

CHAPTER 2

Research Methods

CHAPTER-AT-A-GLANCE

Chapter Outline	Instructional Ideas	Supplemental Materials
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Quantitative Research Methods	Learning Objective 3	
Methods of Observation	Learning Objective 4 Learning Objective 5 Learning Objective 6 Teaching Tip 3 Discussion Question 1 Discussion Question 2	IM Activity: <i>The Social-Desirability Scale</i> IM Activity: <i>Thinking About the Limitations of Sex Surveys</i> IM Activity: <i>Small Group Discussion Questions</i>
The Experimental Method	Learning Objective 7	IM Activity: <i>Designing an Experiment</i>
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Ethics in Sex Research	Learning Objective 9 Teaching Tip 4 Discussion Question 3	IM Activity: <i>Limitations of Research Methods</i> IM Activity: <i>Evaluating Scientific Claims</i>

CHAPTER SUMMARY

Chapter 2 starts by stating the need for an empirical approach to the study of human sexuality. This systematic way of gathering evidence is provided by the scientific method. The different steps in the method are then described: formulating a question, formulating a hypothesis, testing the hypothesis and drawing conclusions. The goals of science (to describe, explain, predict, and control) are then presented as they apply to the study of human sexual behaviour. They then introduce the concepts of variables, correlation, and theories.

Key terminology research terminology is presented (e.g., population, sample, generalizability). Because of the impracticality of studying all the members of a population of interest (target population), researchers try to select a representative sample. Probability sampling (random and stratified random) and convenience samples are the methods most frequently used. The issue of volunteer bias is discussed.

Different observation methods, their advantages and limitations are described. The case-study method, an in-depth observation of individuals or small groups, is frequently used in the report of innovative treatment approaches. Survey methods employ interviews or questionnaires to gather data. The most relevant surveys of sexual behaviours are introduced to discuss issues of sampling. The section ends with a discussion on the reliability and limitations of survey methods. Naturalistic observations (field studies) are described. The authors note that the ethnographic approach is limited because of the usually private nature of sexual behaviour. The participant-observation method requires a direct interaction between the researchers and the participants of the study. As an example, the work of a graduate student who was employed as a stripper while investigating female objectification and body image is described. Focus group methodology and its utility in exploratory research are discussed. The laboratory observation method is illustrated referring to the work of Masters and Johnson who observed participants as they engaged in different sexual activities.

The correlational method, describing the association between variables, although useful to predict behaviour does not provide proof of causal relationships. This can be achieved only through the experimental approach. The different aspects of the experimental method (independent and dependent variables, experimental and control group) are presented. Qualitative methods and their unique advantages are also discussed.

The chapter concludes with a discussion of ethical issues in sexuality research; exposing participants to harm, confidentiality, informed consent and the use of deception are discussed.

LEARNING OBJECTIVES

1. Describe the different steps in the scientific process.
2. Discuss the goals of science as they apply to the study of human sexuality.
3. Describe the different sampling procedures and the relevance of the concept of “representative sample.”
4. Explain the different methods of observation and when their use is appropriate.
5. Discuss the limitations of survey methods.
6. Explain the advantages and limitations of correlational studies on sexual behaviour.
7. Explain the advantages and contributions of the experimental method.
8. Explain the advantages and limitations of qualitative research methods.
9. Identify the major ethical concerns on doing research on human sexuality.

USING THE ACTIVITIES AND ADDITIONAL LECTURE MATERIAL

I. A Scientific Approach to Human Sexuality

II. Quantitative Research Methods

III. Methods of Observation

- **Activity I:** This 33-item questionnaire, *The Social-Desirability Scale*, allows students to determine whether they answer truthfully or construct socially desirable answers to survey questions.
- **Activity II:** *Thinking about the Limitations of Sex Surveys* asks students to apply their general knowledge about the limitations of sex surveys to their possible responses to survey questions. (The answers are in the “Answer Key” section on page 16.)
- **Activity III:** When you are discussing the various research methods, distribute copies of the *Small Group Discussion Questions*. This activity asks students to get into small groups of three or four students to discuss the impact of sex research and speculate about their willingness to participate in various types of sex research.

IV. The Experimental Method

- **Activity IV:** When you are discussing the experimental method, distribute copies of this activity, *Designing an Experiment*, to students, either individually or in small groups. This activity asks students to apply what they have learned about this research method to design an experiment to test a new treatment for AIDS.

