Social Work Research Methods: From Conceptualization to Dissemination

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SAMPLE CHAPTER 3 Specification

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SECTION 3.1 INTRODUCTION

This chapter will show you how to pick an area, find out about it, and refine that area of interest so that you can move to the design stage. We could have divided this into two chapters, with the first being "picking a topic" and the second being "reviewing the literature." The problem with that, though, is that in our experience people almost always do these things at the same time. Napoleon is quoted as saying that "no battle plan survives contact with the enemy." It is equally true that "no research question survives contact with the literature." We will therefore look at question specification as a circular process, with your original ideas being modified by what you find in the literature, being rethought, being further refined by more literature, and so on. At the end of this chapter, you will have the tools you need to describe:

- 1. What your area of interest is
- **2.** Theory that is important to your area
- **3.** Main empirical findings in your area
- **4.** What is going on in the field (real world) in your area
- 5. Methods used to study your area
- **6.** Key issues needing study in your area, taking into consideration the ethical and practical requirements to study these issues
- **7.** The aim and conceptual framework for your research

You may be pleased to hear that you will no longer be alone in your journey through this book. From this point forward, the research process will be illustrated with five examples, four using hypothetical data and one (Maria's project) using real data. These examples will include the entire research process from start to finish. Between them, these five examples will give you practical examples of most of the skills included in this book. Of course, five projects need five researchers, and here they are:

- Abigail is a PhD student who is interested in completing a project for an advanced research methods course. If all goes well, she plans to present it at a local conference.
- John is a new PhD student who is interested in the local Bosnian refugee community, with whom he has a little experience working. He is short of money and desperately wants to get a grant to help subsidize his education. He is hoping to do some qualitative pilot research to help him write a stronger multimethod (meaning both qualitative and quantitative) grant.
- Professor Kathy is a criminologist. Her work requires that her research assistants read through large numbers of handwritten and electronic police files to determine how many times each person in the files has been arrested and convicted, and of what offenses. Each of her research assistant coders fills out a summary form on each person's file. The problem is that her research assistants are accurate only about 80% of the time. She knows this because she has had other people check their work. Professor Kathy is desperate to do just about whatever she can to reduce errors. One afternoon, she heard a radio program on National Public Radio (all professors listen to NPR, it is written into our contracts) talking about an organization

that uses classical music, which they claimed decreased clerical errors. Professor Kathy decided she would try this to see how well it might work. The more she thought about it, the more she thought it might be a good thing to really try it out scientifically. Maybe she could get a publication out of it too.

- Maria is a master's level student specializing in research. She is interested in homicide rates. What kinds of people kill each other? Where do all these killings occur? She is hoping to use this question for her master's research specialization project, and she thinks it would be fun to do something at a conference, maybe to present a poster.
- Yuan is a master's student who has a field placement at a domestic violence facility that treats batterers. The agency is thinking of changing the treatment model they use and has asked Yuan to help them figure out if the new model will work better than the old model. Yuan is taking this opportunity to use the research for his treatment evaluation course project.

SECTION 3.2 Your Area of Interest

The good news is that you probably have an area of interest. For most people, there is an area that they want to understand better. Often it has to do with prior personal or professional experience. Sometimes it is something you enjoy thinking about. The challenge is taking a broad area of interest and turning it into something that can generate useful research questions. Areas of interest can be narrow or broad. One senior professor at our school is fond of telling students that "not all questions are created equal." We agree. A good area of interest will meet the following requirements:

- Your area should interest you. People often choose to study something because it is easy to study or because there are other people around them studying it, or because their school has very strong resources in that area. This is generally a mistake. Most people can do their best work only if they are care about the thing being studied. Choose something that does not interest you, and you may find yourself "running out of gas," getting easily irritated, and being unhappy. These are bad things that can be avoided by finding a way to do what you want to do.
- You must be able to say what your area of interest is in one sentence in simple language. The mother of one of the authors used to say, "If you can't say it simply then you don't understand it." If you

can't spit it out in simple English, then you need to think some more.

- Your area of interest must be small enough to guide you to specific questions. "Children," "Behavior," and "Diversity" are so broad as to be not very helpful. Areas that are more focused, such as "Barriers to academic performance in young children," or "Differences in altruistic behavior between men and women," or "Child-rearing practices among the Hmong in America" are more targeted and will allow you to move more easily to specific questions.
- Your area should have some relevance to practice. Unless you are doing purely basic science, your area of interest will need to be one that can inform what is going on in the field. As you recall, **basic** science means "science that is meant to find out about things but has no goal of immediate practical application." This is different from **applied** science, which is science that is intended to have an impact on the real world right now. Physics is a basic science, while engineering is the corresponding applied science. In the social sciences, sociology is commonly basic science, psychology has large basic and applied branches, while social work and counseling are usually applied.
- Your area should be important. We suppose that all events are important to the people they happen to, but some things are far more important or are more in need of research than others. Does your area really matter? What practical benefits to humankind would come about if we knew more about your area? Issues that affect many other areas of life, such as increasing literacy or decreasing poverty, are clearly very important. This is both a practical issue and one that concerns values and ethics. Is it reasonable to waste resources on something irrelevant? Are you making the world a better place? Is there a reasonable chance that some real moral good will come from the proposed work?
- Your area must lead to questions you can study both ethically and practically. This means that in your area you must be able to:
 - 1. Specify measurable variables: For example, "unease" is not a commonly measured construct, but there are scads of ways to study "depression." Even depression might be hard to measure for some people, for example people with serious illnesses for which standardized scales cannot be used.
 - **2.** Collect the information for the variables ethically: For example, let's say an individual is interested in stress levels among hostages during bank robberies. Because of the stress, retrospective recall is particularly bad among hostages, so

asking them afterward has limitations. The simplest thing would be to stage a robbery yourself and observe people as it went down. Of course, this would almost certainly hurt people (e.g., heart attacks, PTSD, etc.) and is totally unethical. Likewise, it would be extremely dangerous if the researcher tried to use "participant observation" and pose as a criminal to be included in a planned robbery. It would also be unethical not to warn the authorities to try to prevent the crime. In short, you will have very limited ways that you can ethically study stress among hostages, and you will need to think creatively. Maybe you can use voice-stress analyses?

- **3.** Justify access to the study population: If you are going to interact with human subjects, then the question should be important enough to justify the intrusion-even if the questions to be asked are "harmless" and not time consuming. Part of this includes consideration of the perspective of the group to be studied. For example, part of being culturally competent is understanding if the group to be studied also values this particular line of research (Rubin & Babbie, 2005). Further, if possible, you want to avoid sampling from a vulnerable population. For example, minors, prisoners, and individuals with developmental or mental health disabilities are considered "vulnerable populations." These individuals are considered to have limited abilities to consent to participate in research for various reasons. You must have a very important reason to include such individuals in your sample. There must be a clear benefit to the subject group (either immediately or in the future) that far outweighs consideration of their vulnerability. Even with such a rationale, human subjects clearance will be difficult, and you will have to do lots of extra work to show others (and to be sure yourself) that you aren't taking advantage of these vulnerable people.
- **4.** Obtain human subjects clearance from your institutional review board (IRB) and perhaps IRBs of participating agencies: This is done by demonstrating that the study is important and can be conducted with consent and without harm to the subjects. This process is covered in detail later in the book.
- **5.** *Locate sufficient numbers of subjects:* Some subjects are just plain hard to find. For example, you might be interested in finding out what kinds of people are more likely to commit suicide. You decide to give people personality tests and then follow them to see if they end up killing themselves. Fortunately, very few people

kill themselves, so you would have to start with literally thousands of people to end up with enough completed suicides to be meaningful.

6. *Execute the research with the resources available to you:* Do you have the money and time to do it? Do the tools you need exist?

One further (if slightly repetitive) note: Determinations of moral rightness cannot be made scientifically and are not appropriate areas of interest. You can study the act of moral judgment, moral processes, or similar things, but you cannot use science to answer a moral question such as "Is eating meat wrong?" Now that we have a sense of what makes for a good area of interest, let's look at our five friends again and see where they're starting from.

