verbal or written answers to questions about the preferred movies, in this case. Behavior measures study overt actions, in this case, the movies the participants actually attended.

Difficulty: 2

Question ID: 2.1-74

Page Ref: 30

Topic: Psychological Measurement

Skill: Applied

Answer: d. a combination of self-report and behavioral observations.

2.1-74. You walk into a classroom and see the words “process,” “products,” “direct,” and “naturalistic” written on the blackboard. It is most likely that the previous class was discussing the topic of

- a. interviews.
- b. self-reports.

Incorrect: These terms refer to behavioral observations, not self-report measures.

- c. observations.

Correct: A primary way to study what people do is by observation. Researchers use observation in planned, precise, systematic ways. The words on the board refer to characteristics of observations.

- d. questionnaires and surveys.

Difficulty: 2

Question ID: 2.1-75

Page Ref: 30-31

Topic: Psychological Measurement

Skill: Applied

Answer: c. observations.

2.1-75. A professor is trying to determine whether the number of questions students ask in class is related to their class performance. She keeps track of the number of questions students ask and

then compares this to performance on their next test. Technically, the number of questions would be classified as the _____ of behavior, and the test performance as the _____ of behavior.

a. product; process

Incorrect: This is the opposite of the correct answer.

b. process; product

Correct: The “process” is how the behavior is demonstrated (what is observed); in this case it is observed through number of questions asked. The “product” is observation of the effect of the process. The product in this case is the test performance, which is compared with number of questions students asked in class.

c. process; process

d. product; product

Difficulty: 3

Question ID: 2.1-76

Page Ref: 30-31

Topic: Psychological Measurement

Skill: Applied

Answer: b. process; product

2.1-76. A researcher is using the observational technique to study the relationship between student classroom behavior and academic performance. In this context, a good measure of a behavioral process would be _____ and a good measure of a behavioral product would be _____.

a. student quiz grades; student test grades

b. whether the teacher seems organized; whether the teacher speaks forcefully

c. whether students take classroom notes; whether students seem distracted in class

Incorrect: These would both be examples of a behavioral process.

d. whether students look at the teacher when she is speaking; student test grades

Correct: The “process” is the observed behavior that has an effect on the “product” (the test grades.)

Difficulty: 1

Question ID: 2.1-77

Page Ref: 30-31

Topic: Psychological Measurement

Skill: Applied

Answer: d. whether students look at the teacher when she is speaking; student test grades.

% correct 98 a= 0 b= 0 c= 2 d= 98 r = .40

2.1-77. A classmate informs you that, while conducting a naturalistic observation study of children’s play behavior, she had to ask the children to limit their play activity to only one area in the playground in order to make more accurate observations. Being familiar with

observational methods, you should tell her that her study did not involve naturalistic observation because

a. her study took place in a public setting.

Incorrect: In naturalistic observation, a public or natural setting is essential for the context of the observation.

b. the play behavior was not naturally occurring.

Correct: In naturalistic observation, no attempt to change or interfere with the observed behavior is made.

c. only one observation was made of the children's play behavior.

d. naturalistic observational studies cannot be conducted with humans.

Difficulty: 1

Question ID: 2.1-78

Page Ref: 31

Topic: Psychological Measurement

Skill: Applied

Answer: b. the play behavior was not naturally occurring.

% correct 92 a= 0 b= 92 c= 6 d= 2 r = .23

2.1-78. A researcher would be most likely to use naturalistic observation to determine whether males or females are more likely to

a. take baths.

b. take sleeping pills.

c. have dreams with sexual content.

Incorrect: It is not possible to observe another person's dreams, so this would not be a correct answer.

d. show courtesy when approaching a busy intersection in a car.

Correct: Some kinds of human behavior cannot be manipulated and can best be studied through naturalistic observation. Researchers cannot study this behavior in the laboratory but they can observe it as it naturally occurs.

Difficulty: 2

Question ID: 2.1-79

Page Ref: 31

Topic: Psychological Measurement

Skill: Applied

Answer: d. show courtesy when approaching a busy intersection in a car.

2.1-79. A naturalistic observational approach is especially useful in the earlier stages of scientific investigation for all of the following reasons EXCEPT that it

a. helps researchers discover the extent of a phenomenon.

b. helps researchers formulate hypotheses for further research.

Incorrect: Some of the most important research has stemmed from the results of a study using naturalistic observation.

- c. suggests what the important variables and relationships might be.
- d. determines cause-effect relationships between naturalistic variables.

