

Chapter 2

Researching Sex and Gender

Test Questions

Multiple Choice Questions

1. When Harvard President Lawrence Summers proposed that women's innate aptitude for science is less than men's,
- he mentioned stereotypical views of women's innate deficiencies in math and science.
 - he quoted recently published research indicating that women's lower math ability blocks their science achievement.
 - he also mentioned discrimination in education and employment as more important barriers.
 - he emphasized the importance of the female gender role.

Answer: a

2. Ben Barres has a unique perspective on the treatment of women in science and contends that
- women and men receive similar treatment for good work.
 - women have many advantages in science; men are the ones who are now discriminated against.
 - women are still discriminated against in science.
 - men and women work together with few problems; the perception of discrimination comes mostly from administrators, not scientists.

Answer: c

3. In his speculation that the low number of female scientists is due to women's innately lower ability, Lawrence Summers used
- a constructivist argument.
 - a logical argument that is based on scientific research.
 - an essentialist argument.
 - a profeminist argument.

Answer: c

4. Science replaced _____ as a way of knowing about the world.
- intuition
 - personal observation
 - religion
 - magic

Answer: c

5. Unlike earlier ways of understanding the world, early scientists
- assumed that the world works by a set of laws.

- b. advocated religious authority as a valid way to gain knowledge.
- c. questioned the value of observation and knowledge gained through observation.
- d. proclaimed the need for justification by trial.

Answer: a

6. Early scientists adhered to the principle of empirical observation, which is
- a. the philosophy that held metaphysics as valid.
 - b. the philosophy that all things can be described in physical terms.
 - c. the philosophy that valid information can be obtained only through observation.
 - d. the hypothesis that science and the legal system should work on similar principles.

Answer: c

7. Those who defend science contend that _____, whereas those who criticize science hold that _____.
- a. science improves technology but not knowledge . . . science improves knowledge but not technology
 - b. the process of science is objective . . . objectivity is not possible
 - c. physical sciences are the most valid . . . social sciences are the most valid
 - d. men have a natural ability to be scientists . . . sexist bias invalidates all scientific research

Answer: b

8. The assumptions that form the basis for the social sciences
- a. differ from those for the natural sciences, which are more objective.
 - b. differ from the assumptions and methods in the natural sciences.
 - c. are the same as for the natural sciences, but the methods differ.
 - d. are the same as for the natural sciences—both claim to be objective and open to investigation through observation.

Answer: d

9. When scientists say that one criterion for scientific investigation is observability, they mean that
- a. the subject matter must be clear to the person doing the observing but not necessarily to others.
 - b. the subject matter must be publicly observable.
 - c. the observer must gather information according to a plan.
 - d. the observer is the authority on what she or he observed.

Answer: b

10. When scientists say that a criterion for scientific investigation is that their observations must be systematic, they mean that
- a. the subject matter must be clear to the person doing the observing.
 - b. the subject matter must be publicly observable.
 - c. the observer must gather information according to a plan.
 - d. the observer is the authority on what she or he observed.

Answer: c

11. Scientific observation differs from personal observation in
- the training versus the lack of training of the observers.
 - the laboratory versus the real world as the setting for the observation.
 - the use of authority versus personal preference for formulating the hypothesis.
 - the existence of a systematic plan for gathering information in science.

Answer: d

12. What makes science precise?
- The systematic observation upon which the information is based.
 - The empirical basis of the data.
 - The quantification of information in the form of numbers and the use of statistics to analyze the information.
 - all of the above
 - none of the above

Answer: e

13. Quantification refers to
- the process of measurement in precise quantities.
 - the process of turning observations into numbers.
 - the process of changing qualitative research into observations.
 - all of the above

Answer: b

14. The data that researchers collect are usually
- personal impressions.
 - norms.
 - numbers.
 - research citations.

Answer: c

15. A variable is
- the level of interest in a research study.
 - a factor of interest that has more than one level or value.
 - a factor that remains at a constant level throughout a study.
 - a background factor that may become of primary interest through the research process.

Answer: b

16. Descriptive research methods allow researchers to
- gather information about existing phenomena.
 - manipulate independent variables.
 - measure dependent variables.
 - manipulate both independent and dependent variables.

Answer: a

17. Researchers sometimes use operational definitions in conducting their studies, which means that they

- a. define their variables(s) in terms of the operations used to obtain it.
- b. use experimental terminology in creating their independent variables.
- c. define their variables naturalistically rather than manipulate them experimentally.
- d. change the definition of their variables to conform to the operations they need to perform.