Abigail, who is interested in organizations and used to be a child welfare worker, has realized that "organizations" or "child welfare organizations" are probably too big an area to study. She thinks she might look at organizational climate as it affects workers. She is very uncertain as to what specific areas to look at. She thinks she might have a look at burnout, worker retention, and ways workers cope with stress. She might then see which area makes most sense to look at.

Interesting to her?	Can she say it clearly?	ls it narrow enough?	Relevant to practice?	Important?	Practical to study?
Yes	No, but she has several ideas.	No; she needs to pick a more specific issue.	Probably	Maybe; that's not clear yet.	Unknown

John is a new PhD student who isn't sure what he wants to do. He is sure he wants to do work that can lead to a dissertation grant. Dissertation grants are nice because they provide both evidence to future employers of your skills and money to do research. John has always been interested in refugees and resettlement, because he thinks that the time that a person or family is in transition may be critical in getting them a good or a poor start in their new home. It seems like an important area. Locally, the largest population of recent immigrants consists of about 30,000 Bosnian refugees. John understands that this group of refugees has a high likelihood of having had traumatic experiences prior to coming to the United States and wonders how they are dealing with those experiences. John needs to find out more about refugees and their adjustment (especially Bosnians), and he also needs to go out to the community to see what's going on firsthand.

Interesting to him?	Can he say it clearly?	ls it narrow enough?	Relevant to practice?	Important?	Practical to study?
Yes	Not quite yet	Not yet	Yes	Yes	Probably

Professor Kathy has a relatively easy time formulating a question: "Does background music change the number of mistakes made when coding files?" She is not sure yet what kind of music she will try out, or how many different types. She'll look at the literature first.

Interesting to her?	Can she say it clearly?	ls it narrow enough?	Relevant to practice?	Important?	Practical to study?
Fairly	Yes	Yes	It is relevant to researchers.	Yes, from a methodological point of view	Certainly

• *Maria* is interested in homicide rates. She needs to produce a "master's research specialization project" by the end of the semester. She is interested in murder rates in different types of communities. Maria recently went to the dentist, where she noticed that the dentist had a computer screen that showed exactly where her fillings were. The more she thought about it, the more it amazed her that even her cavities were in a database. If cavities exist in a database, then surely many other important things must exist, somewhere, electronically. Maria decided to track down a database that would tell her about murders and then try to see what she could find about the kinds of places in which murders occur. She fired up her search engine and was on her way.

Interesting to her?	Can she say her question clearly?	ls it narrow enough?	Relevant to practice?	Important?	Practical to study?
Yes	Maria is allowing the details of her question to be firmed up after she gets a better sense of what electronic databases are available in her area. The question "Can it be practically studied?" is the first serious hurdle she mus cross. If the data do not exist, she can't study it this way.				nic on "Can it e she must

Yuan is having his question more or less thrust upon him. Yuan is interested in domestic violence and how it is treated. Because of this interest, he is working in a domestic violence shelter during his master's practicum (internship). As part of his education, Yuan is required to do research on the practicum site. For the past several months, Yuan's agency has been wondering if it should switch to a different model of treatment that features cognitive behavioral treatment (CBT) methods. Yuan suggests to the agency that they might want to try it out in a scientific way and see if it works better. The agency, pleased to have someone who brings some research interest and skill, has decided to have Yuan work on the evaluation process as part of his practicum. Yuan's question, therefore, is, "At our agency, will subjects treated by CBT do differently than clients treated under our old system?" Yuan is one lucky dude, having found both a question and a site.

Interesting to him?	Can he say it clearly?	ls it narrow enough?	Relevant to practice?	Important?	Can it be studied?
Yes	Yes	Yes	Yes	Yes	Yes

Our buddies seem to be on their way, some with a clear idea of what they're going to do (Kathy) and some with just a vague plan (Maria). Remember, you will probably end up revising your area as you move forward, and that this doesn't mean that you're doing anything wrong. As you will recall from our illustration in the first chapter, each step of the research process is iterative, which means that you end up doing it over and over again until you get comfortable with where you are. We've done about all we can do without looking at what other people have done, so now we will tell you how to go about reviewing the literature.

SECTION 3.3 THE INITIAL LITERATURE REVIEW

The process of learning more about your area of interest is usually called the *literature review*. We find this term misleading, because there are many resources available to you that are neither journal articles nor books nor book chapters. Among the other places you can go to find out more about your area are the Internet, conferences, professional organizations, colleagues, and experts in the area. In fact, if you are at a university, your first step should probably be to have an informal chat with someone who already knows about the literature in your area, so that he or she can give you pointers as to how to proceed with your search. Don't be afraid to use the professors at your school. It is their job to help you learn. You will note that this section is titled "The Initial Literature Review." This is because you will keep finding more relevant sources throughout your work, and the purpose of this first section is to help you get enough stuff so that you can make some sense of the literature, not so that you are "finished." "Finishing" never happens in an absolute sense; there is always more to learn.

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SECTION 3.3.1: TYPES OF LITERATURE

Most sources can be described in the following ways:

- *Empirical:* These are mainly focused on presenting new data. Most articles and many book chapters are empirical. *Example:* An article reporting findings from an experimental treatment for autism, or a study describing relationships between neighborhood poverty and rates of domestic violence.
- Review or overview: These sources tell you what we know about something. These are commonly found in book chapters and also in journals. *Example:* An article describing what we know about what works and what fails in welfare-towork programs.
- *Theoretical or conceptual:* These sources present ideas, tie together prior findings in new ways, or seek in some other manner to make sense out of what we know. *Example:* An article suggesting that the current findings in a given area can be best explained through the application of a new theoretical model.
- Other: Other articles can be found that focus on subjects such as research methodology or the application of research findings to specific policies.

The above terms are commonly used, *but most sources are mixtures of these categories.* For example, many empirical articles have literature review sections that are longer than their methods and results sections.

WHERE TO FIND LITERATURE

There are many places where literature lurks. The main ones include the following:

- Journal articles: Journal articles are the lifeblood of science. If you pursue research as a career, you will consume more of these than anything else, and you will be judged on how often and how well you write them. There will be "core" journals in your area. For a child abuse researcher, examples might include Child Maltreatment, Child Abuse and Neglect, Child Welfare, and Children and Youth Services Review. However, such a researcher would also use many journals not in his or her core, such as Journal of Interpersonal Violence and Child Development.
- Books and book chapters: More books exist than you might think.
- *Governmental (or similar) publications:* Again, government publications are far more common

than you might expect and are often overlooked. Many are also free and can be ordered online from the government. Many are viewable online.

There are several basic approaches that we have found helpful in locating literature. You may develop others based on your area and personal style. We have listed them in the order we would pursue them in.

- Ask the experts: Go to a professor or other student in your area. Ask for quick suggestions regarding the key journals, texts, and government publications are in your area. Take no more than five minutes doing this. The idea is to get pointed in the right direction, not to have them do your work for you. Say something like "Hi. I'm so-and-so, and I'm interested in diabetes among Latinos. If you were me, what journals or books would you use to begin to understand that area better? Are there a few studies or a few researchers I should definitely look up?"
- Online database searches: At our university, we have access to Psychinfo, which is a good database with many journal articles and book titles listed. This is the best general resource for many people, although other excellent database search engines exist, such as Medline and Sociofile. Many universities have search programs that allow you to search multiple databases at the same time.

USING SEARCH ENGINES

Students come to us all the time saying, quite authoritatively, "There is no literature in my area." These students are always wrong. Why? Because they are just learning how to do searches and aren't really doing a very effective job yet. Using the following technique to isolate areas of interest and find overlaps will probably help you to do a better job.