Correct: Cause and effect relationships if they exist would have to be established in the laboratory. This might happen after the initial stage of observation when hypotheses are just beginning to be formulated.

Difficulty: 3

Question ID: 2.1-80

Page Ref: 31

Topic: Psychological Measurement

Skill: Conceptual

Answer: d. determines cause-and-effect relationships between naturalistic variables.

% correct 66 a=20 b= 10 c= 4 d= 66 r = .24

2.1-80. In a study that examined male and female participation in “Doctors of the World,” the primary source of data was

- a. interviews conducted on the selected subjects.
- b. naturalistic observations of individuals.
- c. conducting experiments.
- d. archival records.

Difficulty: 2

Question ID: 2.1-81

Page Ref: 31

Topic: Psychological Measurement

Skill: Factual

Answer: d. archival records.

2.1-81. A clinical psychologist is working with the Federal Bureau of Investigation to develop an understanding of serial killers. She decides to focus her attention and measurements on a particularly brutal murderer who is serving a life sentence. Her approach is referred to as a

- a. case study.

Correct: Case studies are intensive analyses of individuals that can sometimes yield important insights into human experience that cannot be gathered in any other way.

- b. representative sample.
- c. within-subjects design.
- d. naturalistic observation.

Incorrect: In this example there is no observation of behaviors as they occur in their own natural environment, so this is not naturalistic observation.

Difficulty: 2

Question ID: 2.1-82

Page Ref: 31-32

Topic: Psychological Measurement

Skill: Applied

Answer: a. case study.

% correct 92 a= 92 b= 4 c= 4 d= 0 r = .35

2.1-82. A student who is a philosophy major is very interested in ethical issues. One day she asks you how psychologists deal with ethical issues when they are designing research studies. What should you tell her?

a. As professionals, psychologists have no need to be concerned with ethical issues.

Incorrect: On the contrary, as professionals, psychologists must be *very* concerned with ethical issues when conducting research.

b. The American Psychological Association has established ethical standards for researchers.

Correct: Beginning in 1953, the American Psychological Association has published guidelines for ethical standards for researchers.

c. Prior to conducting research, all psychologists must consult with a philosopher concerning ethics.

d. Only clinical psychologists are subject to ethical standards; research psychologists may use their own judgment.

Difficulty: 2

Question ID: 2.1-83

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Applied

Answer: b. The American Psychological Association has established ethical standards for researchers.

2.1-83. Are researchers obligated to respect the basic rights of research participants? If so, how is this ensured?

a. Yes, special committees oversee every research proposal.

b. Yes, researchers are on their honor to do ethical research.

c. Yes, the legal system and courts hold hearings on all research proposals.

d. No, as scientists, researchers are not obligated to show concern for the rights of participants.

Difficulty: 2

Question ID: 2.1-84

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Factual

Answer: a. Yes, special committees oversee every research proposal.

2.1-84. Imagine that you have agreed to participate in psychological research. Prior to the study, you will be given information about what you can expect and other details of the research, and asked to sign a form indicating your willingness to participate. This process is known as

a. debriefing.

Incorrect: Debriefing comes at the end of a research participant's contribution, when any deception is revealed and the true nature of the research is disclosed.

b. informed consent.

Correct: A part of ethical research standards is for each participant in research to be given information about the procedures they will experience as well as the risks and benefits of participation. Based on this, participants sign a statement consenting to continue as part of the research.

c. risk/gain assessment.

d. intentional deception.

Difficulty: 2

Question ID: 2.1-85

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Applied

Answer: b. informed consent.

2.1-85. The ethical guidelines that all psychological researchers must follow include all of the following EXCEPT that

a. all records of subject behavior must be kept confidential.

b. experimenters must explain the reasons for any deceptions.

c. humans must be paid for their research participation.

d. participants have the right to withdraw their data if they feel they have been misused or their rights abused.

Difficulty: 2

Question ID: 2.1-86

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Factual

Answer: c. humans must be paid for their research participation.

2.1-86. Before giving its approval, an institutional review panel is attempting to ascertain the benefits of a study that will involve some degree of physical discomfort for the participants. The issue before the committee relates most directly to

a. deceiving participants intentionally.

b. debriefing participants after the study.

Incorrect: Debriefing comes at the end of a research participant's contribution, when any deception is revealed and the true nature of the research is disclosed.

c. developing the guidelines for informed consent.

d. making a risk/gain assessment of the study in question.

