Chapter 2: Sex Research: Methods and Problems

Learning Objectives

1 Define sexology and explain how it is impacted by politics. Describe the goals of sexology, provide examples of each goal, and identify and discuss the most controversial of the goals.

2 Describe and give examples of each of the following research methods: case study, survey, direct observation, and experimentation. Under what circumstances would each of these methods be likely to be used?

3 Define each of the following and distinguish among them: survey sample, target population, representative sample, and random sample. Why are sampling issues so important in research?

4 Discuss questionnaires and interviews, and the strengths and limitations of each.

5 Explain how nonresponse, self-selection (volunteer bias), demographic bias, and inaccuracy present problems in survey research.

6 Describe the research studies of Alfred Kinsey and his associates, including research methods used, subject populations studied, and strengths and limitations. Identify which Kinsey results have remained consistent over time and which have now appeared to change.

7 Describe the National Health and Social Life Survey, including research methods used, subject populations studied, and strengths and limitations. Why was the development of this survey critical to public health? Describe the National Survey of Sexual Health and Behavior, including research methods used, subject populations studied, and strengths and limitations. Identify and discuss crucial differences between these surveys.

8 Summarize some of the research findings on ethnicity and sexual behavior.

9 Describe the results of surveys on violent pornography and alcohol use.

10 Describe Masters and Johnson's research, including the research method used, subject populations studied, and strengths and limitations. Discuss the findings of Masters and Johnson that have remained consistent over time.

11 Describe the experimental method of research. Distinguish between independent and dependent variables, providing examples of each.

12 Describe some of the technologies that have been used in sexuality research, including electronic devices, fMRI, and CASI.

13 Describe the impact of the Internet on sexuality research, including how cyberspace is used for research purposes. Identify and discuss problems associated with using the Internet for sexuality research.

14 Explain the ethical guidelines that are followed in sexuality research and identify the institutional review board process.

15 Identify and discuss criteria that are helpful in evaluating various kinds of research.

Discussion Questions

- What are the advantages and disadvantages of conducting sex research in cyberspace? Be sure to discuss volunteer bias, demographics of the population sample, cost and effectiveness of online surveys, response rate, and any other relevant issues.

- If you were a sex researcher today, what topics would you want to explore? In your opinion, are there any issues or topics in sex research that you believe should NOT be studied (because they are too controversial or too problematic to study)? What issues (if any) do you believe should not be studied, and why?

- Would you want to be a participant in a study about sexual matters or behavior? Would you want your friends or family to participate, or know about your participation?

- If anonymity was guaranteed, do you think study participants would still lie about their sexual behaviors? If yes, what would motivate them to do so? If no, is there any way you could know this for certain? What does this say about the validity and reliability of surveys, especially in the field of sexuality?

- Think of sex research topics that have been studied extensively (such as preventing contraction of STIs, sexual responsiveness in both males and females). For each one, discuss the benefits and problems (including ethics) with gaining such knowledge.

- If you were to design a questionnaire on sexual practices, which research method do you believe would harness the most useful information (case study, class survey, field research, questionnaire, interview, experiment) and why?

- In recent years there have been attacks on sexuality research by politicians. Under what, if any, circumstances should politicians be able to block legitimate scientific research?

- Discuss the impact of the AIDS epidemic on sexuality research. Why is such research important to public health?

Guest Speakers

- Have a researcher engaged in sexuality research lecture to the class on research methods.

- Have a researcher who works with animals come to class to discuss the application of animal research to human research in regards to sexual behavior. How does animal research inform human research in this field? What are its disadvantages?

- Someone from the Women's Studies department could discuss the differences in masculine and feminine "ways of knowing" with your class.

- Have a speaker from your Institutional Review Board discuss ethical guidelines in regard to research.

- Invite a psychologist or sociologist who conducts research to teach about statistical procedures for analyzing nonexperimental (descriptive) and experimental data.

- Invite a nursing instructor to discuss research on the sexuality of persons with disabilities.

Teaching Ideas

Group Activity for Difficult Topics
Supplies needed: large unlined butcher paper and markers
Time: 45-60 minutes

Break students into groups of four to six. Tell students they are a research team that has just been awarded a grant to study important questions in the field of human sexuality. What is their question? What method will they use to conduct their research (survey, face-to-face interviews)? Ask students to design a research study on a topic of their choice, being sure to take into account such factors as ethical issues, volunteer bias, and reliability.

Have students write their research question and outline their study design on the butcher paper. After sufficient time (45 minutes or so) have students share their research projects in front of the class. The class can vote on the best-designed research project, if desired.

The Goals of Sexology

Facts and Fictions: What Do We Know?: Have students generate a list of known "urban legends" that relate to this class (examples abound but common ones to this course are that underarm deodorant causes breast cancer or that frequent erection in men without ejaculation leads to painful testes). Students may be surprised at the extent to which they believe some of the legends brought up in class. Assign legends to small groups of students and have them research their origins. Many of these myths are Internet-based. This is a valuable tool for teaching students the difference between what is research and what "everyone knows."