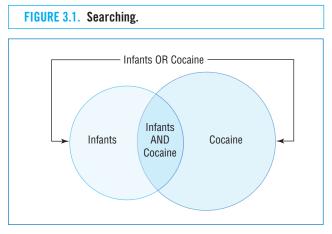
- The goal of searching—Finding areas of overlap: You might want to know about cocaine-exposed infants. This requires you to find two issues simultaneously—cocaine exposure and infants. When you get only the articles that have both, you will have your stuff.
- The technique of searching: Effectively searching a database is a bit of an art and requires practice. The main skills you need to learn for advanced searching involve embedded "and" and "or" commands and learning where to put your parentheses. We will assume you are using a search engine like Psychinfo, which provides windows for entering search terms. Do this:

- 1. *Think about how to specify each area in a very inclusive way*, for example, drug or substance or cocaine, and infant or prenatal or perinatal or newborn or child. You need not be perfect the first time; as you find articles, you will learn the key buzzwords and can redo your search, but you've got to start somewhere. In many engines, you have multiple windows to use. Each of these windows will function like a set of closed parentheses.
- 2. In the search window, type in a request for the intersection of these areas: (drug or substance or cocaine) and (infant or prenatal or perinatal or newborn or child). If multiple windows are available, just type "drug" or "substance" or "cocaine" in the first window, check the "and" connector between the windows, and then type the rest of the text in the second window.
- **3.** See how your search goes and revise 1 and 2 above. For example, "drug" may give you too many false hits, and you may need to exclude it.

Remember:

- "Or" *broadens* the search: "A *or* B" gives everything with *either* A *or* B *in it.*
- "And" *narrows* the search: "A *and* B" gives only those things with *both* A *and* B *in them* (see Figure 3.1).

You can also search for articles by specific authors, using their names and specifying that you are looking for the author's name. In many search engines you can write this as "au=Smith." You can also specify years of publication, language, and type of subject (human versus animal). There is no substitute for just messing around with the search engines. You may well be frustrated for the first hour or two, but you will soon



gain skill and speed in your searching. Most people find it kind of fun after they get used to it.

Neat Trick 1 (Quotes). If you are looking for a phrase in which two words almost always occur together, such as *domestic violence*, you might want to enter those words between quotes. This will only register those articles containing the words next to each other and in that order. This can really streamline your search process.

Neat Trick 2 (Wild Cards). The asterisk (*) is a "wild card" in many search systems. If you enter "abus*," you will get all words starting with "abus," such as "abused," "abusing," "abusive," "abuse," "abuser," and so on. This can be a big help with a lot of words, like *violen**, *neglect**, *argument**, *recover*,* and the like.

HAND REVIEW OF CORE JOURNALS

After a bit of online searching, you will say to yourself something like, "Geez, the *Journal of Imperialist Oppression* is coming up everywhere!" Why not go right to the mother lode? Hit the library, get the last 5–10 years of *JOIO*, pile them up on an empty table, and look through every issue's table of contents. This takes less time than you think, and when you find an article it is already in your hands! Focus on recent journals (see next paragraph for why). If you have online access to the journal in question, you can do this on your computer, and then download or print the articles you want.

BIBLIOGRAPHY SEARCHES

Now you're getting hot. You've got lots of articles already. What is the next step? Look at the articles that are closest to what you are interested in. Read the bibliographies. Obviously, if you see good articles you don't have, you need to go get them, especially if they are cited over and over again in different articles. There are other clever things you can do too. Do some journals keep coming up time after time? If so, and you haven't already reviewed that journal, go do it. Do some author names keep coming up time after time? If so, go do an online search under that person's name.

LIBRARY CATALOGS

Your library probably has an electronic database with books and book chapters. Use it.

LIBRARY SHELVES

Hey, you've found the Library of Congress numbers for your subject, so get your bad self up to the stacks and look at all the books near the ones you found. Chances are you'll find more.

SURFING

Use a search engine (we prefer Google) and cruise the 'Net. Everyone knows how to do this already. Make sure you keep track of where you go and make sure that the sources you use are high-quality (nationally recognized institutions are good). DHHS (www.hhs.gov) is the Waiamea Bay of human services research Web surfing. Go there. You can find out about what's funded, and you can pull boatloads of documents. Once you find key people or institutions relevant to your work, go and track them down online. Many professors have their CVs or cool home pages online, which is a good way to get a listing of their work.

SECTION 3.3.2: HOW TO PHYSICALLY OBTAIN LITERATURE

There are two things you need to know: (1) The best sources are always unavailable, and (2) journal articles can sense desperation and are good at hiding. For these reasons, you should look for sources at least a month in advance of needing them. We procrastinate as much as anyone else, but this is the one place where you will get roadkilled if you procrastinate too much. With these warnings in mind, you will want to find your sources in the following locations:

- Off the shelves: Most journals and books are allegedly on the shelves. Go grab the journals and photocopy them. At the start of a project you will seem to spend more time photocopying than sleeping. Do not check out books unless you want the whole book. Photocopy the pertinent chapter(s) instead.
- Online copies (Internet): Increasingly, full text versions of articles are available online. This is great. Download them to a special directory you create for that purpose. You may want to print them out on paper anyway, both for ease of use and security.
- Through your Library System: Your library may have special features that allow access to things that you can't get to online. Find out about what you have available. Your library almost certainly has an interlibrary loan system. This may be paper or electronic. In either case, you need to allow "several weeks for delivery" in our experience, even if your library claims to be able to deliver things much faster. Somehow that key reference always has something funny going on with it, and you have to wait.
- Photocopying: To repeat: Photocopy everything. We sometimes even photocopy chapters of books that we own (makes it possible to file them or put them in relevant binders). The first thing you must

do is make *absolutely sure* that the date, publisher, journal title, book title, page numbers, author, book editor and whatever else you need for the citation is on the thing you are photocopying. If it isn't, write it in *immediately*. The first time you fail to do this and spend three hours trying to track something down, you will understand why.

• Spending money: There are some things you just plain need. Don't buy too little. Don't buy too much. Buy things that are otherwise unobtainable (like dissertations or little-known books) that you will refer to on a daily or weekly basis.

SECTION 3.3.3: HOW TO PHYSICALLY STORE LITERATURE

Stuff gets away from you. This is bad. Prevent it in the following manner:

- Create directories on your computer for .pdf or similar downloaded articles. In the last year or two (as of this writing in 2007) it has finally become possible to do useful lit searches almost fully online. Increasingly large numbers of articles can be downloaded, commonly in .pdf format. If you can, do it! Make sure you keep these articles somewhere safe, preferably on a backed-up network drive or periodically copied to disks.
- Use a computer reference manager such as Endnotes. This allows you to quickly find stuff, and you can put bibliographies together automatically. The earlier you start doing this, the easier your life will be.
- Keep a list of whom you loan what to. When people want to borrow your material, give them a specific date you need it back. Keep a little notebook indicating whom you loaned what to. Write your name on everything you own in thick permanent felt marker on the outside. That way, even if they don't return it, they'll feel guilty each time they use it.

SECTION 3.3.4: FIVE EXAMPLES OF PRELIMINARY LITERATURE SEARCHES

JOHN'S LITERATURE ON BOSNIAN REFUGEES

John needs to find out about refugees in general, Bosnian refugees in particular, and what we know about what makes them adjust better to our society. Unfortunately, there is nobody else in his school studying this population. He goes to a professor during office hours who teaches a human diversity course who is able to point him to some basic theoretical articles on refugee resettlement. One of these articles (Drachman, 1992) seems to provide a useful conceptual guide for how to think about the entire immigration experience. He then does a PsychInfo search using (Bosnian or Bosnia) and (immigrant or immigration or refugee), which provides 49 hits (a nice, reviewable number). This gets him a number of sources. In selecting which resources he would focus on, John favored those articles that were empirical, that helped him understand the theory and the literature, and that were published in better journals. John avoided a number of articles that were specific to things he had no special interest in (such as marital relationships, young children, and the like) The following examples all came from this first PsychInfo search.