Answer: a

18. An operational definition

- a. is less objective than a conceptual definition.
- b. complicates the research procedure.
- c. specifies the operations used to obtain data.
- d. can supplement a conceptual definition rather than replace such a definition.

Answer: c

19. An experimental design involves

- a. manipulation of at least one independent variable.
- b. a statistically significant correlation.
- c. a survey in which all variables are correlated with all others.
- d. an operational definition of both independent variables.

Answer: a

20. In an experiment, the _____ is what the experimenter manipulates, and the _____ is what the experimenter measures.

- a. correlational variable . . . independent variable
- b. independent variable . . . dependent variable
- c. dependent variable . . . independent variable
- d. extraneous variable . . . control variable

Answer: b

21. In psychology research, dependent variables are

- a. internal events rather than publicly observable responses.
- b. measured by physiological responses rather than by voluntary behaviors.
- c. observable responses or behavior.
- d. not defined before the beginning of the study.

Answer: c

22. When an experimenter finds that the manipulation of an independent variable produced a change in the dependent variable, with all other factors held constant, then

- a. the correlation between the independent and dependent variables must show significant differences.
- b. the experimenter can conclude that the change in the independent variable caused the change in the dependent variable.

- c. the change in the dependent variable was the cause of the differences in the independent variable.
- d. the experimenter can make no conclusions except that the groups differ.

Answer: b

23. The research method that can show cause and effect relationships is

- a. case study.
- b. the survey method.
- c. the experimental method.
- d. the ex post facto method.
- e. any of the above

Answer: c

24. If a variable such as sexual orientation is not open to manipulation, then

- a. researchers must choose more than two levels of this variable to have a valid experiment.
- b. the dependent variable must be operationally defined or the experiment is invalid.
- c. both subject and independent variables must be controlled.
- d. researchers cannot conduct an experiment using this variable as an independent variable.

Answer: d

25. Sexual orientation is an example of a variable that researchers study but cannot manipulate, which makes it

- a. a poor choice for research of any type.
- b. easier to control than variables that can be manipulated.
- c. easier to measure than variables that can be manipulated.
- d. an independent variable.
- e. a subject variable.

Answer: e

26. Rather than create the levels of the independent variable through manipulation, researchers can select people who fall into groups the researchers want to contrast.

- a. This latter type of research is an ex post facto design rather than an experimental design.
- b. The researchers must control other variables, or they will not be able to make clear interpretations of causality in this nonexperimental research.
- c. The researchers should consider a survey rather than the design they had planned.
- d. The researchers should include another independent variable to add contrasts.

Answer: a

27. A subject variable differs from an independent variable in

- a. the number of levels required for an adequate test of each—the subject variable requires more levels.
- b. the manner of their creation—the subject variable was chosen according to characteristics of subjects and the independent variable was manipulated.

- c. the type of dependent variable appropriate for each—subject variables requires attitude measures as dependent variables but independent variables may include any measurable response or behavior.
- d. all of the above
- e. none of the above

Answer: b

28. When researchers use gender as a subject variable,
- a. they perform experiments that require careful attention to control of other variables.
 - b. they use the social categories of male and female to contrast attitudes about men and women.
 - c. they usually compare a group of men or boys to another group of women or girls.
 - d. they must manipulate gender as their independent variable.

Answer: c

29. Researchers who use gender as a subject variable
- a. study men's judgments about the acceptability of various behaviors of men and women.
 - b. study women's judgments about what constitutes masculinity and femininity.
 - c. also examine the social context and social expectations of men and women.
 - d. compare a group of girls or women to a group of men or boys and look for differences or similarities.
 - e. both a and b

Answer: d

30. When researchers compare a group of girls or women to a group of men or boys and look for differences or similarities, those researchers are using what approach?
- a. gender as a subject variable
 - b. gender as a survey topic
 - c. gender as a social category
 - d. the feminist approach

Answer: a

31. In an ex post facto study researchers _____, and in an experimental study researchers _____.
- a. choose participants according to preexisting characteristics . . . manipulate conditions to produce differences
 - b. assign participants to groups randomly . . . assign participants to groups according to some personal characteristics of participants
 - c. use more than one independent variable . . . use one independent variable with two or more levels
 - d. conduct a survey . . . conduct a correlation

Answer: a

32. Your friend read a research report concluding that college men scored 25 points higher on a mathematics achievement test than college women and said, “Being a woman really causes them to be worse at math.” You reply,
- “Twenty-five points may not be a significant difference, so maybe it’s not important.”
 - “But the same report said that women scored 30 points higher on the synonym test for verbal fluency, so being a woman causes superior verbal performance.”
 - “This experiment may not have controlled for number of math classes completed, so the experimenter could not make clear conclusions of causality, and you shouldn’t, either.”
 - “Any study with gender as a variable is not experimental, so any conclusions of causality are inappropriate.”