Correct: Risks must be minimized and participants must be informed of the risks (emotional reactions, effects on self-image, stress...). Suitable precautions must also be taken to deal with strong reactions. Risk is weighed against benefits to participants, science and society.

Difficulty: 2

Question ID: 2.1-87

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Applied

Answer: d. making a risk/gain assessment of the study in question.

% correct 68 a= 10 b= 2 c= 20 d= 68 r = .63

2.1-87. A researcher is designing a study that includes a procedure that may be upsetting or psychologically disturbing to his participants. What special actions do the guidelines for ethical standards of the American Psychological Association require him to follow?

a. He must have a personal liability statement from his insurance company.

b. Although not required, he should consult with an institutional review board prior to beginning the research.

c. He must minimize risks, inform participants of potential risks, and be prepared to deal with participant reactions.

d. He must have available, on-call in the laboratory, a medical doctor and a psychiatrist to deal with potential problems.

Difficulty: 3

Question ID: 2.1-88

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Factual

Answer: c. He must minimize risks, inform participants of potential risks, and be prepared to deal with participant reactions.

2.1-88. Which of the following is NOT included as one of the criteria of the American Psychological Association for allowing deception in research?

a. The deception must be explained to the participants by the end of the research.

b. The research must be part of a series of studies that have used deception in the past.

c. The research must have sufficient scientific and educational importance to warrant deception.

d. The researchers must demonstrate that no other equally effective procedures excluding deception are available.

Difficulty: 2

Question ID: 2.1-89

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Factual

Answer: b. The research must be part of a series of studies that have used deception in the past.

% correct 80 a=8 b=80 c= 0 d= 12 r = .61

2.1-89. Suppose you have signed up to participate in a psychological research study. Is there any chance that you will be deceived?

a. No, because the use of deception is illegal in most states.

Incorrect: Intentional deception in research is not illegal, and is often used. It must, however, be justified.

b. No, because the code of ethics psychologists adhere to prohibits the use of deception.

c. Yes, because most psychological research involves deception.

d. Yes, because sometimes informing participants may bias the results.

Correct: For example, if you were studying the effects on aggression of violence on television, telling participants in advance would likely affect their reactions and bias the results.

Difficulty: 3

Question ID: 2.1-90

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Applied

Answer: d. Yes, because sometimes informing participants may bias the results.

% correct 67 a= 0 b= 19 c= 10 d= 67 r = .35

2.1-90. At the end of a research study, participants must be provided with as much information about the study as possible and any emotional or psychological problems must be addressed.

This process is formally known as

a. debriefing.

b. informed consent.

c. risk/gain assessment.

d. unintentional deception.

Difficulty: 2

Question ID: 2.1-91

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Factual

Answer: a. debriefing.

2.1-91. At the conclusion of the experiment, the researcher explains to the participants that it was necessary to provide them with inaccurate information in order to minimize bias. She goes on to say that even though their data has been collected, they can still withdraw their data if they choose to do so. The researcher is carrying out the process of

a. intentionally deceiving the participants.

Incorrect: Deception involves misleading research participants about the true nature of a study so that their expectations will not bias their contributions.

b. describing a risk/gain assessment of the study.

c. providing debriefing information to the participants.

Correct: Debriefing gives as much information as possible to the participants and is a time for addressing any confusion, upset, or embarrassment that may have occurred as a result of the experiment. If participants react in negative ways to the information, including feeling as if they have been misused, they may, even at this point in the study, withdraw their data.

d. explaining to the participants their rights under informed consent.

Difficulty: 2

Question ID: 2.1-92

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research g

Skill: Applied

Answer: c. providing debriefing information to the participants.

2.1-92. Should animals be used in psychological and medical research? If you were going to be consistent with your text author's points, you would answer "yes" because

a. animals are less expensive to care for and to monitor.

Incorrect: While this may be an accurate statement, it does not in and of itself justify the use of animals in research.

b. animal research has led to important breakthroughs in several areas of science.

Correct: Benefits of animal research have included discovery and testing of medicines that are effective in humans as well as much other behavioral data that can be generalized to humans and may be helpful to them. It has also led to improvements in animal welfare, including alleviation of stresses of the confinement experienced by zoo animals.

c. historically, the psychological and medical sciences have relied on animals as research participants.

d. although animal research does not benefit animals directly, the animals benefit indirectly by being cared for.

Difficulty: 2

Question ID: 2.1-93

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Applied

Answer: b. animal research has led to important breakthroughs in several areas of science.