JOHN'S LITERATURE ON BOSNIAN REFUGEES

- Nesdale, D., Mak, A. (2003). Ethnic identification, selfesteem and immigrant psychological health. *International Journal of Intercultural Relations* 27(1), 23–40. This article looked at immigrants from many countries in Australia and found that ethnic self-esteem had little to do with psychological health, personal self-esteem was a better predictor. For John, It provides useful empirical data regarding the role of ethnic self-esteem and identification in promoting psychological health.
- Bemak, F, Chung, R., Pederson, P. (2003). Counseling refugees: A psychosocial approach to innovative multicultural interventions. Greenwood Press, Westport, CT.
 This book describes how a Multi Level Model of therapy can be applied to refugees. It includes a number of case studies including two Bosnians. There is also a nice literature overview. For John, it provides a chance for him to see someone else's background and lit review on the subject, summary of main ideas, and it gives him a chance to "get into" two case studies of Bosnians. This is a great source for John.
- Miller, K., Worthington, G. Muzurovic, J., Tipping, S., Goldman, A. (2002). Bosnian refugees and the stressors of exile: A narrative study. *American Journal of Orthopsychiatry* 72(3), 2002, 341–354. This article, from an excellent journal, does basically what John was thinking of doing. It is a superb qualitative piece which includes narrative data on 28 Bosnian refugees describing them pre-departure, during transition and currently in Chicago. John is initially crushed. They did his idea already! No fair! Upon more reflection, though, he realizes that this just gives him more information upon which to craft a better question. He notices the average age of the person in the study is about 50. That's pretty old. How about younger people?
- Cusak, K. (2002). Refugee experiences of trauma and PTSD; Effects on psychological, physical, and financial wellbeing. Dissertation Abstracts International: Section B: The Sciences & Engineering Vol 62(10), 47–78.
 Western Michigan University. This doctoral dissertation

looks at newly arrived refugees, including some Bosnians, and employs standardized tests to determine predictors of PTSD, quality of life and self-sufficiency. This is an absolute gold-mine for John, since dissertations include lengthy literature reviews, which can aid the search, and this dissertation is only a year old, so most recent literature should be present. Well worth the money to order it (www.umi.com).

- Witmer, T., Culver, S. (2001). Trauma and resilience among Bosnian refugee families: A critical review of the literature. *Journal of Social Work Research & Evaluation* 2(2), 173–187. This overview article looks at the literature, but, unfortunately, focuses on Bosnian Muslims only. Still, a wonderful review, which confirms John's observation that PTSD seems to be the most heavily studied issue with this population. This is a critical reading for John, who can now get a more general view of the literature.
- Mollica, R., Saraljic, N., Chemoff, M., Lavelle, J., Sarajilic-Vukovic, I. Massagli, M. (2001). Longitudinal study of psychiatric symptoms, disability, mortality, and emigration among Bosnian refugees. *JAMA: Journal of the American Medical Association* 286(5), 546–554. This article focuses rather strongly on the period of early departure/camp life, looking at mainly medical and mental health symptomatology. John finds this reading useful to get a better understanding of the early transitional experiences of this population.
- Weine, S., Kuc, G., Dzudra, E., Razzano, L., Pavkovic, I. (2001). PTSD among Bosnian refugees: A survey of providers' knowledge, attitudes and service patterns. *Community Mental Health Journal* 37(3), 261–271. This article looks at service providers, not refugees, and finds they are having real problems even recognizing PTSD among clients, let alone working with them. John needs this article to get a sense for service delivery issues and practical concerns regarding this population.

John's next step was to obtain these articles physically and to obtain the key and commonly cited references in the sources, particularly from the dissertation (Cusak, 2002) and the review article (Witmer & Culver, 2001). This provided him with a nice collection of about 40 articles. A number of trends in the literature are becoming apparent to John. First, there has been some fairly advanced empirical research, but almost exclusively in the area of PTSD, as John suspected. Second, almost all the empirical work has been done in the last few years, with few useful items being more than three years old. Third, there seems to be substantial current interest in this area, with publications in top journals. This all seems to bode well for John's choice for a dissertation topic, since it is a hot issue which has apparently only been studied along the single axis of PTSD. John never

did find a journal which seemed to come up repeatedly in the search, but he did find a sufficient literature base to support his further work. His challenge now is finding an interesting and understudied part in this area which will provide the best fit for his dissertation work.

MARIA'S LITERATURE ON HOMICIDE RATES

Maria, who is interested in community homicide rates, took a backward approach to exploring her area. She started by looking for data she could find online that measured homicide rates. She did a number of Web searches and found that while it was fairly easy to get data at the county level on homicides, it was tough finding anything at a lower level. She eventually found that the San Diego Coroner's office publishes homicide and suicide counts by zip code and has been doing so for two years at www.sdcounty.ca.gov/cnty/cntydepts/safety/ medical/stat/2000mestats.pdf and www.sdcounty.ca.gov/ cnty/cntydepts/safety/medical/stat/2001mestats.pdf. While Maria had not initially thought about looking at suicide rates, the data were available, and it did seem interesting. Would it follow the same patterns as homicides? She found the question interesting and exciting. Maria talked to the professor teaching her social development class about where she could get community data on zip codes to match to the San Diego data. She was told that the U.S. Census (www.census.gov/Press-Release/ www/2002/sumfile3.html) was the best source. A look at the census data dictionary ("Technical Documentation," same Web page) showed her that she could easily find out a large number of interesting things about the residents of each zip code, including income, educational status, racial composition, median age, and so on. Maria now had a source for counts by zip code of suicide and homicide and a source for lots of other information about those zip codes that she could look at. She now had to find out what we know about community homicide and suicide rates. She found the following:

- Centerwall, B. (1995). Race, socioeconomic status, and domestic homicide. *JAMA: Journal of the American Medical Association* 273(22), 1755–1758. This article looked at 349 killings in New Orleans and found that although Blacks appeared far more likely to commit murder than Whites, this difference vanished when neighborhood characteristics (low census tract SES measured as percentage of households with more than one resident per room) was taken into account. (Maria found this interesting. It was going to be critical for her to control for poverty in her study.)
- Harries, K. (1995). The ecology of homicide and assault: Baltimore city and county, 1989–91. *Studies on Crime & Crime Prevention.* Vol 4(1), 1995, 44–60. This article found that three community (tract) dimensions

(poverty-violence, unemployment, stable neighborhood) explained about 50% of the variance in homicide rates, which is a lot. (This was Encouraging. It looked as if she might well find that communites do have big effects. Her work would be more interesting, though, because she was looking at both suicide and homicide.)

Harries, K. (1990). Serious violence: Patterns of homicide and assault in America. Springfield, IL: Charles C. Thomas. This somewhat dated book contains useful information about neighborhood types and homicide rates, including theory and findings. (It's a nice general background work. Maria thought is was too bad it wasn't more recent, containing more recent references.)

Maria couldn't find much else. She noticed that Keith Harries came up a lot, so she "Googled" him. This led her to www.ojp.usdoj.gov/ovc/publications/ infores/geoinfosys2003/welcome.html, which is a Department of Justice site about how to do community mapping. It includes a wealth of citations, including

- Boggs, S. (1965). Urban Crime Patterns American Sociological Review 30: 899–908.
- Brantingham, P. J. & Brantingham, P. (1981). *Environmental Criminology.* Prospect Heights, IL: Waveland Press.
- Brantingham, P. J., and Brantingham, P. (1984). *Patterns in Crime.* New York: Macmillan.
- Harries, K. 1974. *Geography of Crime and Justice*. New York: McGraw-Hill.

It seems as if Maria's literature is fairly narrow and confined to a few particular researchers. This surprised her because she was worried that this area might have been studied to death. The downside, of course, is that there will be relatively little to look at in terms of models of how she should proceed. The good news is that she gets to do some pretty interesting and cutting-edge work. She realized she needed to do a little more review of the suicide literature. She used (kw: suicide and kw: ecology). She also did (kw:suicide) and (kw: tract or kw:zipcode or kw:county). These and other searches resulted in the following:

Wenz, F. (1977). Ecological variation in self-injury behavior. Suicide and Life-Threatening Behavior. 7(2), 92–99. This article looked at census tracts and found that economic status at the tract level did predict suicide rates, with poorer areas having higher rates. (Maria is excited that the data on suicide seems to be converging with the data on homicide, at least as far as SES goes.)