Answer: d

33. Studies in which gender is a subject variable are _____, and studies in which gender is a social category are usually _____.
- survey research . . . ex post facto studies
 - ex post facto studies . . . experimental studies
 - experiments . . . naturalistic observations
 - naturalistic observations . . . surveys

Answer: b

34. When researchers consider gender as a social category, they
- concentrate on the physical differences that produce gender-related behaviors.
 - ignore gender-related differences and concentrate on the social context of sexual behavior.
 - consider gender as a piece of information upon which people make judgments.
 - narrow the focus of their studies, omitting inappropriate content from their research.

Answer: c

35. When researchers use gender as a social category,
- they can manipulate gender as an independent variable.
 - they usually compare a group of men or boys to another group of women or girls.
 - they must perform longitudinal research, which takes time, so this technique is not a very common approach to gender research.
 - gender is the dependent variable rather than the independent variable.

Answer: a

36. A serious limitation for the survey method is
- its use of self-reports rather than direct observations of behavior.
 - the exclusion of operational definitions for this type of research.
 - the limited number of variables that can be studied.
 - the inevitable bias that comes from introspection.

Answer: a

37. Participants in survey research

- a. may lie about their behavior.
- b. may experience problems in accurately recalling the information requested.
- c. may withhold information that is embarrassing.
- d. both a and b
- e. all of the above

Answer: e

38. Researchers often use surveys to

- a. study questions that are not empirical.
- b. study questions that might be difficult to observe directly.
- c. answer questions that other researchers have studied experimentally.
- d. explore data collected by other researchers.

Answer: b

39. Correlational studies allow researchers to determine the _____ between two variables.

- a. causal direction
- b. experimental source of variance
- c. strength of the relationship
- d. inverse causality

Answer: c

40. When reading a research report, you find the expression $r = .67$. From this information you know that

- a. the researchers did an experiment with two variables.
- b. the research was a correlational study.
- c. the study failed to reveal significant results.
- d. the study revealed significant results.
- e. none of the above

Answer: b

41. One of your friends says, “Wow, the researchers in this assigned reading found a really high correlation— +1.23.” You should say,

- a. “I think you’ve misread something—correlations can’t be higher than +1.00.”
- b. “But was there a significant difference between the experimental and control groups?”
- c. “Is that level of correlation statistically significant?”
- d. “Wow, may I see it?”

Answer: a

42. If two variables are highly correlated, then

- a. they are also causally related.
- b. they are not causally related.
- c. they may be causally related, but the correlation does not allow any deductions concerning causality.

- d. the two variables must be related to a third variable before deductions of causality are possible.

Answer: c

43. Some researchers have objected to the distillation of behavior into numbers, claiming that this process omits some of the important aspects of the situation. These critics prefer _____ approach to research.

- a. a quantitative
- b. an objective
- c. a qualitative
- d. social category

Answer: c

44. Qualitative research

- a. involves manipulation of multiple variables.
- b. involves measurement of multiple variables.
- c. does not involve manipulation of independent variables or control of other variables.
- d. both a and b

Answer: c

45. Case studies focus on

- a. collecting information on as many cases as necessary to obtain a representative sample.
- b. studying one case intensively.
- c. interviewing according to operational definitions.
- d. reversing the order of questions for alternative participants to avoid bias in collecting information.

Answer: b

46. Qualitative interviews

- a. are identical to survey interviews except that qualitative interviews are shorter.
- b. are usually shorter than survey interviews.
- c. may not include a standard set of questions that all participants answer.
- d. all of the above

Answer: c

47. Researchers conducting ethnographic studies

- a. immerse themselves in a situation to gather information and understand the situation.
- b. maintain objectivity by observing without the knowledge of those who are the objects of study.
- c. are careful to maintain the separation of researcher and participant.
- d. have a standard set of responses that they seek from all research participants.

Answer: a

48. Focus groups

- a. focus on interpersonal variables and both manipulate and measure such variables.
- b. consist of a small group of participants whose discussion focuses on a particular topic.
- c. are like ex post facto studies in the inclusion of subject variables rather than independent variables.
- d. need to have large samples or the results will be invalid.