V. Qualitative Research Methods

VI. Ethics in Sex Research

- **Activity V:** When you have completed your discussion of all of the research methods, distribute copies of this activity, *Limitations of Research Methods*, to students, either individually or in small groups. This activity asks students to think of a research topic that would be appropriate for each type of research, identify the precautions researchers must take, and list the limitation of each research method.
- **Activity VI:** *Evaluating Scientific Claims* provides hypothetical examples of research findings. Students are asked to determine whether the conclusions appear justified and to identify the flaws that make the results questionable or misleading. (Answers are in the “Answer Key” section on page 196)

TEACHING TIPS

1. Have students describe a time they witnessed two people displaying affection in public. What inferences did they make about the partners? How would they label or classify the behaviours they observed?
2. As examples of the goals of the science of human sexuality, use research on HIV transmission. Researchers have identified and described the virus, explained the process by which the virus attacks the body’s immune system, and attempted to predict the number of people who will be infected by the virus. Research findings have been used to control the spread of the virus through the establishment of infection control guidelines by the Public Health Agency of Canada.
3. Use the following example to discuss the limitations of the case-study method. In 1995, doctors transfused bone marrow cells from a baboon into a man who had been HIV positive for 15 years. Because baboons do not get HIV, researchers hoped that the bone marrow cells would strengthen the man’s immune system.
4. To help students better understand the experimental method, have them plan a “real” study (e.g., testing a new treatment for HIV.) Discuss the ethical considerations involved, choosing subjects to participate, assigning subjects to the control and experimental groups, and the variables to consider.

DISCUSSION QUESTIONS

1. How many of you would volunteer to complete a lengthy questionnaire about your sexual behaviours and attitudes? What differences in attitudes might there be between those of you who would volunteer and those who would not?

2. Have any of you ever completed and returned a sex questionnaire published in a magazine? Did you (or would you) answer the questions as honestly as possible? On what topics would you refuse to answer questions?
3. What are some of the obvious limitations of sex research?

ADDITIONAL RESOURCES

Literature

- Bullough, V. (1994). *Science in the Bedroom: A history of sex research*. New York: Basic Books.
- Caplan, P. J. and Caplan, J. B. (1994). *Thinking critically about research on sex and gender*. New York: HarperCollins.
- Durant, L. E. (2000). Self-administered questionnaires versus face-to-face interviews in assessing sexual behavior in young women. *Archives of Sexual Behavior*, 29, 4, 309-323.
- Chivers, M. L. and Bailey, M. J. (2005). A sex difference in the features that elicit genital response. *Biological Psychology*, 70, 2, 115-120.
- Graham, C. A., Sanders, S. A., Milhausen, R. R., & McBride, K. R. (2004). Turning on and turning off: A focus group study of the factors that affect women's sexual arousal. *Archives of Sexual Behavior*, 33, 6, 527-538.
- Goldman, J. D. (2000). Some methodological problems in estimating incidence and prevalence in child sexual abuse research. *The Journal of Sex Research*, 37, 4, 305-315.
- Kinsey, A. C, Pomeroy, W. B., and Martin, C. E. (1948). *Sexual behavior in the human male*. Philadelphia: W. B. Saunders Co.
- Kinsey, A. C., Pomeroy, W. B, Martin, C. E., and Gebhard, P. H. (1953). *Sexual behavior in the human female*. Philadelphia: W. B. Saunders Co.
- Lykins, A. D., Meana, M., and Kambe, G. (2006). Detection of differential viewing patterns to erotic and non-erotic stimuli using eye-tracking methodology. *Archives of Sexual Behavior*, 35, 5, 568-575.
- McBride, K. R., Sanders, S. A., and Janssen, E. (2007). Turning sexual science into news: Sex research and the media. *Journal of Sex Research*, 44, 4, 347-358.
- Minton, H. L. (1988). American psychology and the study of human sexuality. *Journal of Psychology and Human Sexuality*, 1, 17-34.
- Money, J. (1988). Commentary: Status of sex research. *Journal of Psychology and Human Sexuality*, 1, 5-15.

