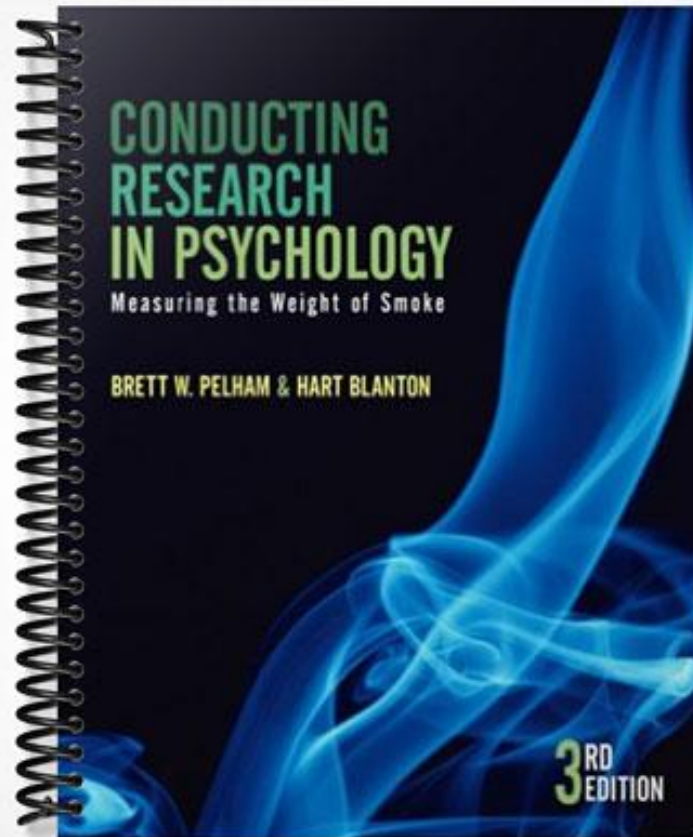


TEST BANK



Chapter 2--How Do We Find Out: The Logic, Art, and Ethics of Scientific Discovery

Student: _____

1. A(n) ____ is a universal statement that allows reliable predictions of future events.
 - A. theory
 - B. law
 - C. hypothesis
 - D. proof

2. A general statement about the relation between two or more variables is called a:
 - A. hypothesis
 - B. law
 - C. theory
 - D. construct

3. In contrast to laws, theories do not always make accurate predictions. This is partly because of:
 - A. boundary conditions
 - B. poor testability
 - C. parsimony
 - D. logical positivism

4. A good theory should be:
 - A. testable
 - B. parsimonious
 - C. falsifiable
 - D. all of the above

5. ____ are predictions about specific events that are derived from one or more ____.
 - A. hypotheses; theories
 - B. proofs; hypothesis
 - C. hypotheses; proofs
 - D. theories; hypotheses

6. Which of the following things is LEAST precise and coherent?
 - A. a canon
 - B. a theory
 - C. a hypothesis
 - D. a law

7. ____ usually have more empirical support than ____, which usually have more empirical support than ____.
- A. Laws, theories, hypotheses
 - B. Theories, laws, hypotheses
 - C. Hypotheses, laws, theories
 - D. Laws, hypotheses, theories
8. Which of the following should be falsifiable?
- A. a theory
 - B. a hypothesis
 - C. a law
 - D. all of the above should be falsifiable
9. Theories are typically used to generate specific research:
- A. designs
 - B. laws
 - C. hypotheses
 - D. conclusions
10. For hypotheses to serve as good tests of specific theories they must:
- A. generate predictions that disagree with common sense
 - B. emphasize the causal relations between two or more variables
 - C. provide comprehensive statements about reality
 - D. follow in a clear and logical fashion from the theories in question
11. According to the text, the principle of ____ refers to the idea that the same behavior is often produced by many different causes.
- A. determinism
 - B. equifinality
 - C. pluralism
 - D. philosophical convergence
12. Felix collected convincing experimental data suggesting that cigarette smoking causes lung cancer. He therefore concluded that exposure to air pollution does not cause lung cancer. Felix has failed to appreciate the principle of:
- A. spurious variables
 - B. equifinality
 - C. induction
 - D. covariation

13. Dr. Rose showed that aggression is predicted well by genetic factors. In contrast, Dr. Jones showed that aggression is predicted well by environmental factors. Which principle suggests that Dr. Rose and Dr. Jones may both be correct?
- A. naïve realism
 - B. logical positivism
 - C. equifinality
 - D. parsimony
14. Most people believe strongly in gravity because that they have repeatedly observed that when specific objects are dropped, the objects (e.g., pins, piñatas, pianos) always fall to the earth. According to the text, this form of reasoning is referred to as:
- A. reasoning
 - B. deduction
 - C. induction
 - D. validation
15. According to David Hume, even if all the observations scientists make are consistent with a conclusion, it is always possible that they will eventually make a new observation that violates this conclusion and proves it wrong. This is known as the problem of ____.
- A. deduction
 - B. induction
 - C. reasoning
 - D. observational scope
16. The method of deduction can be described as:
- A. reasoning from the general to the specific
 - B. reasoning from the specific to the general
 - C. reasoning from the practical to the symbolic
 - D. reasoning from the symbolic to the practical
17. Wason (1971) used the "E, K, 4, 7" task to demonstrate:
- A. behavioral confirmation
 - B. the positive test bias
 - C. the perseverance effect
 - D. logical positivism
18. Which approach to scientific hypothesis testing is similar to the bias demonstrated in Wason's (1971) "E, K, 4, 7" experiment?
- A. validation
 - B. qualification
 - C. falsification
 - D. demonstration

