

Test Bank for Health Psychology A Biopsychosocial Approach 6th Straub

Chapter 02: Multiple Choice

1. A questioning approach to all information, including the information found in news reports, journal articles, or the arguments of others, best illustrates:

- a. the hindsight bias.
- b. overconfidence.
- c. critical thinking.
- d. effective psychology.

ANSWER: c

2. A form of faulty reasoning in which our expectations prevent us from seeing alternative explanations for our observations is called:

- a. belief bias.
- b. overconfidence.
- c. confirmation bias.
- d. tautological reasoning.

ANSWER: c

3. In the early twentieth century, many experts incorrectly attributed the disease pellagra to unsanitary sewage removal instead of a dietary deficiency. Their failure to consider alternative explanations for the disease and to leap to an untested conclusion is an example of:

- a. evidence-based reasoning.
- b. meta-analysis.
- c. confirmation bias.
- d. belief bias.

ANSWER: c

4. The field of medicine that investigates the causes, spread, and control of disease within the population is:

- a. psychoneuroimmunology.
- b. behavioral medicine.
- c. epidemiology.
- d. psychosomatic medicine.

ANSWER: c

5. A health psychologist who wishes to study the health outcomes of shift work decides to interview assembly line workers as they finish their shifts. In this example, the psychologist is conducting a(n) _____ study.

- a. epidemiological
- b. experimental
- c. descriptive
- d. observational

ANSWER: c

6. A nonexperimental study in which a researcher observes and records participants' behaviors, often forming hypotheses that are later tested more systematically, is called a(n):

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- a. descriptive study.
- b. field study.
- c. experiment.
- d. correlational study.

ANSWER: a

7. A descriptive study in which one person (or one group) is studied in depth in the hope of revealing general principles is called a:

- a. case study.
- b. placebo control.
- c. longitudinal study.
- d. natural experiment.

ANSWER: a

8. After a detailed study of an Iraq War veteran, a health psychologist concludes that the stresses of war can cause long-lasting psychological damage. Which research method did the psychologist use to deduce this?

- a. survey
- b. case study
- c. cohort study
- d. experiment

ANSWER: b

9. Which data collection method recruits a small number of participants to discuss a specified topic or issue together?

- a. naturalistic observation
- b. focus group
- c. survey
- d. statistical comparison

ANSWER: b

10. In which type of research is a representative sample of people asked to answer questions about their attitudes or behaviors?

- a. case study
- b. naturalistic observation
- c. meta-analysis
- d. survey

ANSWER: d

11. The procedure used to help ensure that the experimental and control groups do not differ in any way that might affect the results of an experiment is called:

- a. variable controlling.
- b. random assignment.

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- c. representative sampling.
- d. stratification.

ANSWER: b

12. In this type of descriptive study, the researcher observes participants' behavior and records relevant data:
- a. case study.
 - b. survey.
 - c. meta-analysis.
 - d. observational study.

ANSWER: d

13. Correlational research is most useful for:
- a. revealing cause-and-effect relationships.
 - b. explanation.
 - c. understanding the relationship between two variables.
 - d. hypothesis testing.

ANSWER: c

14. _____ is a statistical measure of the strength and direction of the relationship between two variables.
- a. The p -value
 - b. The correlation coefficient
 - c. The prediction coefficient
 - d. Beta

ANSWER: b

15. This discovery by health psychologists—that the more cigarettes a person smokes each day, the shorter the person's life expectancy—would demonstrate that:
- a. smoking and life expectancy are negatively correlated.
 - b. smoking and life expectancy are positively correlated.
 - c. smoking causes cancer.
 - d. smoking is the only factor related to life expectancy.

ANSWER: a

16. If blood pressure and height are positively correlated, you would expect a tall person to have:
- a. lower blood pressure than people who are shorter.
 - b. higher blood pressure than people who are shorter.
 - c. the same blood pressure as people who are shorter.
 - d. higher blood pressure than people who are taller.

ANSWER: b

17. A graphed cluster of data points, each of which represents the values of two variables in a descriptive study,

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is called a:

- a. bar graph.
- b. scatterplot.
- c. pie chart.
- d. box plot.

ANSWER: b

18. A graph that shows the relationship between age and the use of health care by plotting individual pairs of values as points is called a(n):

- a. observational graph.
- b. line graph.
- c. scatterplot.
- d. correlation plot.

ANSWER: c

19. Professor Armstrong wishes to construct a graph representing the correlation between the height and the weight of people in a particular group. She would be best advised to construct a:

- a. bar graph.
- b. line graph.
- c. scatterplot.
- d. meta-analysis.