Value Clarification: Follow the generic rules for this activity found in the Appendix (Teaching Techniques from A to Z) and use these statements: (1) The purpose of sex research should be to discover universals in behavior, (2) It is more important to respect individual privacy than it is to better understand intimate sexual behavior, (3) More money needs to be spent studying HIV/AIDS than in studying heart disease, (4) It is unethical to systematically observe people in public places without their permission.

Student Reflections: In pairs or small groups, ask students to discuss whether or not the federal government should be involved in funding research in sexology. What are the pros and cons? Next, have students read "Sex Research Under Siege" box featured in the textbook. (If students do not have their textbooks with them, you may read this aloud.) Allow students to discuss their thoughts and feelings as a group.

Book Report: Ask students to read the Ford & Beach (1951) book, the Suggs & Miracle (1993) book, or Laumann et al.'s (1994) NHSLS report. Have them write a 1- to 2-page book report and their personal reaction to the book. Consider using this as a written assignment for the entire class.

Nonexperimental Research Methods

Case Study: Ask students to research the childhood of each of the following women: Gloria Steinem, Hillary Clinton, Mae West, and Betty Friedan. Have students provide written or oral reports on what conclusions they can make with regard to what life experiences might result in a woman becoming a spokesperson for women's rights. Ask a student to find these women's e-mail addresses and contact them about these issues.

Class Survey: Hand out blank 3 x 5 cards. Ask students to indicate their sex on the card, how many people they have dated in the past two years, then how many people they believe the average college student of the same and opposite sex has dated. Collect cards anonymously. Compare self and other reports by student gender.

Field Research: BEFORE beginning this class, ask three students to tally the number of males and females who speak or ask questions in class today; inform them NOT to tell others what they are doing. Near the end of class, tell the other students what these three students were doing and record their results on the chalkboard.

Discuss gender differences in the context of observer bias or observer accuracy. Have the observers discuss any obstacles or impediments they experienced (e.g., hard to take notes, hard to focus on class lecture or discussions, hard to see everyone, hard to keep track of those who spoke without raising a hand, hard to decide if a one- or two-word remark counted as speaking in class, etc.). Discuss the ethical issues related to having some students observing and taking note of the behavior of other students.

The Experimental Method

Fact-Finding Group: Ask students to form groups of four to six members. Provide them with copies of **Handout 2.1: Research Terminology** (a helpful review of research facts they will need to know to understand research articles) and **Handout 2.2: Research Detective** and have them fill in the correct answers. You can require that this be done with or without textbooks or notes.

- Have student-groups bring various copies of research abstracts to class and ask them to state the hypothesis, list IVs and DVs, describe how variables were controlled or measured, participants and results (*Science* and *New England Journal of Medicine* are good resources for short, clearly written research articles.).

Experiment: Ask students what would be a good topic of research that could be studied using the experimental method. If several are offered, have students vote on the most interesting one. Next, ask students to form groups of four to six members. Have each group provide a brief proposal for how they would set up an experiment on this topic: state a hypothesis, list IVs and DVs and how they would be controlled or measured, how many subjects, and where they would get them. Compare the similarities and differences in the proposals, asking which ones most closely fit the description of good research they have been learning about.

Brainstorm: Have students generate a list of groups or populations that are typically underrepresented in sex research. (Examples: the elderly population, minority groups, the socioeconomically disadvantaged, homeless.) Next, have the class brainstorm the best research methods for capturing each of these groups.

Technologies in Sex Research

Critical Thinking: Ask students to form groups with four to six members. Give each group a topic to "research" using the Internet. Have students find sites addressing their topic as well as sites where data are being collected (e.g., university-based online assessment). What are the advantages and disadvantages to online research? Have students apply what they have learned about research in critiquing the information and how it was obtained. Combine this with the questions posed in the section on "Evaluating Research" in the textbook.

Ethical Guidelines for Human Sex Research
Student Reflections: In pairs or small groups, ask students to list sexual situations, settings, or behaviors which would be ethical for researchers to observe without prior permission, and those that it would be unethical for them to observe. Discuss similarities and differences on student lists. What if they were on an ethics committee and there was disagreement among members—how would they resolve their differences?

Simulation: Assign students into groups of four to six people. Designate half of the groups as Researchers and the other half as Ethics Committee Members. Find proposals of research on sex issues online. Proposals may be obtained through university IRB websites, which are often posted as public information. Pair groups so that a Researchers group gets the same proposal as an Ethics Committee Members group. Have groups discuss the pros and cons of the proposals among themselves. Then, simulate a meeting with the Ethics Committee by having each Researchers group discuss the pros and cons of the proposal with their respective Ethics Committee Members group.