- Connoly, J., & Lester, D. (2001). Suicide rates in Irish counties: 10 years later. *Irish Journal of Psychological Medicine*, 18(3), 87–89. This article found that different factors (age distribution, urbanization) predicted suicide rates in Irish counties at different times. This is another very useful article that looks at a range of factors beyond SES.
- Durkheim, E. (1897). Le Suicide. Paris: Felix Alcan. This author is cited by just about everyone. He outlines four possible ecological or sociological causes of suicide. "Egoistic suicides" are socially isolated people who may be depressed or subject to stressors (poverty, divorce). "Anomic suicides" result from social disruption and have to do with individual feelings of anger and unhappiness. The other two kinds of suicides ("altruistic" and "fatalistic") are rare in our society and do not seem terribly relevant. It is interesting to note that both egoistic and anomic suicides seem as though they might be more common in impoverished areas, which have lower levels of community integration and more stressors. (Talk about ancient history! Maria thought it would be nice to include some historical background about how this area came to be studied, though.)
- Cutchin, M., & Churchill, R. (1999). Scale, context and causes of suicide in the United States. *Social Science Quarterly*, 80(1), 97–114. This very interesting article has a key methodological point: Scale matters. You will get different results when looking at different geographical units, and explanatory power increases at lower levels, so tracts would be better than zip codes, which would be better than counties, which are better than states, etc. (Maria is now very pleased that she is looking at zip code rather than county figures. She is a little worried that she doesn't have tract-level data, but she just can't find any.)
- Lester, D. (1999). Suicidality and risk-taking behaviors: An ecological study of youth behaviors in 29 states. *Perceptual and Motor Skills*, 88(3), 1299–1300. This study is interesting mostly because it was able to find that one factor that individual studies have found to be predictive of suicide at the individual level (drug abuse) is also predictive of suicide at the statewide level. (However, this was not a terribly exciting article for Maria.)
- Jarvis, G., Ferrence, R., Whitehead, P., & Hohnson, F. (1982). The ecology of self-injury: A multivariate approach. *Suicide and Life-Threatening Behaviors*, 12(2), 90–102. This source is mainly of interest for the advanced statistical methods used and the fact that low-SES, high-density housing and single personhouseholds predicted suicidality, but family status and mobility did not. (Maria notices that housing density and living alone seem important. This tends to remind her of the Durkheim book. It seems to be worth checking out Census variables that have to do with this.)

McCullough, J., Philip, A., & Carstairs, G. (1967). The ecology of suicidal behavior. *British Journal of Psychiatry*, 113(496), 313–319. This study found that old, lonely tenement dwellers and younger people from troubled families are at high risk for suicide. This is of interest because both types of person are more likely to reside in low-SES areas—(more confirmation that Maria has to look at living arrangements and density.)

It looks as if there are both theoretical and empirical reasons to suspect associations between some environmental factors, such as SES, and suicide rates.

YUAN'S LITERATURE ON DOMESTIC VIOLENCE

Yuan first went to his agency to find what empirical literature they were aware of. He found several articles suggesting how treatment should be done but not much with evidence behind it. He then decided to look in the textbooks he had, but again, there were few empirical citations. He decided to do a Psychinfo search. Initially, he got few hits, but he eventually stumbled on the terms ("domestic violence," or batterer) and ("cognitive behavioral," or CBT). This worked well and yielded the following.

- Dowd, L. (2002) Female perpetrators of partner aggression: Relevant issues and treatment. *Journal of Aggression, Maltreatment and Trauma. 5(2)* 73–104. This one is not really on topic, as it deals with female perpetrators, but this article is interesting and provides almost 100 citations with generally useful information about the area of battering. (Yuan is mainly interested in this work for the superb reference list. The fact that it is a recent publication helps here.)
- Hamsley, J. (2001). The efficacy of domestic violence treatment: Implications for batterer intervention programs. Unpublished doctoral dissertation. Memphis State University, Memphis, Tennessee. This study seeks to measure conflict resolutions skills, marital adjustment, and emotional functioning as outcome variables (preliminary diagnostic questionnaire, Moriarity, 1981). (Bingo! This dissertation is not too different from what Yuan plans to do, and it seems to be a "must-get." He coughed up the bucks and ordered the document (www .umi.com). This instrument sounded interesting, so Yuan Googled it. He found http://buros.unl.edu/buros/jsp/ search.jsp, a Web site from the Mental Measurements Yearbook with people offering online summaries of instruments and reviews of instruments. While the actual reviews cost \$15 each, and Yuan didn't buy any, he did use it to search for titles and found a number of instruments he could check out later.)

- Buttell, F. (2001). Moral development among court-ordered batterers: Evaluating the impact of treatment. *Research on Social Work Practice*, 11(1), 93–107. This interesting article suggests that batterers, who have very poor moral reasoning, did not have their moral reasoning improved by a CBT program. (Yuan finds this troubling. It seems that CBT will work for some people but not for others. How will he deal with this in his research?)
- Morrel, T. (2000). *Changes in self-efficacy, self-esteem and aggression in male batterers: A comparison of cognitive-behavioral and supportive group therapies.* Unpublished doctoral dissertation, University of Maryland at Baltimore. This study found that treated subjects did better, but CBT and supportive therapy had the same levels of benefit. Self-esteem and self-efficacy gains did not predict decreased spousal violence as reported by the victims. (This definitely could be an important resource.)
- Stof, D., Breiling, J., & Maser, J. (1997). Handbook of Antisocial Behavior. New York: Wiley. (Another goldmine, this seems to be one of the major reference works in the field. It will allow Yuan to look up findings, theory, and methods in the area of violence.)
- Gerlock, A. (1997). New directions in the treatment of men who batter women. *Health Care for Women International*, 18(5), 481–493. Although a bit out of date, this reference has a good review of the literature and applies feminist theory to both treatment and methodological issues. (The application of theory was particularly interesting to Yuan.)
- Hanusa, D. (1994). A comparison of two group treatment conditions in reducing domestic violence. Unpublished doctoral dissertation, University of Wisconsin, Madison. (This is yet another doctoral dissertation with yet more dependent variables, including social skills, sex role rigidity, hostility, anger, and depression.)

Yuan has been fortunate, finding authoritative sources (Stof et al.) and three dissertations on the subject in the last 10 years. The dissertations should be particularly useful, because critiquing methodology as it exists in the field is often a primary focus of doctoral dissertations, and he should be able to build on their work and benefit from their experience.

PROFESSOR KATHY'S LITERATURE ON THE EFFECTS OF MUSIC

Professor Kathy did a search using (kw: music or kw:musical) and (kw: task or kw: performance or kw: completion). This resulted in 2,310 hits—too many. She narrowed her search to citations with these terms in the titles and switched "ti" for "kw," which dropped the results down to 379. This is still a lot, but she decided to go through them, quickly skimming the titles. She found the following citations:

- Stephensen, V. (2002). The Effect of Classical Background Music on Spatial Reasoning Skills as Measured by Completion of a Spatial Task: A Study of Selected College Undergraduates. Unpublished doctoral dissertation, Universidad de Guadalajara, Mexico. Classical music and jazz were tried on people doing mazes. It turns out that Handel speeded people up, but no kind of music made people more accurate. (This was discouraging.)
- Halam, S., Price, J., & Katsarou, G. (2002). The effects of background music on primary school pupil's test performance. *Educational Studies*, 28(2), 111–122. This study found that calming music increased 10- to 12-year-olds' ability to do memory and arithmetic tasks, but students did not do well with music perceived as arousing or aggressive or unpleasant. (While not looking at adults, this study does seem close to Professor Kathy's area of interest, and there did seem to be some effect from the classical music. It seems as if the kind of music is important. Maybe different types of music will need to be studied.)
- Furnham, A., & Strbac, L. (2002). Music is as distracting as noise: The differential distraction of background music and noise on the cognitive test performance of introverts and extraverts. *Ergonomics*, 45(3), 203–217. This article finds that introverted people are more affected by distractions than are extraverts. (Who knew? This could be something Kathy should attend to. This study is getting more complicated by the minute.)
- Johnson, M. (2000). *The effects of background classical music on junior high school student's academic performance.* Unpublished doctoral dissertation. The Fielding Institute. This article found that classical background music was more poorly associated with lower student performance than the silent control condition. This is good—more evidence that this is a worthwhile area to study.
- Otto, D., Cochran, V., Johnson, G., & Clair, A. (1999). The influence of background music on task engagement in frail, older persons in residential care. *Journal of Music Therapy*, 36(3), 182–195. For older people, time spent on-task did not vary by the presence of background music. (Kathy finds it interesting that music has been studied across so many populations. It is also interesting that there seems to be a trend of some articles having positive findings, while others don't.)
- Rauscher, F., & Shaw, G. (1998). Key components of the Mozart effect. *Perceptual and Motor Skills*, 86(3), 835–841. This study reviews the literature on the degree to which some classical music might or might not influence task performance. The authors conclude that there may be a slight effect, but that how it is studied makes a difference. (This one is similar to the last article. It looks as if the differences may be small or elusive. This may require a larger sample size to find small effects.)