2.1-93. To become a more sophisticated and critical thinker one should

a. remember that correlation is the same as causation.

Incorrect: Recall from this chapter that correlational research *cannot* be used to determine cause-and-effect relationships.

b. accept obvious explanations rather than seeking alternatives.

c. avoid being concerned with operational definitions of concepts.

d. consider first how to disprove a theory before seeking confirming evidence.

Correct: Critical thinkers consider the evidence and go beyond the information as it is presented to look at what is actually there. Confirming evidence is appropriate once the original statement is determined to be fact.

Difficulty: 2

Question ID: 2.1-94

Page Ref: 34

Topic: Becoming a Critical Consumer of Research

Skill: Conceptual

Answer: d. consider first how to disprove a theory before seeking confirming evidence.

2.1-94. Having good numerical skills is

a. important because you are less likely to be influenced by how statistics are presented.

Correct: The format in which statistics are presented can have a major impact on how people perceive the information and act on it. We find it hard to imagine 10% of 100, while forming an image of 10 out of 100 is relatively easy. We think of these numbers as representing different values, when in fact they are the same. When we have better numerical skills, we tend to make better decisions about data.

b. important because you will recognize the numerical difference between “10% out of 100” and “10 out of 100”

c. not important because as a psychologist you will not often use statistics.

Incorrect: Even if a psychologist is not a researcher, a working knowledge of statistics is necessary to understand the results of others’ published research.

d. not important because as a psychology major you will not have to learn statistics.

Difficulty: 2

Question ID: 2.1-95

Page Ref: 35

Topic: Critical Thinking in Your Life: Why Is Skill with Numbers Important?

Skill: Applied

Answer: a. important because you are less likely to be influenced by how statistics are presented.

True/False Questions

2.2-1. A theory is defined as an organized set of concepts that explains a phenomenon or set of phenomena.

- a. true
- b. false

Difficulty: 1
Question ID: 2.2-1
Page Ref: 21
Topic: The Process of Research
Skill: Factual
Answer: a. true

2.2-2. When psychologists conduct research, all data and methods must eventually be open for public verifiability. In other words, the general public determines whether to accept or reject the conclusions reached by a researcher.

- a. true
- b. false

Difficulty: 2
Question ID: 2.2-2
Page Ref: 22
Topic: The Process of Research
Skill: Conceptual
Answer: b. false

2.2-3. To minimize the potential for bias, researchers must be certain that no variable in an experiment is operationally defined.

- a. true
- b. false

Difficulty: 2
Question ID: 2.2-3
Page Ref: 23
Topic: The Process of Research
Skill: Applied
Answer: b. false

2.2-4. In an experiment, researchers manipulate the dependent variable and measure the independent variable.

- a. true
- b. false

Difficulty: 3
Question ID: 2.2-4
Page Ref: 23
Topic: The Process of Research
Skill: Applied
Answer: b. false

2.2-5. A researcher or observer should try to subtly communicate to participants in a study the behaviors he or she anticipates, to bring about a desirable expectancy effect.

- a. true
- b. false

Difficulty: 3
Question ID: 2.2-5
Page Ref: 25
Topic: The Process of Research
Skill: Conceptual
Answer: b. false

2.2-6. A double-blind control is an experimental technique in which biased expectations are eliminated by telling only the experimental assistants which participants have received which treatment.

- a. true
- b. false

Difficulty: 3
Question ID: 2.2-6
Page Ref: 25-26
Topic: The Process of Research
Skill: Conceptual
Answer: b. false

2.2-7. In a within-subjects research design, different groups of participants are randomly assigned to experimental conditions or to control conditions.

- a. true
- b. false

Difficulty: 3
Question ID: 2.2-7
Page Ref: 26
Topic: The Process of Research
Skill: Conceptual
Answer: b. false

2.2-8. The entire set of individuals to which generalizations will be made based on an experimental sample is called the population.

- a. true
- b. false

Difficulty: 1
Question ID: 2.2-8
Page Ref: 26
Topic: The Process of Research
Skill: Factual
Answer: a. true

2.2-9. A representative sample should have equal numbers of males and females as well as an even balance among all racial groups.

- a. true
- b. false

Difficulty: 3
Question ID: 2.2-9
Page Ref: 26
Topic: The Process of Research
Skill: Conceptual
Answer: b. false

2.2-10. The value of a perfect positive correlation is +1.0 and the value of a perfect negative correlation is -1.0.