- Mustanski, B. S. (2001). Getting wired: Exploiting the internet for the collection of valid sexuality data. *Journal of Sex Research*, 38, 4, 292-301.
- Parker, R. and Gagnon, J. (1995). *Conceiving Sexuality: Approaches to Sex Research in a Postmodern World*. New York: Routledge.
- Plante, R. (2006). *Sexualities in Context: A Social Perspective*. Cambridge, MA: Westview Press.
- Rojas, A. and Kinder, B. N. (2007). Effects of completing sexual questionnaires in males and females with histories of childhood sexual abuse: Implications for institutional review boards. *Journal of Sex and Marital Therapy*, 33, 3, 193-207.
- Seal, D. W. (2000). Dilemmas in conducting qualitative sex research in applied field settings. *Health Education and Behavior*, 27, 1, 10-24.
- Society for the Scientific of Sex Statement of Ethical Guidelines (1993). *Journal of Sex Research*, 30, 2, 192-198.
- Weiss, D.L. (1998). Conclusion: The state of sexual theory. *The Journal of Sex Research*, 35, 1, 100-114.
- Wiederman, M.W. (1999). Volunteer bias in sexuality research using college student participants. *The Journal of Sex Research*, 36, 1, 59-66.
- Wiederman, M.W. (2001). *Understanding Sexuality Research*. Belmont, CA: Wadsworth.
- Wiederman, M.W. and Whitley, B.E. (eds.) (2001). *Handbook for Conducting Research on Human Sexuality*. Mahwah, NJ: Lawrence Erlbaum Associates.

Videos

(The websites for many of the major education video distribution companies are listed on page 257 of this manual.)

Alfred Kinsey: Social Science in America's Bedroom (2000, 16 minutes). Discusses the research of Alfred Kinsey, the limitations of his data, and the ramifications of his ground-breaking research. *Educational Training Videos*.

Scientific Method (2002, 25 minutes). This program demonstrates the scientific method. It shows how to state a problem, conduct research, form a hypothesis, set procedures, perform an experiment, record results, interpret data, and state a conclusion. *Insight Media*.

Qualitative Research: Methods in the Social Sciences (2006, 20 minutes). Discusses qualitative research and introduces the primary methods of qualitative research that are used throughout the social science disciplines. *Insight Media*.

Web Sites

<http://nsrc.sfsu.edu> The website, based out of San Francisco State University, focuses on promoting sexual literacy through science, sexuality education, and social policy formation. Information on a wide range of sexuality topics, current research, and job and research opportunities in the field are presented.

<http://www.csun.edu/~sr2022> This site belongs to the Center for Sex Research of the California University at Northridge and provides updated information on current topics of research as well as links to other relevant sites.

<http://www.sexscience.org> This is the home page of the Society for the Scientific Study of Sex (SSSS), and provides links to *The Journal of Sex Research* and the *Annual Review of Sex Research*.

<http://www.ejhs.org> The electronic journal of Human Sexuality. A publication of the Institute of Advanced Study for Human Sexuality.

<http://rmc.library.cornell.edu/HSC> The Human Sexuality Collection seeks to preserve and make accessible primary sources that document historical shifts in the social construction of sexuality, with a focus on U.S. lesbian and gay history and the politics of pornography.

<http://www.kinseyinstitute.org> Home page of the Kinsey Institute.

<http://cregs.sfsu.edu> Center for Research & Education on Gender and Sexuality: publications and research, education and training, issues involving various sexuality topics, press/news, blogs, and events.

<http://www.sstarnet.org> Society for Sexual Therapy and Research: Assists professionals who treat problems of sexual function, sexual identity, and reproductive life; provides a forum for the exchange of ideas between those interested in research in human sexuality.

ANSWER KEYS

Thinking About the Limitations of Sex Surveys

Answer key: Factors that limit the validity of survey data include faulty memories, difficulties estimating the incidence of sexual behaviours; denial, distortion or concealment of information; tendencies to present socially desirable answers; differences in meanings of particular terms; use of biased, haphazard or nonrepresentative samples, and volunteer bias.

Evaluating Scientific Claims

- | | | | |
|------|---------|---------|---------|
| 1. C | 2. C, G | 3. A, G | 4. B, D |
| 5. 1 | 6. B, F | 7. A, B | 8. C, E |

Nevid, J. S. (1992, February). *Personal communication*. Used with permission.

ACTIVITIES

Activity 1: The Social Desirability Scale

Surveys on sex or other topics may be biased by social desirability--that is, the tendency of respondents to slant responses to interviews or questionnaires in a socially desirable direction, rather than to report how they truly feel. How about you? Do you tell people what is on your mind, or do you misrepresent your behavior and attitudes in order to avoid social disapproval? Do you complete questionnaires candidly, or do you put down what you think is the socially desirable response? When it comes to our sexual behaviour and attitudes, the urge to respond in a socially desirable direction may be at its highest.