ANSWER: c

20. A positive correlation means that:

- a. data points fall in a downward slope from the upper left part of the graph to the lower right.
- b. one variable has beneficial health effects on another variable.
- c. the variables tend to increase in conjunction with one another.
- d. psychologists are certain that one variable causes another variable to change.

ANSWER: c

21. Kendra mistakenly interprets a statement of association between two variables as evidence of causation. Angel, who understands Kendra's error in interpreting the data, is demonstrating higher:

- a. prevalence.
- b. incidence.
- c. statistical literacy.
- d. meta-analysis.

ANSWER: c

22. The ability to read and interpret statistics and think critically about arguments that use statistics as evidence is called statistical:

- a. literacy.
- b. proficiency.

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- c. competency.
- d. ability.

ANSWER: a

23. In a study of the effects of alcohol consumption on mood, alcohol would be the _____ variable.
- a. experimental
 - b. dependent
 - c. correlational
 - d. independent

ANSWER: d

24. In an experiment, the factor that may be influenced by the experimental treatment is the _____ variable.
- a. experimental
 - b. dependent
 - c. correlational
 - d. independent

ANSWER: b

25. The group that is exposed to the condition or treatment of interest in an experiment is the:
- a. control group.
 - b. baseline group.
 - c. experimental group.
 - d. standardized group.

ANSWER: c

26. To study the potential effects of social isolation on blood pressure, some research participants were instructed to solve problems while working together while others solved problems while working alone. Those who worked alone were assigned to the:
- a. control group.
 - b. baseline group.
 - c. experimental group.
 - d. correlational group.

ANSWER: a

27. Maria believes that high doses of caffeine speed up a person's reaction time. In order to test her hunch, she has five friends each drink three 8-ounce cups of coffee and then she measures how quickly they are able to push a button when a tone is sounded. What is wrong with Maria's research strategy?
- a. No independent variable has been specified.
 - b. No dependent variable has been specified.
 - c. There is no control condition.
 - d. There is no provision for repeating the experiment.

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ANSWER: c

28. A research design in which the researcher directly manipulates the independent variable and the assignment to treatment is a(n):

- a. experimental design.
- b. quasi-experimental design.
- c. observational design.
- d. correlational design.

ANSWER: a

29. A study comparing two groups that differ naturally on a specific variable of interest is called a:

- a. longitudinal study.
- b. cross-sectional study.
- c. retrospective study.
- d. quasi-experiment.

ANSWER: d

30. When health psychologists study variables that cannot be manipulated, they often conduct a:

- a. randomized clinical trial.
- b. quasi-experiment.
- c. community field trial.
- d. laboratory experiment.

ANSWER: b

31. Professor House believes that regular exercise boosts academic achievement. To find out if that is true, she compares, over the course of six months, the academic achievement of (1) a group of students who, by their own admission, get little or no exercise and (2) a group of students who exercise regularly. This is an example of a(n):

- a. double-blind study.
- b. expectancy study.
- c. quasi-experiment.
- d. clinical trial.

ANSWER: c

32. Roger is conducting an experiment in which he is comparing the health literacy rates of a group of individuals with genius-level IQs to the health literacy rates of a group of individuals with average-level IQs. In this example, IQ is:

- a. the independent variable.
- b. the confounding variable.
- c. the dependent variable.
- d. the subject variable.

ANSWER: d

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33. In a quasi-experiment, the _____ group takes the place of a _____ group.

- a. comparison; control
- b. control; comparison
- c. comparison; experimental
- d. control; experimental

ANSWER: a

34. A study comparing representative groups of people of various ages on a particular dependent variable is called a:

- a. longitudinal study.
- b. cross-sectional study.
- c. epidemiological study.
- d. field study.

ANSWER: b

35. The Youth Risk Behavior Surveillance (YRBS) study is an example of a(n) _____ study.

- a. experimental
- b. cohort
- c. longitudinal
- d. cross-sectional

ANSWER: d

36. Which situation is an example of longitudinal research?

- a. A researcher compares the ways that many different age groups perform on a memory test.
- b. A researcher compares how, at different ages, the same group of people performs on a memory test.
- c. An investigator compares the performance of an experimental group and a control group of participants on a memory test.
- d. A researcher compares the performance of several different age groups on a test of memory as each group is tested repeatedly over a period of years.

ANSWER: b

37. What is the main drawback of longitudinal studies?

- a. You cannot observe health changes that occur gradually.
- b. They are very time consuming.
- c. Too many people want to participate, which skews the results.
- d. No correlations can be drawn from this type of study.

ANSWER: b

38. A characteristic or condition (such as smoking) that occurs with greater frequency in people with a disease (such as lung cancer) than it does in disease-free people is known as a:

- a. pathogen.