Professor Kathy also did some Googling, and the following citations were found on a very useful Web site at Valpariso University. Each came with a summary of the article's findings:

- Furnham, A., & Bradley A. (1997). Music while you work: The differential distraction of background music on the cognitive test performance of introverts and extraverts. *Applied Cognitive Psychology*, 11, 445–455. For complicated tasks, music does not seem to help.
 (This seems OK, because Kathy plans to test the effect on a fairly simple task.)
- Fox, J. G., & Embrey, E. D. (1972). Music—an aid to productivity. *Applied Ergonomics*, 3(4), 202–205.
 This article, based on experiments with factory workers, suggests that music does improve repetitive tasks.
 (This is good news; Kathy's coding work is fairly repetitive, so maybe she might find something.)
- Smith, W. A. S. (1961) Effects of industrial music in a work situation requiring complex mental activity. *Psychological Reports*, 8, 159–162. Card-punchers (it has to do with old computers) did about the same with music or no music, but reported that they were happier with music. (Should she study the happiness of her student coders? Will anyone care? Probably not.)

In summary, there seem to be several threads of research. First of all, there is research finding perhaps a slight benefit to music in terms of people doing repetitive tasks. Second, there is interest in the degree to which the introversion/extroversion of the subject may make a difference. Third, there seems to be the issue of different types of music having different effects. There is an idea that sometimes music may hurt performance if it is too annoying or intrusive. This seems like a good start.

ABIGAIL'S LITERATURE ON CHILD WELFARE

Abigail has decided to look at child welfare supervisors and see if their particular supervisory skills predict client outcomes. She looks at the supervision literature, as supervisors seem to be an important link between workers and their organizations.

- Bibus, A. (1993). In pursuit of a missing link: the influence of supervision on social worker's practice with involuntary clients. *Clinical Supervisor*, 11(2), 7–22. This article provides useful context and background for CPS supervision. (It's not really directly relevant, but it can help Abigail flesh out her introduction.)
- Flynn, R. (2001). External influences on workplace competence: Improving services to children and families. In Foley, P., Roche, J., et al. (Eds,). *Children in*

society: Contemporary theory, policy and practice. (pp. 177–184). Buckingham, England: Sage Publications. This one provides a nice overview of how external sources can affect children through the workers' services. (It will be more helpful background.)

- Glisson, C., & Durick, M. (1988). Predictors of job satisfaction and organizational commitment in human service organizations. *Administrative Quarterly*, 33, 61–81.
 These authors help us understand how workers' happiness and attitude toward the workplace can vary based on other factors. (Although it's an interesting article, it doesn't seem to bear directly on client outcomes.)
- Glisson, C., & Hemmelgarn, A. (1998). The effects of organizational climate and interorganizational coordination on the quality and outcomes of children's service systems. *Child Abuse & Neglect*, 22(5), 401–421. These findings suggest that managing conflict, fostering cooperation, and helping workers assume clear roles might have a positive impact on client outcomes. (This appears more useful, more related to Abigail's specific area of interest.)
- Himle, D., Jayaratne, S., & Thyness, P. (1991). Buffering effects of four social support types on burnout among social workers. *Social Work Research and Abstracts*, 29, 22–27. This article looks at supervisory social support and impacts on burnout. (Abigail hadn't thought directly about burnout. Maybe supervision affects clients mainly through lessening worker burnout? Should she study this?)
- Holloway, E., & Neufeldt, S. (1995). Supervision, its contributions to treatment efficacy. *Journal of Consulting and Clinical Psychology*, 63(2), 207–213. This article asserts that there is very little research that looks at the relationship between clinical supervision and client outcomes. (Abigail had noticed this. It is nice to have someone she can cite as saying that the area isn't too strongly studied, though.)
- Perry, E., Kulik, C., & Zhou, J. (1999). A closer look at the effects of subordinate–supervisor age differences. *Journal of Organizational Behavior*, 20(3), 351–57. This one provides reason to suspect that the age difference between supervisor and supervisee may be an important factor in their relationship. (It seems not to be too relevant, but maybe age is something Abigail should track in her work to see if it matters. She hadn't thought of that.)
- McFadden, E. (1975). Helping the inexperienced worker in the public child welfare agency: A case study. *Child Welfare*, 54(5), 319–329. This qualitative work, although aged, provides some useful background "feel" to the issue. (It's nice to read something that makes sense on a human level, even if it is horribly out of date.)

These sources have shown Abigail a number of things. First of all, her area has been looked at, and there seems to be a person (Glisson) who is cited a lot and seems to be the main researcher in this area. There has been work done on how organizational and supervisory factors affect workers, especially with regard to stress and burnout; and also a small amount has been done on how supervisory factors affect clients. Abigail now has to think about how she will narrow her question. The more she thinks about what she has found, the less interested she becomes. She finds herself wanting to look at something more tangible. As she is looking through the sources, one article in particular catches her eye:

Gustavson, N., & MacEachron, A. (2002). Death and the child welfare worker. *Children and Youth Services Review*, 24(12), 903–915.■

This article interests her for a number of reasons: The field of client death seems to have some linkage to theory but appears understudied with regard to child welfare workers. It is in an area that Abigail understands, and there seem to be practical implications surrounding how child welfare workers handle the death of a child on their caseload. Does it lead to them quitting? Do they become less effective if they don't deal with it well? Although most of the literature seems to look at helping professionals in general, it seems that child welfare might be a special case because child welfare workers are specifically charged with the safety of their child clients as their primary focus and make critical decisions regarding their safety on a daily basis. Furthermore, fatalities on child welfare worker caseloads are likely to be homicides, whereas many psychotherapeutic caseload deaths are suicides. Finally, the agency that Abigail worked for was interested in this issue. She seems to recall them having some kind of training on it. Perhaps they would be interested in hosting the research?

The literature that Abigail finds is scant, and she gets a good deal of it from the references in the Gustavson & MacEachron article:

Bendiksen, R., Bodin, G., & Jambois, K. (2000). The bereaved crisis worker: Sociological practice perspective on critical incident death, grief, and loss. In Lund, D. A. (Ed). *Men coping with grief* (pp. 253–272). Amityville, NY: Baywood Publishing. Again, we get medical and police/rescue workers, but it does provide interesting ideas, including the importance of venting the pent-up emotions following a death. (This could be helpful in terms of thinking about what factors might be important.)

- Burrrell, L. (1996) *The impact of experience, exposure and support on emergency worker health*. Dissertation Abstracts International, Section B: The Sciences and Engineering. Vol. 57(6-B). 4067. This very helpful dissertation includes information on the manner in which social support seems to mitigate the negative effects of client death. The sample is of medical crisis response workers (EMTs). (Social support makes a lot of sense to Abigail as a key factor; this seems worth looking at.)
- Defey, D. (1995). Helping health care staff deal with perinatal loss. *Infant Mental Health Journal, 16(2),* 102–111. This article is useful because it looks at reactions to the deaths of young children, and most child abuse fatalities are quite young. (Although Abigail isn't finding lots of material directly in her area, she is finding that parts of her area have been studied in isolation. On one hand, this is frustrating, but it also suggests that there is plenty of room for her to do what she wants.)
- Moore, K., & Cooper, C. (1996). Stress in mental health professionals: A theoretical overview. *International Journal of Social Psychiatry*, 42(2), 82–89. Theoretical overview articles are always useful in the early stages of a project, even if they are not exactly on topic. (This can at least give Abigail a citation for talking about stress among helping professionals in general, even if it isn't exactly the right profession.)
- Rowe, M. (1997). Hardiness, stress, temperament, coping, and burnout in health professionals. *American Journal* of *Health Behavior*, 21(3), 163–171. Burnout may be an area of interest. (This article helps Abigail get focused on that issue and think about if it is something she wants to look at in particular.)