Evaluating Research: Some Questions to Ask
Critical Thinking: Read aloud to the class an advertisement for some sexual aid or sexual therapy of some kind (breast enlargement or penis enlargement advertisements are particularly good for this exercise). Have students apply the questions posed in this section of the text to the advertisement. Discuss what additional information they would need in order to evaluate the ad. Discuss what kind of study might help them obtain such information.

- This could also be assigned as an extra credit or written assignment. You could enlist students to find lots of advertisements throughout the semester (2 points of extra credit for each one, setting a maximum of 2 to 4 points per student). Then, use these at the end of the semester in a final critical thinking exercise to assess student retention of the basics about sexual research.

Student Reflections: Either provide a list of 5 to 10 sexual issues that would be interesting to study or ask the class to generate this list. In small groups, ask students to decide which research method (e.g., quantitative or qualitative, case study or experiment, etc.) would be best for studying each issue, stating the reasons for their choices.

Clips / Videos

Clips
The War: Punishment, Modeling (1:30) Psych in Film, Clip 1
This clip illustrates observational learning and modeling, which can be used in a discussion of observation as a research method.

Videos
Albert Bandura (24 min.) (2001) Insight Media

"Albert Bandura compares his approach to the study of personality with other approaches."

Alfred Kinsey: Social Science in America's Bedroom (16 min.) (2000) FFH
Kinsey's work had important ramifications.

Bandura's Social Cognitive Theory: An Introduction (30 min.) (2006) Davidson
"Using archival materials, newly shot visuals, and Bandura's own narration, this video explores Bandura's innovative methods from his early Bobo doll experiments through his work with phobias and his more recent work on self-efficacy."

The Bigger Picture: Distributions, Variation, and Experiments (12 min.) (2000) Insight
This video introduces students to distributions, variation, and experiments.

Carl Rogers and the Person-Centered Approach (65 min.) (2003) Insight Media
"This video provides an overview of Carl Rogers' life and work and traces the development of the client-centered or person-centered approach to counseling, psychotherapy, education, group work, and human relationships."

Classical and Operant Conditioning (55 min.) (1996) FFH
"This program examines the nature of behaviorism and describes how the theory is applied in clinical and educational settings."

Ethics and Scientific Research (30 min.) (1992) Insight Media
"This video addresses ethical issues of scientific research, focusing on scientific misconduct and its control."

Experimental Design (2 volumes, 30 min. each) (1989) Insight Media
"This program distinguishes between observational studies and experiments, teaching basic principles of experimental design."

The First Measured Century: Social Science in America's Bedroom (2000) PBS
Alfred Kinsey Measures Sexual Behavior (180 min. for entire FMC series)
What role did Kinsey play in shaping the 20th century?

Freud: The Hidden Nature of Man (29 min.) (1970) Insight Media
"Using dramatized interviews with Sigmund Freud, this video examines psychoanalysis, the Oedipus complex, the unconscious, infantile sexuality, and the relationship of the id, ego, and superego."

How Numbers Lie: Media Truth or Fiction (23 min.) (1997) Insight Media
"This program teaches viewers how to think critically and analyze statistics disguised as facts."

Kinsey (118 min.) (2004) Fox Searchlight Pictures
Award-winning feature-length film about the life of Alfred Kinsey, with outstanding cast and production. Clips can be shown to demonstrate the lack of sex research and knowledge prior to Kinsey's groundbreaking work.

Learning: Classical and Operant Conditioning (30 min.) (2001) Insight Media
"Presenting Ivan Pavlov's landmark experiments on classical conditioning, this video explores the process of learning. It differentiates between classical and operant conditioning."

Qualitative Research: Methods in the Social Sciences (20 min.) (2006) Insight
"This program discusses the types of questions addressed through qualitative research and considers problems of validity. It examines qualitative textual analysis and looks at methods of qualitative research."

Quantitative Research: Methods in the Social Sciences (20 min.) (2006) Insight
"This DVD discusses the methods used in and the scope of quantitative research. It examines measurement issues; discusses experimental design and statistical analysis; and covers surveys, sampling, and data analysis."

Research Methods for the Social Sciences (33 min.) (1995) Insight Media
"This program examines types of experimental design, describing when they would be most appropriate."

Sociological Perspectives (30 min.) (2002) Insight Media
Three major perspectives are presented.

Understanding Psychology: Perspectives on Psychology (30 min.) (2004) Insight Media
The biological, psychodynamic, and behavioral perspectives are presented.

Understanding Sociology: Making Sense of Sociological Theory (60 min.)(1997) Insight
This video "looks at societies as organic structures, as economic structures, and as agents of social action."

Why Sociology? (30 min.) (2002) Insight Media
"Featuring interviews with a diverse group of sociologists, this video examines and describes the development of sociology as a discipline."