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- b. virus.
- c. risk factor.
- d. immunogen.

ANSWER: c

39. When epidemiologists track the number of deaths due to a specific cause in a given group, at a given time, they are tracking:

- a. mortality.
- b. morbidity.
- c. incidence.
- d. prevalence.

ANSWER: a

40. Mortality is to death as morbidity is to:

- a. trauma.
- b. disease.
- c. mortality.
- d. pathogens.

ANSWER: b

41. *Morbidity* refers to the:

- a. number of unfavorable health outcomes in a group of people at a given time.
- b. number of deaths due to a specific cause.
- c. new cases of a disease in a specific population.
- d. total number of diagnosed cases of a disease or condition.

ANSWER: a

42. *Mortality* refers to the:

- a. number of unfavorable health outcomes in a group of people at a given time.
- b. number of deaths due to a specific cause.
- c. number of new cases of a disease in a specific population.
- d. total number of diagnosed cases of a disease or condition.

ANSWER: b

43. *Incidence* refers to the:

- a. number of unfavorable health outcomes in a group of people at a given time.
- b. number of deaths due to a specific cause.
- c. number of new cases of a disease in a specific population.
- d. total number of diagnosed cases of a disease or condition.

ANSWER: c

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44. *Prevalence* refers to the:

- a. number of unfavorable health outcomes in a group of people at a given time.
- b. number of deaths due to a specific cause.
- c. number of new cases of a disease in a specific population.
- d. total number of diagnosed cases of a disease or condition at a given time.

ANSWER: d

45. Dr. Sengupta is conducting research on the etiology of bird flu. This means that she wants to understand the:

- a. number of new cases of the disease each year.
- b. total number of diagnosed cases of the disease.
- c. origins of the disease.
- d. relationship between the age of patients and the disease.

ANSWER: c

46. John Snow's investigation of the 1848 cholera epidemic in London is an example of which type of research study?

- a. cross-sectional
- b. randomized clinical trial
- c. quasi-experiment
- d. retrospective study

ANSWER: d

47. Which type of study begins with a group of people who are already suffering from a disease and then examines factors associated with that disease?

- a. experimental
- b. placebo
- c. prospective
- d. retrospective

ANSWER: d

48. Which type of epidemiological study played an important role in initially identifying the risk factors that led to AIDS?

- a. a retrospective study
- b. a prospective study
- c. a randomized clinical trial
- d. a meta-analysis

ANSWER: a

49. Longitudinal epidemiological studies that begin with people who are disease-free and are then followed for a period of years are called:

- a. retrospective studies.
- b. prospective studies.

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- c. correlational studies.
- d. cross-sectional studies.

ANSWER: b

50. Which epidemiological method is essentially the same as a longitudinal study?
- a. a retrospective study
 - b. a prospective study
 - c. a randomized clinical trial
 - d. a meta-analysis

ANSWER: b

51. Which epidemiological method is essentially the same as a true experiment?
- a. a retrospective study
 - b. a prospective study
 - c. a randomized clinical trial
 - d. a meta-analysis

ANSWER: c

52. In one study, health psychologists compared the reading level of children who attended a school close to a noisy airport with the reading level of children attending a school in a much quieter area. This is an example of a:

- a. quasi-experimental study.
- b. retrospective study.
- c. prospective study.
- d. randomized clinical trial.

ANSWER: d

53. A quantitative technique that combines the results of many different studies that examine the same effect or phenomenon is called a:

- a. meta-analysis.
- b. relative risk study.
- c. qualitative research study.
- d. double-blind study.

ANSWER: a

54. Professor Gomez conducts a meta-analysis of the estimated number of diagnoses of HIV infection in the United States. She finds that certain groups continue to be disproportionately affected by the virus. Which group of individuals is she most likely to find most affected?

- a. female, biracial, female having sex with female, injection drug users
- b. male, Hispanic/Latino, heterosexual, married men
- c. male, African American, men having sex with men
- d. female, Native American, heterosexual, sex workers

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ANSWER: c

55. Which of these is NOT a basic condition that must be met before a cause-and-effect relationship between a risk factor and a health outcome can be inferred?

- a. The evidence must be consistent.
- b. The relationship need not make sense.
- c. There must be a dose–response relationship.
- d. The alleged cause must have been in place before the health outcome appeared.

ANSWER: b

56. A statistical indicator of the likelihood of a causal relationship between a specific risk factor and a health outcome is:

- a. meta-analysis.
- b. effect size.
- c. attributable risk.
- d. relative risk.