Answer: b

49. Qualitative research methods

- a. focus less on objectivity than quantitative research methods.
- b. include a more open relationship between researcher and participant than quantitative research.
- c. emphasize objectivity more than quantitative research.
- d. a and b
- e. all of the above

Answer: d

50. Conclusions concerning the causes of differences in gender-related behaviors

- a. cannot come from ex post facto studies.
- b. must be based on correlational studies.
- c. require statistically significant differences based on comparisons of groups of men and women.
- d. require measurements of biological responses as well as behavioral responses.

Answer: a

51. Qualitative research methods

- a. have decreased in popularity over the past 10 years.
- b. have increased in popularity and replaced quantitative methods over the past 15 years.
- c. have gained in popularity but usually supplement rather than replace quantitative methods.
- d. now account for over half the research in feminist scholarship but less than 5% in other areas of research.

Answer: c

52. “We do not discover reality, we invent it” is a statement consistent with the _____ viewpoint.

- a. scientific reactionary
- b. radical feminist
- c. constructionist
- d. methodologist

Answer: c

53. The saying “seeing is believing” is consistent with _____, and “believing is seeing” is consistent with _____.

- a. feminist empiricists . . . masculinist objectivists
- b. traditional empiricist science . . . the constructionist view
- c. the structuralist school . . . the functionalist movement
- d. subjective experience in research . . . empiricism

Answer: b

54. Constructionists argue that the observations upon which science is based are
- a. inevitably biased.
 - b. objective.
 - c. difficult to define.
 - d. feminist.

Answer: a

55. Despite the notion that science is objective, bias can enter the process through
- a. the selection of topics to study.
 - b. the choice of research method.
 - c. their expectations for certain results.
 - d. all of the above

Answer: d

56. When researchers make a hypothesis, they are
- a. analyzing data.
 - b. explaining results.
 - c. predicting the outcome of the study.
 - d. all of the above
 - e. none of the above

Answer: c

57. Portrayals of female scientists in the movies
- a. show men but not women as competent scientists.
 - b. show impossibly glamorous women working in laboratories in which they are the primary investigators with male subordinates.
 - c. show women as well-accepted by their male colleagues.
 - d. show a higher proportion of female scientists than exist in reality.

Answer: d

58. One way that film portrayals of female scientists are accurate is that
- a. female scientists experience harassment and lack of respect in the movies and in the laboratory.
 - b. male scientists are less likely than female scientists to be employed in government research in movies.
 - c. female scientists are portrayed as directors and administrators, positions that they occupy as often as male scientists.
 - d. all of the above

Answer: a

59. Results that are statistically significant are
- based on experimental rather than correlational research.
 - based on some pattern rather than random chance.
 - indicative of large and important differences.
 - indicative of cause and effect relationships.

Answer: b

60. A gender-related difference has practical significance when it
- is statistically significant.
 - can make a difference in the lives of men and women.
 - is likely to have occurred on the basis of chance alone.
 - both a and b

Answer: b

61. A statistically significant result can lack practical significance if the result is
- small.
 - correlational.
 - experimental.
 - not based on a representative sample.

Answer: a

62. The technique of meta-analysis allows researchers to
- draw causal conclusions from correlational research.
 - draw causal conclusions from ex post facto research.
 - combine results from several studies and evaluate the overall significance of the effect.
 - evaluate each of several studies independently.

Answer: c

63. Researchers who find gender similarities in math ability
- may have trouble getting their results published.
 - tend to make headlines, as their results are unexpected.
 - prove the null hypothesis.
 - feel that they have to include a replication, as their results are unexpected.
 - both c and d

Answer: a

64. The tendency to publish results that show differences
- can lead to an accurate picture of the underlying biological basis of gender-related differences.
 - can lead to a bias in favor of the null hypothesis.
 - is a factor in the perception of widespread gender-related differences.
 - is unimportant to scientists, who are objective in their hypotheses.

Answer: c

65. Some feminist critics of science have argued that science is an inevitably biased activity, whereas others have contended that
- the masculine values of science are the best approach to gain knowledge.
 - science is value-free and unbiased.
 - the history of sexist and racist bias in science is in the past and not in the present.
 - scientists must make greater efforts to avoid bias, and greater objectivity is possible.

Answer: d

66. Of the scholars who have called for a change in the scientific method, feminist empiricists have
- rejected traditional science and called for an alternative set of method to study women.
 - called for stricter adherence to the empiricist principle to overcome sexist bias in science.
 - proposed alternative categories for analyzing sex and gender.
 - offered few criticisms or alternatives to traditional science.