The following questionnaire, authored by Crowne and Marlowe (1960) may suggest whether you answer truthfully or construct socially desirable answers. Read each item and decide whether it is true (T) or false (F) for you. Try to work rapidly and answer each question by circling the T or the F.

- T F 1. Before voting, I thoroughly investigate the qualifications of all the candidates.
- T F 2. I never hesitate to go out of my way to help someone in trouble.
- T F 3. It is sometimes hard for me to go on with my work if I am not encouraged.
- T F 4. I have never intensely disliked anyone.
- T F 5. On occasions, I have had doubts about my ability to succeed in life.
- T F 6. I sometimes feel resentful when I don't get my way.
- T F 7. I am always careful about my manner of dress.
- T F 8. My table manners at home are as good as when I eat out in a restaurant.
- T F 9. If I could get into a movie without paying and be sure I was not seen, I would probably do it.
- T F 10. On a few occasions, I have given up something because I thought too little of my ability.
- T F 11. I like to gossip at times.
- T F 12. There have been times when I felt like rebelling against people in authority, even though I knew they were right.
- T F 13. No matter who I'm talking to, I'm always a good listener.

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- T F 14. I can remember “playing sick” to get out of something.
- T F 15. There have been occasions when I have taken advantage of someone.
- T F 16. I’m always willing to admit it when I make a mistake.
- T F 17. I always try to practice what I preach.
- T F 18. I don’t find it particularly difficult to get along with loudmouthed, obnoxious people.
- T F 19. I sometimes try to get even rather than forgive and forget.
- T F 20. When I don’t know something, I don’t mind at all admitting it.
- T F 21. I am always courteous, even to people who are disagreeable.
- T F 22. At times, I have really insisted on having things my own way.
- T F 23. There have been occasions when I felt like smashing things.
- T F 24. I would never think of letting someone else be punished for my wrongdoings.
- T F 25. I never resent being asked to return a favor.
- T F 26. I have never been irked when people expressed ideas very different from my own.
- T F 27. I never make a long trip without checking the safety of my car.
- T F 28. There have been times when I was quite jealous of the good fortune of others.
- T F 29. I have almost never felt the urge to tell someone off.
- T F 30. I am sometimes irritated by people who ask favors of me.
- T F 31. I have never felt that I was punished without cause.
- T F 32. I sometimes think when people have a misfortune, they only got what they deserved.
- T F 33. I have never deliberately said something that hurt someone’s feelings.

Crowne, D. P. and Marlowe, D. A. (1960). “A new scale of social desirability independent of pathology.” *Journal of Consulting Psychology*, 24, 351, Table 1. Reprinted by permission.

Scoring Key for the Social-Desirability Scale

Scoring Directions: Place an “X” in the space after the item number for each item in which your response matches the one in the scoring key. Count the X marks to arrive at your total score and place this number on the line marked Total Score.

1. T	12. F	23. F
2. T	13. T	24. T
3. F	14. F	25. T
4. T	15. F	26. T
5. F	16. T	27. T
6. F	17. T	28. F
7. T	18. T	29. T
8. T	19. F	30. F
9. F	20. T	31. T
10. F	21. T	32. F
11. F	22. F	33. T

Total Score _____

Interpreting Your Score

Low Scorers (0 to 8): One in six people score in the range of 0 to 8. People scoring in this range answered most of the items in the socially *undesirable* direction. They tend to be more willing than most people to respond to test items honestly and candidly, even when their responses may be met with social disapproval.

Average Scorers (9 to 19): Two of three people score in the range of 9 to 19. These people show an average level of concern about the social desirability of their responses. In their actual behaviour, they may show an average degree of compliance with social expectations, rules, and conventions.

High Scorers (20 to 33): One person in six achieves a score of 20 to 33. These people show a high level of concern about the social appropriateness of their test responses. They tend to avoid responses to test items that may lead others to disapprove of them and may show strict compliance with social expectations, rules, and conventions in their actual behaviour.

Crowne, D. P. and Marlowe, D. A. (1960). “A new scale of social desirability independent of pathology.” *Journal of Consulting Psychology*, 24, 351, Table 1.