ANSWER: d

57. The ratio of the prevalence of a health condition in a group exposed to a particular risk factor to the prevalence of that condition in a group not exposed to the risk factor is called:

- a. prevalence.
- b. the incidence–prevalence ratio.
- c. the prevalence–incidence ratio.
- d. relative risk.

ANSWER: d

58. The actual amount of a disease that can be attributed to exposure to a particular risk factor is called the:

- a. prevalence ratio.
- b. incidence–prevalence ratio.
- c. attributable risk.
- d. relative risk.

ANSWER: c

59. We determine attributable risk by subtracting the _____ rate of a disease in people who have been exposed to a risk factor from the _____ rate of the disease in people who have not been exposed to the risk factor.

- a. incidence; prevalence
- b. prevalence; incidence
- c. prevalence; prevalence
- d. incidence; incidence

ANSWER: d

60. Epidemiologists have found that sedentary people are twice as likely to develop a particular health condition

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as people who exercise regularly. This means that:

- a. sedentary people have a relative risk of 2.0 for this health condition.
- b. sedentary people have a relative risk of 0.50 for this health condition.
- c. there is a cause-and-effect relationship between lack of exercise and the health condition.
- d. lack of exercise is the only contributing factor to development of the health condition.

ANSWER: a

61. Medical residency programs today train new physicians to critically appraise research by using the principles of:

- a. allopathic medicine.
- b. holistic medicine.
- c. evidence-based medicine.
- d. homeopathic medicine.

ANSWER: c

62. Qualitative researchers:

- a. use the highest-quality technology in their studies.
- b. never use quantitative data in their studies.
- c. study how participants' personal qualities are risk factors for unfavorable health outcomes.
- d. ask open-ended questions and report responses in narrative form.

ANSWER: d

63. Why do many health psychologists turn to qualitative research?

- a. When data are presented in numbers, some information may be lost.
- b. Quantitative research requires too much statistical analysis.
- c. Qualitative research takes less time.
- d. Participants are less likely to drop out of a qualitative study.

ANSWER: a

64. Why is it important for researchers to obtain informed consent?

- a. Most participants in research studies are under the age of 18 and need to demonstrate that they have the cognitive capacity to understand the procedures.
- b. Participants need to understand the procedures and agree to participate, especially if there are risks involved.
- c. Researchers do not want to be accused of stealing another person's ideas.
- d. Participants should consent to be informed of the results after the study.

ANSWER: b

65. What is a *debrief*?

- a. a shorter version of a study aimed at reproducing the results of a larger study
- b. a hearing for a researcher who has violated codes of ethical conduct in research

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- c. the process in which research participants are given more details about the study after its completion
- d. brief verbal consent granted by a participant with full knowledge of the potential risks involved in a study

ANSWER: c

Chapter 02: Essay

1. What is the value of evidence-based medicine for society?

ANSWER: A good answer to this question will explain that:

- Evidence-based medicine optimizes decision-making in treating patients.
- Medical interventions are held to a high standard because they are tested for efficacy, to demonstrate "if they actually work."
- Everyone can benefit, because the practical application of research improves the quality of health care.
- Without evidenced-based medicine, it would be difficult to know what improves health.

2. Xia pets a dog, and 10 minutes later she sneezes. Xia wonders if she sneezed because she is allergic to dogs. The next day, the same situation occurs. Xia concludes, "I must be allergic to dogs!" What is the problem with this conclusion? What questions could Xia ask to appraise the scenario critically?

ANSWER: A good answer to this question will:

- Discuss the issue of jumping to conclusions about cause-and-effect relationships without testing hypotheses scientifically.
- Specifically mention how Xia is influenced by confirmation bias in this scenario.
- Generate a couple of questions—such as "What other factors may have caused Xia to sneeze?"—that demonstrate critical thinking.

3. Compare and contrast research methods in health psychology with those used predominantly in epidemiology, paying careful attention to the objectives of each field.

ANSWER: A good answer to this question will mention:

- Randomized clinical trials, case-control studies, quasi-experimental designs, retrospective studies, prospective studies, cross-sectional studies, and longitudinal studies.
- Descriptive and experimental designs in health psychology and, specifically, natural experiments and clinical trials in epidemiological research.
- That health psychology seeks to learn how psychological factors affect health, while epidemiology seeks to pinpoint and elucidate cause-and-effect relationships in health and wellness.

4. Describe the major descriptive research study types used in health psychology, and discuss their limitations and possible pitfalls.

ANSWER: A good answer to this question will:

- Identify the descriptive research study types mentioned in the text: case studies, interviews, surveys, focus groups, and observational studies.
- Describe the limitations of each study type as specifically related to health psychology research. These limitations could include generalizability difficulties, previous experiences, problems with item wording or question wording or clarification of terminology, rapport-building and consistency of experience, equipment failure, and researcher interference or manipulation.