- a. true
- b. false

Difficulty: 3

Question ID: 2.2-11
Page Ref: 27
Topic: The Process of Research
Skill: Factual
Answer: a. true

2.2-11. The primary purpose of using correlational methods is to establish cause-and-effect relationships.

- a. true
- b. false

Difficulty: 2
Question ID: 2.2-10
Page Ref: 28
Topic: The Process of Research
Skill: Conceptual
Answer: b. false

2.2-12. If two variables are completely unrelated to each other, they will yield a correlation coefficient of zero.

- a. true
- b. false

Difficulty: 3
Question ID: 2.2-12
Page Ref: 29
Topic: The Process of Research
Skill: Factual
Answer: a. true

2.2-13. If the results of a test or experiment are consistent and dependable, such that they can be repeated under similar conditions at different times, psychologists would say that the findings are valid.

- a. true
- b. false

Difficulty: 3
Question ID: 2.2-13
Page Ref: 30
Topic: Psychological Measurement

Skill: Factual
Answer: b. false

2.2-14. If the information produced by research or testing accurately measures the psychological variable or quality it is intended to measure, it is said to be valid.

- a. true
- b. false

Difficulty: 3
Question ID: 2.2-14
Page Ref: 30
Topic: Psychological Measurement
Skill: Factual
Answer: a. true

2.2-15. Questionnaires and surveys are examples of self-report measures.

- a. true
- b. false

Difficulty: 2
Question ID: 2.2-15
Page Ref: 30
Topic: Psychological Measurement
Skill: Factual
Answer: a. true

2.2-16. When research is potentially upsetting for participants, the American Psychological Association guidelines require that risks must be minimized, participants must be informed of the risks, and suitable precautions must be taken to deal with strong reactions.

- a. true
- b. false

Difficulty: 2
Question ID: 2.2-17
Page Ref: 33
Topic: Ethical Issues in Human and Animal Research
Skill: Applied
Answer: a. true

2.2-17. The American Psychological Association's ethical guidelines require that research participants be informed of any deception that will take place, prior to their giving informed consent.

- a. true
- b. false

Difficulty: 2

Question ID: 2.2-18

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Conceptual

Answer: b. false

2.2-18. According to the ethical guidelines proposed by the American Psychological Association, if deception is used in research it must be explained to the participants by the conclusion of the research and the participants must have the opportunity to withdraw their data.

- a. true
- b. false

Difficulty: 2

Question ID: 2.2-19

Page Ref: 33

Topic: Ethical Issues in Human and Animal Research

Skill: Factual

Answer: a. true

2.2-19. Critical thinking skills are a good thing to read about, but they are not essential to the effective study and application of psychology.

- a. true
- b. false

Difficulty: 2

Question ID: 2.2-20

Page Ref: 34

Topic: Becoming a Critical Consumer of Research

Skill: Conceptual

Answer: b. false

Fill in the Blank Questions

2.3-1. At the common core of most psychological theories is the assumption of _____, the idea that all events are the result of specific causal factors.

Difficulty: 3
Question ID: 2.3-1
Page Ref: 21-22
Topic: The Process of Research
Skill: Conceptual
Answer: determinism

2.3-2. Often stated as a prediction that a certain outcome will result from specific conditions, a(n) _____ is a tentative and testable explanation of the relationship between two or more events or variables.

Difficulty: 2
Question ID: 2.3-2
Page Ref: 22
Topic: The Process of Research
Skill: Conceptual
Answer: hypothesis

2.3-3. To minimize observer biases, researchers typically use uniform, consistent procedures in all phases of data collection. This process is known as _____.

Difficulty: 3
Question ID: 2.3-3
Page Ref: 23
Topic: The Process of Research
Skill: Conceptual
Answer: standardization

2.3-4. In an experiment, psychological researchers seek to establish a cause-and-effect relationship between two types of variables by manipulating the _____ variable and measuring the _____ variable.

Difficulty: 2
Question ID: 2.3-4
Page Ref: 23
Topic: The Process of Research
Skill: Applied
Answer: independent; dependent

2.3-5. Sometimes variables that are outside of the experimenter's control affect a participant's behavior. Such factors are called _____ variables.

Difficulty: 3
Question ID: 2.3-5
Page Ref: 25
Topic: The Process of Research
Skill: Conceptual
Answer: confounding

2.3-6. The _____ effect refers to a change in behavior in the absence of an experimental manipulation, due to an individual's belief that the treatment will have an effect.