As a result of her literature review, Abigail has now decided to radically switch her focus to child fatalities and how workplace and other factors are associated with better or worse worker outcomes. She thinks that she will have to look at work environment and the worker's home environment and see how these correlate with either better or worse functioning following the death of the child client. Admittedly, this is still somewhat fuzzy, but Abigail hopes it will come together a little bit better in the design phase.

SECTION 3.4

REVIEWING THE FIELD

We have looked at the academic literature, but if our work is going to be practically relevant, we need to know more about what is actually going on in the community. If you are doing basic science (science meant to find things out without concern for practical application), then you may skip this part altogether. Many times, people come to an area of interest because they have some field experience and so are already familiar with how their issues play out in practice. Sometimes, however, people decide they want to look at an issue that is new to them and about which they know basically nothing. In the world of social science, there are few things as frightening as a researcher using standardized instruments and sophisticated statistics to study an area he or she knows nothing about in a practical sense.

How do you learn more about your area? Conferences are good. General handbooks can also help, such as the *Handbook for Child Protection Practice* (Dubowitz & Depanfilis, 2000). In the end, though, there is really no substitute for experience. Is it possible for you to contact someone who does the work you are interested in? Can you buy that person lunch and get feedback about your ideas? Is there anything like a "ride-along" available in your area of interest? Once you settle on an area of career interest, the best alternative is for you to work or volunteer in the area, even if it is for only a few hours per week. There is really no substitute for having experience working with the population you study. If you don't have such experience, we strongly recommend you get some.

Among our examples, John has had experience working with Bosnians at a refugee service center, but he doesn't know much about the community otherwise. As a next step, John decides to find out about local agencies serving Bosnian refugees. His school's practicum office knows of several supervisors who work in these agencies, and the Assistant Director of Field knows one personally. John uses this contact to get in touch with this person, invites her to lunch, and is able to quickly pick up an introduction to the Bosnian social service scene in his town. It mostly revolves around the Resettlement House, a local service center for refugees that serves several hundred Bosnians. John now has at least a general idea of what science is being done and what agencies are working with the population in his area. He also decides to broaden his knowledge of the population by reading what he can find about them, attending cultural events hosted by the community, and starting to do some volunteer work at the Resettlement House. He still has not specified his question, and isn't sure what theories will guide him. This is his next task.

Abigail talks to her old supervisor and finds that there may be a great deal of receptiveness at the county, or maybe even the state, level to doing a study of workers who have had clients die. She is excited about the opportunity to do research within a system she knows so well.

Maria decides that she can make better sense of communities and violence by talking to police officers. She decides to do a number of ride-alongs in poor and in wealthy areas. This enables her to both get a better sense for the people and events in these neighborhoods and to get feedback from police about their perspectives on what goes on and why.

Yuan, while not as experienced as Abigail, does understand how work is done at his agency. His biggest need is to understand the specific intervention being tested, CBT, and how it may be used in other agencies. It might be useful for him to contact people at other agencies who use the model and find out more about the issues that have arisen in their experience.

Professor Kathy is doing work that has practical application only to professors and research assistants. She already knows all about that, so she does nothing special to learn more.

SECTION 3.5

UNDERSTANDING YOUR LITERATURE

After your initial literature review, you need to check to see that you can answer the following questions:

- 1. What questions have been asked by others in my area?
- **2.** What populations have been studied and at what level (i.e., individual, community, and so on)?
- **3.** What constructs or variables have been looked at?
- **4.** What instruments (tests) or other measures have been used in my area?
- **5.** What theories exist to tell me how to think about my area or what relationships are likely to exist there?
- **6.** What kinds of designs (experimental, correlational, and the like.) are used in my area?
- 7. What are the main empirical findings in my area?
- **8.** What needs to be studied next in my area?

Your next task is to look at the literature you've got and try to see if you can answer the above questions. If you can't, then you need to go back and fill in the gaps with more literature. We will describe each of the above points in detail.

SECTION 3.5.1: WHAT QUESTIONS HAVE BEEN ASKED BY OTHERS IN MY AREA?

Perhaps the easiest question to answer is what research questions others have asked. Any competently written research article will tell you precisely what questions are being asked and how these questions build on prior work. Unless your area is brand new, you may notice that there will be clusters of studies that look at particular issues and reference each other. Try to see what the big issues are in your area. Note carefully exactly how the questions in your literature are phrased and try to see if these questions make sense to you. A good question should be clear, testable, and meaningful. One problem that stops many of our students dead is that they can't find many articles relating to their precise question. If you can't find literature in your area, find literature about the closest thing possible. For example, let's say you want to do a study where you try to raise the self-confidence and improve the self-image of very young amputees (4 to 6 years old). Let's say you can't find much on it. What you would do is go to the literature on adolescent or adult amputees and their adjustment and see what you could find there. You would also go to the developmental literature on young children and see what that would contribute to your work. Possibly there is a parallel literature (say, on working on psychological issues with children with cancer) that you could tap. Nobody is going to blame you for broadening your sources if there is no alternative. In short, if you can't find it, find the next closest thing.

Understanding what the questions in your area are allows you some room for creativity and critical thought. Do the questions make sense to you? Are they studied in a way that fits with what you know from your experiences in the field? Are there questions that are not asked but that strike you as critical? Time spent thinking about these things is time well spent.

SECTION 3.5.2: WHAT POPULATIONS HAVE BEEN STUDIED, AND AT WHAT LEVEL?

Researchers often focus on particular groups of people for no scientifically valid reason. For example, college freshmen are not typical Americans, but vast amounts of research have been done only on them, just because they're available. Some fields (psychology) have been criticized for focusing almost exclusively on middleclass Whites. Other kinds of work, such as poverty studies, have spent quite a lot of effort on some populations (poor inner-city residents) while largely ignoring other groups (the rural poor). You should use your common sense and see if the questions being asked match well with the populations studied. Are racial, class, sexual orientation, gender, and other critical forms of diversity within our population being well covered?

What are the units of analysis in the studies you reviewed? We'll discuss units of analysis in Chapter 3, but basically, the unit of analysis is the level at which you sample, score, and analyze. If I were to do a study on which city has the best quality of life, my unit of analysis would be the city. If I were to do a study on surviving cancer after taking a given drug, my unit of analysis would be the person (cancer patient). Most studies use individuals as the unit of analysis, but other levels, including families, groups, organizations, census tracts, zip codes, cities, counties, or states are used. Sometimes the unit of analysis is a measure of time, such as a day. We recently submitted a grant in which we counted the number of violent events each day in a four-year period in an attempt to try to understand the degree to which violent sporting events might be associated with rises in violent acts. Ask yourself what level your question has been explored on, and see if you can think of other ways to look at your issue at different levels of analysis.

SECTION 3.5.3: WHAT CONSTRUCTS AND VARIABLES HAVE BEEN LOOKED AT?

Constructs (things, concepts, events, and the like) are the things we study. When we look at them in a highly operationalized form, we call them variables. In this sense, depression might be the construct you want to study, but you may operationalize depression as the subject's score on the Beck Depression Inventory. The score from that scale is now your variable representing depression. Sometimes researchers get clumsy or lazy or just plain do bad work, and you may find yourself easily confused. For example, many studies will list "mental health" as an outcome, but will measure only subject depression. This is not a global measure of "mental health" at all, just of a single part of it. Other times, a researcher may operationalize "job exit" as the person's stated intention to leave the job, while another researcher may operationalize the same construct as the actual exit. These are very different.

You should be familiar with the constructs and variables in your area. Do they include the things you want to study? Do you agree with how constructs are turned into variables? Is some key construct or variable missing? Do the constructs apply well to the people you want to study?

There may also be considerable debate in a given area regarding the appropriate construct or variable to use. For example, Papadopoulos and Lee (2002) point out that there are yet to be agreed-upon means of measuring or controlling for culture across studies and disciplines. Berry and colleagues (2002) detail several aspects of culture that one might consider in research. Further, one should always check out constructs with members of the population to be studied. Different cultures may have very different ways of defining and discussing various concepts of interest (Boynton et al., 2004; Pan, 2003).