Activity II: Thinking About the Limitations of Sex Surveys

Imagine you are asked to participate in a sex survey. You know the investigator is a respected professor at your college and you are assured that the results will be kept confidential. A code will be attached to your responses—no names, please! The questionnaire contains hundreds of items surveying everything from the age at which you had your first romantic kiss to whether you have had intercourse, homosexual fantasies, and so on. How valid do you think your responses would be? Based on your knowledge of the text, list some of the factors that might account for invalid results.

- 1.
- 2.
- 3.
- 4.
- 5.
- 6.
- 7.

Activity III: Small Group Discussion Questions

Sex Research

In groups of three to four students each, discuss the following questions and ideas. After 20 minutes, one student from each group should summarize the small group discussion to the class.

1. Some legislators have argued against funding for any sex research because more knowledge would remove the mystery and romance from sexual relationships. How do you respond to this argument?
2. Have you ever completed and returned a sex questionnaire published in a magazine? Did you (or would you) answer the questions as honestly as possible? On what topics would you refuse to answer questions?
3. Would you volunteer to complete a lengthy questionnaire about your sexual behaviours and attitudes? Why or why not? What differences in attitudes might there be between students who would volunteer and those who would not?
4. Would you agree to participate in a direct laboratory observation study similar to Masters and Johnson's study? Under what circumstances? Why or why not?

Activity IV: Designing an Experiment

Directions: You are a medical researcher who has just “discovered” a new treatment for HIV. Now you need to design an experiment to test its effectiveness. Using the following questions as guidelines, plan your experiment.

1. What *groups* will you have in your study? How will you assign subjects to the group(s)? What problems do you anticipate?
2. What is your independent variable(s)? What is your dependent variable(s)?
3. How will you assign your subjects to the *experimental* and *control groups*?
4. What *extraneous variables* will you need to consider?
5. What *ethical issues* will you need to consider?

Activity V: Limitations of Research Methods

Directions: For each of the research methods listed below, think of a topic that would be appropriate for this method of research. Then, keeping this topic in mind, identify the precautions researchers should take and the limitations of that method.

Method and Topic	Precautions	Limitations
Case Study		
Survey		
Naturalistic Observation		
Ethnographic Observation		

Participant Observation		
Laboratory Observation		
Focus Groups		
Correlational Approaches		
Experiment		

Activity VI: Evaluating Scientific Claims

Below you will find hypothetical examples of research findings. Based on the concepts of research design discussed in this chapter, determine whether the conclusions appear justified.

- _____ 1. A researcher conducts a survey of sexual behaviour among students on your campus by polling every third person that enters the library.
- _____ 2. A researcher observes that young men at a bar are more likely to approach young women after they have had an alcoholic drink and concludes that alcohol increases self-confidence in heterosexual interactions.
- _____ 3. A researcher finds that sexual activity among joggers is greater than among non-joggers and concludes that jogging increases sexual drive and activity.
- _____ 4. A researcher finds that women report less frequent experience in masturbation during childhood than do men and concludes that childhood masturbation occurs only among boys.
- _____ 5. An investigator assigns subjects at random to either read sexually explicit passages or view the same stories enacted in an explicit videotaped vignette. Finding significantly greater sexual arousal in the videotaped vignette condition, the investigator concludes that visual stimuli were more effective in evoking sexual responses under these conditions.
- _____ 6. An animal behaviourist argues that non-human primates are naturally promiscuous based on evidence that chimpanzees and other primates at the local zoo frequently have promiscuous relationships.
- _____ 7. An investigator finds that men who committed rape were more likely to be exposed to pornographic materials shortly before committing the crime than were men who committed other violent crimes. The investigator concludes that exposure to pornographic stimuli induces sexual violence.
- _____ 8. A therapist interviews the parents of a group of gay males in therapy and determines that the parents' personalities fit the profile predicted by the therapist's theoretical model of parents of gay males.

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After the students have tried to discover the problems in the situations presented, ask them to use the following code to identify the major flaw or flaws that lead you to believe the conclusions are questionable or even misleading.

- A. Confuses correlation with causation.
- B. Over generalizes.
- C. Sample may not be representative of the population of interest.
- D. Recollections of past events may not be accurate.
- E. Experimenter bias may slant results.
- F. Results may not generalize to natural conditions.
- G. Subjects were not assigned randomly to groups, so differences may be due to subject characteristics rather than the experimental (independent) variable.
- H. Experimenter failed to control for subject expectancies. No major flaw detected. Conclusion seems justified.

Nevid, J. S. (1992, February). *Personal communication*. Used with permission.