5. Use figures and specific health psychology-related examples to describe the types of correlation (positive or negative, strong or weak). In your response, discuss why correlation enables prediction but not causation and why correlation is important to the fields of health psychology and epidemiology.

ANSWER: A good answer to this question will include:

- Figures illustrating positive versus negative correlation, as well as strong versus weak correlation.
- A detailed explanation of the theoretical relationship and practical relationship between correlation and causation.

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- Mention that the concept of correlation does not explain or rule out the contributions of other variables. This is central to the fields of health psychology and epidemiology, which are built upon the interaction of multiple factors influencing health and wellness.

6. Explain the nature and advantages of experimentation in health psychology and epidemiological research, with specific examples that demonstrate your understanding.

ANSWER: A good answer to this question will:

- Explain how health psychologists use experiments to test hypotheses; to identify appropriate examples of experimental designs and methodology; and to examine topics such as sampling, participant assignment, blinding procedures, and variable selection.
- Discuss the experimental designs and methodologies used in epidemiological research, and discuss study design selection, participant selection, and hypothesis testing.
- Mention specific study designs and methodologies, including randomized clinical trials, case-control studies, quasi-experimental designs, retrospective studies, prospective studies, cross-sectional studies, and longitudinal studies, and also mention their importance to the investigation of questions relevant to the advancement of the fields.

7. Explain the difference between incidence and prevalence. What does each one measure? What can epidemiologists learn by comparing both incidence and prevalence rates of a disease or condition between groups?

ANSWER: A good answer to this question will:

- Define incidence and prevalence: the number of new cases and the total number of cases of a particular disease or condition.
- Analyze why researchers study both incidence and prevalence of diseases: the importance of knowing morbidity and mortality rates.
- Specifically mention that comparing ratios of incidence and prevalence between different groups allows researchers to measure relative risk and attributable risk.
- Describe how analyzing changes in incidence and prevalence rates plays a role in inferring causality between risk factors and particular conditions or diseases.

8. Ignoring for the moment any ethical or practical constraints, how might you design a study that would conclusively settle the question of whether smoking causes cancer?

ANSWER: A good answer to this question will:

- Identify a design and study objective that asks a clear, unambiguous question and has a testable outcome.
- Critically evaluate the design decision question in order to eliminate any correlational designs and still address the multiple biopsychosocial factors that have an influence on the causal relationship between smoking and cancer.
- Utilize and identify appropriately, in both name and function, specific epidemiological and health psychology designs mentioned in the chapter as the basis for the study.
- Adhere to and demonstrate understanding of the basic conceptual framework for inferring causality: consistent evidence, temporal precedence, logical relationship of variables, the presence of a dose-response relationship between the risk factor (smoking) and the health outcome (cancer), that the relative risk must logically suggest causality, and that the incidence or prevalence of cancer must drop when smoking is removed as a causal factor.

9. The trend for researchers to use qualitative research methods in their studies has been growing. What are

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some of the disadvantages of quantitative data that qualitative data addresses? What are some of the disadvantages of collecting only qualitative data?

ANSWER: A good answer to this question will:

- Define qualitative research, and explain how it complements quantitative data.
- Give examples of disadvantages of quantitative data, such as these: that numbers allow for a limited interpretation; that survey questions and answer options may be too ambiguous, not allowing participants to give a more detailed explanation; that results may not be generalizable beyond controlled laboratory settings; that gathering only quantitative data does not allow researchers to explain individual idiosyncrasies; that gathering only quantitative data may require a very large sample size.
- Give examples of disadvantages of qualitative data, such as these: that the data is subject to interpretation, that researchers may rely on anecdotal information as evidence, that the process is time consuming, that results are difficult to replicate, that recruiting a representative sample is difficult.

10. To complete your psychology major, you are required to test a hypothesis by conducting a psychological experiment with human participants. Before you can begin collecting data, your methods and analytical procedure must be approved by an Institutional Review Board (IRB). In your research proposal, you need to make sure you are meeting the ethical codes of research. What must you do to protect the well-being of research participants? What forms of scientific misconduct must you avoid? Discuss the negative impacts of committing scientific misconduct.

ANSWER: A good answer to this question will:

- Explain that you must (1) obtain informed consent, (2) protect participants from harm and discomfort, (3) keep data confidential, and (4) fully debrief participants.
- Specifically mention fabrication, falsification, and plagiarism.
- Discuss how scientific misconduct can lead people to believe results that are not true, changing policy and individual behavior.