Difficulty: 3
Question ID: 2.3-6
Page Ref: 25
Topic: The Process of Research
Skill: Factual
Answer: placebo

2.3-7. In a _____ research design, each participant is used as his or her own control, perhaps by having his or her behaviors compared before and after receiving a treatment.

Difficulty: 3
Question ID: 2.3-7
Page Ref: 26
Topic: The Process of Research
Skill: Factual
Answer: within-subjects

2.3-8. When participants are randomly assigned either to an experimental condition or to a control condition, this is called a _____ design.

Difficulty: 3
Question ID: 2.3-8
Page Ref: 26
Topic: The Process of Research
Skill: Factual
Answer: between-subjects

2.3-9. Psychologists use _____ when they want to determine to what extent two variables, traits, or attributes are related to one another.

Difficulty: 2
Question ID: 2.3-9
Page Ref: 27
Topic: The Process of Research
Skill: Conceptual
Answer: correlational methods

2.3-10. Trying to find the true source of something you read in the newspaper and carefully considering evidence of the reliability of the information is an example of _____.

Difficulty: 3
Question ID: 2.3-10
Page Ref: 34
Topic: Becoming a Critical Consumer of Research
Skill: Conceptual
Answer: critical thinking

Essay Questions

2.4-1. Describe research methodologies that involve manipulation of an independent variable. What relationship does the dependent variable have to the independent variable? Include an explanation of experimental group, control condition, and random assignment.

Difficulty: 3
Question ID: 2.4-1
Page Ref: 23-26
Topic: The Process of Research
Skill: Conceptual

Answer: The independent variable is the factor manipulated by the experimenter. The dependent variable is that which the experimenter measures. The hypothesis states that the dependent variable will be affected by the independent variable in some way. The experimental group is the group that receives the treatment condition. The control group does not. Random assignment has as its goal elimination of confounding variables to the extent possible, since they will vary equally across groups. Include terms such as operational definition and random sampling.

2.4-2. A friend of yours attributes the high grades she receives on tests to the fact that she always drinks coffee while studying. You start thinking about how psychologists might design a study that would determine whether the caffeine in coffee can contribute to better academic performance. Describe an appropriate design for such a study, making sure to explain how you would operationalize your variables, the measurements you would use, and how you would control for possible alternative explanations of your results.

Difficulty: 3

Question ID: 2.4-2

Page Ref: 26-27

Topic: The Process of Research

Skill: Conceptual

Answer: State what independent variable and dependent variable will be used. Operationalize the variables. Explain if this will be a within-subjects design and what this means. Explain how random sampling will be used.

2.4-3. Surveys provide one with the opportunity to participate in research outside the laboratory. How effective are the surveys in affecting one's attitudes? Self-report measures also provide data about experiences that cannot be observed directly. How reliable is the data obtained thereby? What other methods would you suggest for the assessment of behavior?

Difficulty: 3

Question ID: 2.4-3

Page Ref: 30

Topic: Psychological Measurement

Skill: Conceptual

Answer: Describe self-report measures, including surveys. Advantages include being able to reach a large number of people and collecting data about attitudes, beliefs, feelings that cannot be directly observed. Limits to use of self-report include exclusion of children, illiterate or nonverbal adults, and speakers of other languages, as well as the potential influence of social desirability.

2.4-4. One of the primary ways to study behavior is through observation. Discuss the use of observation in research. In what ways can naturalistic observation be preferred to laboratory observation when studying behavior?

Difficulty: 2

Question ID: 2.4-4

Page Ref: 30-32

Topic: Psychological Measurement

Skill: Conceptual

Answer: One of the primary ways to study what people do is through observation. The scientific method starts with observation of regularities in the environment and questions that are developed about them. Observations focus on the process or products of behavior. Direct observations are sometimes employed in research. Naturalistic observation may also be used.

2.4-5. The topic of research ethics comes up in a philosophy class. Because she knows that you are taking a psychology course, the professor asks you how psychologists deal with the issue of ethics when it comes to human and animal research. How would you respond?

Difficulty: 2

Question ID: 2.4-5

Page Ref: 32-34

Topic: Ethical Issues in Human and Animal Research

Skill: Conceptual

Answer: Animal research has allowed important breakthroughs in many areas of behavioral science (include examples). Heightened awareness of the fact that nonhuman animals cannot give informed consent should lead to increased scrutiny of the need for animal research and of ways to refine procedures so that they do not harm animals or put them at risk. Mention observational studies in naturalistic settings.