## **Chapter 3 PLANING RESEARCH: GENERATING A QUESTION**

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### **CHAPTER OVERVIEW**

Before carrying out a research project, we need to consider many factors. The first is the nature of the research question. Our topics develop in a myriad of ways. Further, our methodologies also develop according to the nature of the topic we investigate. The ultimate practical choices we make should result from a serious consideration of the research that preceded ours, a process that is aided by databases like PsycINFO.

# Activity 3.1 Asking the Right Questions

**Concept:** This exercise informs students that they need to ask the right questions in order to get good answers. A researcher who wants to investigate some phenomenon is like the physician who tries to help a patient. The physician forms an initial hypothesis, tests it with a question or medical test, revises the hypothesis and tests it with more questions or tests, until a conclusion is reached. Researchers also form hypotheses, test them, and refine them until satisfied that the conclusions are valid.

Sometimes the right questions are not obvious. But without the right questions, conclusions are going to be invalid.

**Time:** This activity takes 5 to 10 minutes, depending on class responses and the instructor's desires.

**Instructions:** Ask students to consider the information in the scenario below, taken from a highlighted case study by Oliver Sacks in his book *The Man Who Mistook His Wife for a Hat.* They should then play the role of physician and decide what questions to ask in order to find out what is going on.

**Discussion:** Students often conclude that there is something wrong with the Natasha K. In fact, there is a medical condition, but the fact that students automatically assume that such behavior reflects a problem says something about their attitudes toward old people and sexuality. Maybe her reawakened sexuality is a normal and healthy process.

In reality, students are unlikely to ask the right question, which would have been "Have you ever been a prostitute?" Natasha had worked in a brothel when she was a teenager. She speculated to Oliver Sacks that she might have "Cupid's Disease," which he had never heard of. It was the prostitutes' name for syphilis.

The students should provide their rationale for asking the questions they did. They might end up choosing an appropriate treatment (i.e., an antibiotic) but for the wrong reasons. Sometimes people draw useful conclusions from invalid information.

The important elements here are that you need to ask the right questions to get the most useful answers and that the right questions are not always obvious. In addition, the way you frame your questions influences the nature of the conclusions you draw. Different people might approach the situation very differently, asking different questions, and taking different approaches.

**Reference:** Sacks, O. (1987). *The man who mistook his wife for a hat: And other clinical tales.* New York: HarperCollins.

# Activity 3.1 Asking the Right Questions

### The Scenario

The following scenario is from a case study highlighted in *The Man Who Mistook His Wife for a Hat* (by Oliver Sacks). You should play the role of the doctor. Your task is to decide what is going on. To do so, you need to ask questions. To get good answers, you have to ask good questions. What are some of the questions you should ask?

Write them down and indicate briefly why them might be useful questions.

Natasha K. Was 90 years old and came to the clinic where neurologist Oliver Sacks worked. She noted that a year or two previously, she experienced a reawakening of sexual feelings and desires.

She thought it was "Delightful!" and said that the thought it was wonderful feeling "frisky." Initially she enjoyed it, but then she wondered if something was wrong. Her friends started to worry and said that it wasn't normal for a women of her age to be feeling so sexual

After her friends expressed concern, Natasha convinced herself that she must be sick or, as she put it, "You're feeling too well, you have to be ill!"

# Homework 3.1 PsycINFO Homework Assignment

**Purpose of the Homework**: This assignment will give you more practice in using PsycInfo. It is also designed to show you how different approaches lead to different kinds of questions and perspectives. Various researchers may be interested in the same general topic, but because of the way they have been trained, their approaches differ. This relates, in a way, to the idea that if the only tool you have is a hammer, you begin to see everything as a nail. That is, once you develop an approach to research, you tend to stick with it, so you see every question within that single perspective.

Assignment: Find three research, journal articles related to the topic of depression. One must have been done from the perspective of a clinical or counseling psychologist, one by a psychiatrist or neuroscientist and one by some other kind of psychologist (e.g., experimental psychologist, cross-cultural psychologist, somebody whose expertise is in the area of psychology and religion, etc.) Describe the basic question each researcher (or research team) has asked, how they addressed the question, and what they concluded. Then describe how the different approaches and perspectives of the researchers influenced they questions they asked. Make sure you include a references section in APA format.

### **Guidelines:**

- 1. Summarize each research question clearly and in everyday English.
- 2. Explain the methodology for the study without using excessive jargon.
- 3. Describe what the researcher(s) found, that is, their results.
- 4. Explain why they think this research is important; that is, what conclusions they drew.
- 5. Comment on how the different types of question the researchers asked let to different methodologies. Explain why it is beneficial that researchers adopt very different methodologies to study the same topic--depression.
- 6. Include a reference page with citations in APA style.