Answer: b

67. Of the scholars who have called for a change in the scientific method, those who adopt feminist standpoint epistemologies have
- rejected traditional science and called for an alternative set of methods to study women.
 - called for stricter adherence to the empiricist principle to overcome sexist bias in science.
 - proposed alternative categories for analyzing sex and gender.
 - offered few criticisms or alternatives to traditional science.

Answer: a

68. By adding alternative methodologies, such as qualitative methods, researchers
- will eliminate bias from scientific research.
 - provide ways for traditional methods to gain sensitivity to women.
 - can gain information that they could not through traditional methods.
 - add problems to the already complex research process.

Answer: c

69. Those researchers who have proposed methods to minimize sexist bias in research would be classified as
- advocates of feminist standpoint epistemologies.
 - feminist empiricists.
 - multicultural observers.
 - female psychologists.

Answer: b

70. When researchers gather information through observation
- their data may still contain biases.

- b. their data will be objective.
- c. their data will be subjective.
- d. operational definitions are not necessary.

Answer: a

71. To minimize sexist bias in research, researchers should
- a. perform all appropriate significance tests.
 - b. be alert to bias in explanatory systems.
 - c. be alert to the many way in which bias can enter the research process.
 - d. all of the above

Answer: d

Essay Questions

- Q1. What is the constructionist position and how does that position differ from traditional science?

Look for the following points in students' answers:

- A1. A. Constructionists believe that
- 1. Scientists (and others) create their view of the world rather than discovering the world.
 - 2. Objectivity in science is impossible.
- B. Constructionists challenge the assumptions of traditional science, including
- 1. The notion that scientists are objective and free from bias.
 - 2. The notion that objective reality exists, and scientists can understand the world through empirical observations.

- Q2. In what ways do the limitations of the experimental and ex post fact methods have an impact on the study of gender?

Look for the following points in students' answers:

- A2. A. Limitations include
- 1. Experimental studies tend to be artificial.
 - 2. Ex post facto studies are also usually laboratory studies, but researchers cannot draw conclusions about causality based on these studies.
- B. Impact on gender research
- 1. Gender of participants cannot be an independent variable in experimental research, because researchers cannot manipulate participants' gender.
 - 2. Ex post facto studies use gender as a subject variable, comparing female to male participants, but researchers cannot make legitimate conclusions about cause-and-effect relationships based on this research method.

- Q3. Contrast quantitative and qualitative research methods.

Look for the following points in students' answers:

- A3. A. Researchers using quantitative methods
1. Often conduct their research in laboratories.
 2. Strive for objectivity, including a distinction between the role of researcher and participant.
 3. Concentrate on obtaining a representative group of participants to allow generalization.
 4. Collect data in terms of numbers.
 5. Use statistics to do significance testing.
 6. Attempt to simplify complex situations and control the research situation.
- B. Researchers using qualitative research methods
1. Usually conduct research in natural settings.
 2. Accept more subjectivity, including an equal power balance between researchers and participants.
 3. Often seek unusual participants or situations rather than a representative sample.
 4. Rarely collect information in the form of numbers or use statistics.
 5. Strive to retain the complexity of the research situation.

Q4. Discuss how a statistically significant result may be unimportant.

Look for the following points in students' answers:

- A4. A. The concept of statistical significance
1. Applies to the evaluation of research results.
 2. Indicates a pattern of results that were not likely to have occurred on the basis of chance alone, suggesting that some other factor has influenced the results.
 3. Is accepted by researchers as an indication of whether or not their studies worked as hypothesized, based on the results of analyzing the data with the appropriate statistical test.
- B. A result may be statistically significant yet not large.
1. Statistical significance determines patterns of data and compares that pattern to a random pattern.
 2. Even small differences may reveal a pattern that is not likely to have occurred on the basis of chance.
- C. The concept of practical significance
1. To be important, differences must be large enough to make a difference in people's lives.
 2. This criterion is more difficult and rarer than statistical significance.

Q5. Discuss and give examples of how gender bias can become a factor in research.

Look for the following points in students' answers:

- A5. A. Gender bias can enter the research process at any point.
B. Those points include

1. Finding a problem to study, which can be biased by allowing personal and social factors to guide the choice.
2. Choosing variables, which can be biased by inaccurate definitions or incomplete information.
3. Choosing a design, which can be biased by a design that did not allow for the inclusion of information about the context of a behavior.
4. Formulating a hypothesis, which can be biased by adhering to a gender-biased theory.
5. Collecting data, which can be biased by allowing personal factors to bias observations.
6. Analyzing data, which can be biased by ignoring gender as a factor in the analysis.
7. Interpreting results, which can be biased by failing to discuss a negative finding for the gender variable.