19. Curtis believes that redheads are hot-tempered and aggressive. Because of this belief, Curtis frequently behaves aggressively toward redheads. Not surprisingly, Curtis's behavior often makes redheads angry at him, and it occasionally leads to aggressive confrontations. Curtis appears to be engaging in:
- A. behavioral confirmation
 - B. behavioral validation
 - C. behavioral verification
 - D. behavioral confrontation
20. Which of the following is NOT one of the approaches to scientific hypothesis testing discussed in the text?
- A. validation
 - B. qualification
 - C. falsification
 - D. demonstration
21. Which approach to scientific hypothesis testing would a logical positivist such as Karl Popper be **most** likely to support?
- A. validation
 - B. qualification
 - C. falsification
 - D. demonstration
22. Bill McGuire has argued that almost every theory in psychology is correct under some conditions and incorrect under others. In light of this fact, which approach to hypothesis testing would McGuire be most likely to support?
- A. validation
 - B. qualification
 - C. falsification
 - D. demonstration
23. Which approach to hypothesis testing can resolve the conflict between two opposing theories by specifying the conditions under which each of the theories is correct?
- A. qualification
 - B. integration
 - C. validation
 - D. falsification
24. Induction refers to reasoning:
- A. from the general to the specific
 - B. from the specific to the general
 - C. by means of analogy and insight
 - D. by means of intuition and counterexample

25. McGuire's rules for generating research hypotheses can be divided into:
- A. inductive and deductive techniques
 - B. productive and counterproductive techniques
 - C. traditional and progressive techniques
 - D. intuitive and theoretical techniques
26. Which of the following is NOT an inductive technique for generating research hypotheses?
- A. using case studies
 - B. trying to account for paradoxical incidents
 - C. analyzing the practitioner's rule of thumb
 - D. reasoning by analogy
27. Bowlby's reliance on observations of attachment behavior in primates as a way of understanding adult romantic attachment represents an example of the use of _____ to generate new research ideas.
- A. reasoning by analogy
 - B. a paradoxical incident
 - C. serendipity
 - D. a functional analysis
28. Which of the following is NOT a deductive technique for generating research hypotheses?
- A. capitalizing on serendipity
 - B. applying a functional or adaptive analysis
 - C. trying to account for conflicting results
 - D. trying to account for exceptions to well-established principles
29. B.F. Skinner appears to have discovered the partial reinforcement effect when he was running a simple conditioning experiment, ran low on food pellets, and began reinforcing only a percentage of responses he otherwise would have reinforced 100% of the time. This is an example of:
- A. capitalizing on a paradoxical incident
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 - C. reasoning by analogy
 - D. the hypothetico-deductive method
30. McGuire's research on attitude inoculation is a good example of generating a research hypothesis by taking advantage of:
- A. a paradoxical incident
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31. The goal of IRBs (internal review boards) is to ensure that all studies conducted at a specific university or research site:
- A. adhere to consensually agreed upon community standards of ethical behavior
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32. Dr. Swinkels conducted a lab experiment in which he told participants that one of their primary jobs was to make some ratings of scenes from popular movies. However his actual reason for showing participants the movie clips was to manipulate participants' mood. Once this experiment is done, Dr. Swinkels should make certain to:
- A. explain the reason(s) for the deception in the study
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 - D. all of the above (she should do all three things)
33. To decide whether a specific research proposal is ethical, internal review boards (IRBs) always consider both "risks" and "benefits." What general rule regarding risks and benefits do IRBs apply?
- A. the risk to benefit ratio in research must be at least 1:2, meaning that the benefits must be at least twice as great as the risks
 - B. all risks and benefits likely to arise as a result of participation in a study must be fully explained to participants prior to their participation
 - C. any benefits that are likely to arise as a result of participation in a study must outweigh all of the risks
 - D. the benefits of education in an experiment must outweigh any risks of coercion
34. Which of the following is NOT one of the ethical research principles summarized in the text?
- A. freedom from coercion
 - B. guarantee of compensation
 - C. informed consent
 - D. protection from physical and psychological harm
35. Debriefing must occur:
- A. prior to the beginning of any experiment
 - B. at the conclusion of a deception study
 - C. both at the beginning and at the conclusion of a deception study
 - D. only when the experimenter is taking a shower

Chapter 2--How Do We Find Out: The Logic, Art, and Ethics of Scientific Discovery **Key**

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