Handout 3.1 Examples of strategies to reduce the number of irrelevant citations in a PsycINFO® search.

Search for References to Adoption	Strategy to narrow the search	Number of references*
Adoption anywhere in the citation		9932
Adoption as the Subject of the reference	Choose "Word Appears in Subject". (You can also select "Author" if you want to name an author who has studied adoption.)	3472
Only work published since 1980	Choose "Set Other Limits" and indicate publication year of 1980 to the current year (or whatever time span you want).	2670
Only work published in the English language	Choose "Set Other Limits" and select English as the only language	2582
Only work published in books or journals	Choose "Set Other Limits" and select material in journals, books and edited books. This eliminates hard to access material like doctoral dissertations	1742
Only empirical studies (i.e., original research reports)	Choose "Set Other Limits" and select Publication Type = Empirical Studies	918
Only work involving females in the adoption process	Choose "Set Other Limits" and select Population = Female	258
Only work on adoption of children	Choose "Set Other Limits" and select Age Group = Childhood	78

<sup>\*</sup>These numbers are illustrative of a search; the actual values will be different as PsycINFO is updated.

 ${\bf Handout~3.2} \\ {\bf Strategies~for~Expanding~the~Number~of~Relevant~Citations~in~PsycINFO}^{\circledast}$ 

Strategy to Expand the Search	Result
Use the <i>Suggest</i> option and enter "Adopt*" or "Adoption"	You get a list of terms that relate to your topic, like Adoptive, Adoptive Children, Biological Family, Interracial Adoption. You can use these as subjects for your search.
Use the <i>Thesaurus</i> option and enter "Adopt*"	You get a list of categories that PsycINFO® uses that are related to adoption.
Use the <i>Index</i> and enter "Adopt*" or "Adoption"	You get at least a dozen subject categories to search
Example: Use the Thesaurus terms "Adopted-Children", "Adoptees", "Adoption-Child", "Interracial	You get 156 citations that relate to the Thesaurus terms and that still follow the limits set in Table 6.
Adoption" and "Adoptive-Parents" connected by OR (i.e., Adopted-children OR adoptees OR adoption-child OR interracial-adoption OR adoptive-parents)	Using OR tells PsycINFO® to access any citation that uses any of your terms. If you connected them with AND, PsycINFO® would only access those citations that include all those terms at the same time, which would restrict the search greatly. In fact, a single journal article is unlikely to fall into all these categories.

## Handout 3.3 Concepts That Are Clarified in the Different Sections of a Research Report.

#### Introduction

- What is the general topic of the research article?
- What do we know about this topic from previous research?
- What are the authors trying to demonstrate in their own research?
- What are their hypotheses?

#### Methods

**Participants**--Who took part in the research

- How many people (or animals) were studied?
- If there were nonhuman animals, what kind were they?
- If there were people, what were their characteristics (e.g., average and range of age, gender, race or ethnicity, were they volunteers or were they paid)?

Apparatus and Materials—What did the researchers need to carry out their study?

- What kind of stimuli, questions, etc. were used?
- How many different kinds of activities did participants complete?
- What instrumentation was used to present material to participants and to record their responses?

**Procedure**—What did the people actually do during the research session?

- After the participants arrived what did they do?
- What did the experimenters do as they interacted with participants?

### Results

- What were patterns of behaviors among participants?
- Did behaviors differ when different groups were compared?
- What type of behaviors are predictable in the different testing conditions?
- What were the results of any statistical tests?

### **Discussion**

- What do the results mean?
- What explanations can you develop for why the participants responded as they did?
- What psychological processes help you explain participants' responses?
- What questions have not been answered fully?
- How do your results relate to the research cited in the introduction?
- How do your results relate to other kinds of research?
- What new ideas emerge that you could evaluate in a subsequent experiment?

### Reference

What research was cited in the research report (e.g., work published in journals or other written sources, research presentations, personal communications)?

### INTEGRATION OF THE CONCEPTS

Create four groups of items and explain why the terms in each group belong together.

Author

Breakdown of Everyday Beliefs

Discussion

Formal If-Then Statements

Introduction

Keyword

Methods

Research Literature

Research Team

Researcher's Ideas

Results

Set Other Limits

Spontaneously Occurring Events

Subject

Group 1: PsycINFO search terms: Keyword, Subject, Author, Set Other Limits

Group 2: Ways of developing research ideas: Researcher's Ideas, Research Literature, Research Team

Group 3: Sources of research ideas: Spontaneously Occurring Events, Breakdown of Everyday Beliefs, Formal If-Then Statements

Group 4: Parts of an APA style research report: Introduction, Methods, Results, Discussion