Young Dr. Freud (120 min.) (2003) PBS
"This PBS video traces the early life of Sigmund Freud, from his birth in 1856 to the publication of The Interpretation of Dreams in 1900."

Suggested Websites

- http://allpsych.com/psychology101/intro.html. This site discusses research methods that students can use as a guide to learn more about design and analysis.

- http://www.humansexualityeducation.com/. The Institute for the Advanced Study of Human Sexuality, which offers graduate degrees in human sexuality, provides access to research and other materials on their website.

- www.kinseyinstitute.org. The Kinsey Institute for Research in Sex, Gender, and Reproduction, Inc. This is an excellent research website. Have students click on Research and Publications and report on one of the current studies in progress. Each study contains a slide presentation that explains the study's hypotheses, methodology, etc. Students can even see examples of survey questions. Instructors could also stay up to date with ongoing research.

- http://nsrc.sfsu.edu. The National Sexuality Resource Center is a website of interest to students wanting further training in human sexuality, as well as a link to current sex research.

- http://www.nsrc.sfsu.edu/sexuality_research_social_policy. The journal, *Sexuality Research and Public Policy* identifies key sociopolitical issues related to sexuality research.

- http://www.sexscience.org/. The Society for the Scientific Study of Sexuality provides information about sexuality research, including a discussion of ethical standards.

Handout 2.1 Research Terminology

1. **Theory:** An integrated set of concepts that explain, account for, or predict certain phenomena. Used to generate testable hypotheses which can be used to prove or disprove the theory, or to revise or discard it.

2. **Hypothesis:** A specific testable statement, expressed as a prediction or a statement of cause and effect.

3. **Operational definitions:** Statements that describe the exact method of measuring variables that are used in the study. EX: The operational definition of a significant improvement in anxiety could be "a reduction in scores on the Spielberger Anxiety Scale, taken before and after treatment."

4. **Independent variable:** The variable that is controlled or manipulated by the researcher in order to determine its effects on the dependent variable.

    - It is independent because it is not affected by other variables (it is set or fixed by the experimenter).

    - It is the "cause" in cause-and-effect; the independent variable causes the dependent variable.

    - EX: If this *caused* that, "this" is the independent variable; if this is *caused by* that, "that" is the independent variable.

5. **Dependent variable:** The variable that is being observed or measured; the variable of interest.

    - It is dependent because it *depends on* the independent variable (it changes as a result of the levels of the independent variable).

    - It is the "effect" in cause-and-effect; the dependent variable is caused by the independent variable.

    - EX: If this *caused* that, "that" is the dependent variable; if this is *caused by* that, "this" is the dependent variable.

6. **Random selection of subjects:** This occurs when every person in a given population as an equal chance of being chosen for a study. Random selection helps to produce a **representative sample**, which means that subjects who are being studied are similar in important ways to the subjects in the population.

7. **Random assignment of subjects to groups:** This means that every subject in the random sample has an equal chance of being in either the treatment or control groups. This is often done by using a set of random numbers to assign subjects to groups.

This process improves the likelihood that, overall, each group will contain subjects with similar characteristics.

6. **Double-blind:** This means that neither the experimenter nor the subjects knows which group the subjects are in, treatment or control; until after the experiment is done. Both are *blind* to who gets what level of the IV until after the DV is measured.

Handout 2.2: Research Detective

First Case: You and your fellow research detectives are being asked to determine the identity of the IVs and DVs in each of the following questions:

1. What is the effect of ANXIETY on SEXUAL AROUSAL?
   IV = _____ DV = _____

2. What is the effect of PORNOGRAPHY on ATTITUDES TOWARD WOMEN?
   IV = _____ DV = _____

3. Is SEXUAL BEHAVIOR affected by DRUG USE?
   IV = _____ DV = _____

4. Does LEVEL OF LIGHT change LEVEL OF SEXUAL SATISFACTION?
   IV = _____ DV= _____

Second Case: Now that you've gotten good at identifying IVs and DVs in simple research questions, you and your fellow detectives must pick them out of a description of a study AND describe the hypothesis that is related to each IV-DV pair:

1. Subjects are randomly assigned to two groups. One-third read a textbook describing sexual techniques; one-third read a news magazine; and one-third watch a film demonstrating sexual techniques. Every 30 seconds, all subjects rate their sexual arousal on a scale of 1 to 7 points.
   IV = _____ DV = _____

   The hypothesis is: _____

   _____

2. Subjects are randomly assigned to two groups of pairs: one group of pairs spends one hour role-playing and practicing active-listening skills; the other group of pairs spends one hour reading an article on active listening. Both groups are given a conflict situation to resolve. Their discussions are videotaped and later coded according to the number of active-listening behaviors they used during their discussions.
   IV = _____ DV = _____

   The hypothesis is: _____

   _____