SECTION 3.5.4: WHAT INSTRUMENTS (TESTS) OR OTHER MEASURES ARE USED?

Most studies have very specific ways of measuring variables of interest. This will commonly take the form of a score on a test (we call these tests "instruments" so that we can impress people at cocktail parties and charge more for our services). Sometimes there will be broad agreement about how to measure something. For example, the Beck Depression Inventory we mentioned above is very commonly used for measuring depression, while the CBCL (Child Behavior Checklist) is commonly used to measure children's emotional and behavioral problems. Instruments have different strengths and weaknesses. To stay with the example of the Beck Depression Inventory: This instrument gives you a continuous score, which is very useful for most statistical analyses, but it does not tell you other things. If, for example, you want to know if someone meets the current diagnostic criteria for depression, then you can't use the Beck, because it does not conform to diagnostic criteria for depression as found in the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR). You want something like depression section from the DIS-IV (Diagnostic Interview Schedule – IV), an instrument designed to test whether or not someone meets DSM-IV-TR diagnostic criteria.

You need to have a pretty clear understanding of what instruments exist to study the constructs you are interested in. The best way to do this is simply to see what others have used. We would also recommend the Mental Measurements Yearbook site (http://buros .unl.edu/buros/jsp/search.jsp). Another good resource specific to children and youth is Conducting School-Based Assessments of Child and Adolescent Behavior (Shapiro & Kratochwill, 2000). Finally one must consider whether or not a given measure has been used with your population. There may be cultural biases in instruments due to conceptual differences, linguistic issues, or other problems. The New Handbook of Multicultural Assessment: Clinical, Psychological, and Educational Applications (Suzuki et al., 2000) is a great resource for helping you to understand if a measure is culturally appropriate.

SECTION 3.5.5: WHAT THEORIES EXIST TO TELL ME HOW TO LOOK AT MY DATA OR WHAT RELATIONSHIPS ARE LIKELY TO EXIST IN MY DATA?

Understanding what theories to use and how to use them is very important. It is also probably the most difficult part of the entire research process. The role of theory in your work will depend entirely on the issue you are interested in studying. Just like understanding variables or instruments, a good place to start with theory is to see what other people are using. It is not plagiarism or copying to base your work on the work of others. It is how science works. We call this "knowledge building." What you can't do is take credit for the work of others.

Right now your task is to find out about the theories that are important in your area. Good articles will overview the theories on which their design is based. It shouldn't be too difficult to see what theories are commonly used or even dominant in your area. For example, in the treatment of phobias, you will quickly find that many studies test behavioral or cognitive behavioral treatments. You will find relatively few studies on phobias examining the efficacy of treatments based in humanistic theory. As in the other areas, you need to think for yourself here. Do the theories match up with the research populations, questions, and designs in a clear way? It will almost certainly be necessary to go back to the literature and find more sources on the theories that are most commonly used or most appropriate to you.

SECTION 3.5.6: WHAT KINDS OF DESIGNS ARE USED IN MY AREA?

This will make more sense to you later, but try to figure out how people are doing research on your subject. Do they all use experimental designs (see next chapter)? Do any of the articles you have found say they are "longitudinal"? Are qualitative methods used? Try to get a sense for what ways that researchers are approaching the area, so you can approach your own design with some background and the benefit of the prior work of others. You probably aren't at a place where you can really critically figure all this out yet, but don't worry, we'll get there.

SECTION 3.5.7: WHAT ARE THE MAIN EMPIRICAL FINDINGS IN MY AREA?

It can be confusing just listing out the findings from each article you read. Try to figure out what the big and consistent findings are. Which findings come up over and over again? Which hypotheses are consistently supported or are consistently not supported? Are there strong trends that generalize over time and across populations? Try to get a sense for the larger and more important empirical findings in your area. Try to determine if the findings in your area represent large and meaningful differences, or if they simply report small effects that barely manage to reach statistical significance. For example, many studies find that boys are five or ten times as likely to become delinquent as girls. This is a big difference that matters. Other studies have found that birth order may influence IQ by a point or two. This is a small difference that has no practical importance.

You ought to be able to describe the findings in your area in simple terms. You should be able to say things like "The literature consistently reports a strong relationship between X and Y," or "We have reports only of weak or nonsignificant associations between X and Y." Don't panic, we'll teach you all about things like association and significance as we go forward. For now, just try to get a sense of what your literature says.

SECTION 3.5.8: WHAT NEEDS TO BE STUDIED NEXT IN MY AREA?

This is an easy one. Most articles end with a paragraph or so that tells the reader what kinds of research need to be done in the future. Simply go to the articles you have found and read what the authors have to say. Dissertations can be particularly good for this. This is another place to use your creativity. Start with these questions:

- What key questions are unanswered?
- What issues have been raised recently that need answering?
- What policies, events, or changes in the world suggest a new slant on the research?
- Have all important populations been studied with regard to your question?
- What strikes you as missing or important to look at?

SECTION 3.5.9: EXAMPLE PROJECTS— UNDERSTANDING THE LITERATURE

We will now look at our five friends and see how they are doing with regard to these issues.

John. John has found a decently sized literature on Bosnians. In order to find out what form his research should take, he'd like to find some important gaps in the current work that he can exploit. Two themes have emerged. First, it is obvious to John that PTSD was getting all the attention. Second, there seems to be a real lack of any focus on strengths (Whitmer & Culver, 2001) in the literature. As far as researchers are concerned, the issue is mental health (meaning PTSD), and that seems to be that. While John was originally planning to focus his work on PTSD, the lack of research in other key areas is too tempting to miss. So John searches for strengths or resiliency among Bosnian refugees and finds almost nothing except some qualitative descriptions of services that had been provided from a strengths perspective. John is starting to think that finding out more about the strengths of the Bosnians and how these strengths help in supporting mental health and economic success might be interesting, important, understudied, and fundable. More in-depth review of his sources brought up some interesting findings in this regard. Nesdale and Mak (2003) found that psychological health was higher among refugees with higher levels of personal achievement in their new cultures. Miller and colleagues (2002) found that lack of mastery in a range of areas was among the primary issues faced by Bosnian refugees in Chicago. A very common finding is represented by Baker (1988) who mastery of language most important things in adapting to life in America. How should John look at this strength stuff? He has no idea and needs some theory. One of his identified sources is a large book that seems as though it might have a nice theory review section (Bemak, Chung, & Pedersen, 2003). From this source, he identified two possible theoretical models to use and found that Berry and Kim's model (Berry & Kim 1988) seemed like a good fit. That model discussed four different types of acculturation and related them to mental health outcomes. John is beginning to believe that he would like to use this model, in conjunction with a focus on strengths, to look at different kinds of mental health and economic outcomes among Bosnian refugees.

Abigail. Abigail has chosen to look at how client death affects child welfare workers. She is beginning to thing she is interested mainly in how client death may or may not lead to more or less trauma for different workers. From her readings, she has found that both a positive work environment and social support from family and friends should be helpful factors. As far as she can tell, there has been no empirical work to date looking at child welfare workers and their response to client fatality, but she does have models she can draw from that have been developed with populations of medical professionals.

Maria. Maria has found theoretical reasons why she would expect homicide and suicide rates to be higher in some zip codes as well as a modest number of studies, mainly at the county or higher levels, showing how this is done empirically. Maria is in a good position at this point because the census variables available to her will allow her to track most of the things that interest her (poverty, housing, age, race, and the like), and her level of analysis (zip code) will provide her with better (finer level) data than have been previously found at the county level.

Yuan. Yuan has found both theoretical and empirical sources that pertain to CBT and domestic violence. If anything, he has too many possible paths open to him, especially in the area of constructs and variables of interest. He has a range of outcome variables he can choose from, including a number of scales measuring various kinds of conflict or violence. He also has the

option of studying events, ranging from perpetrator or spousal accounts of violence to a review of police records (if he can get them). The particular form of CBT to be used by Yuan's agency has a heavy emphasis on blocking violent behavior through teaching alternate means of conflict resolution, so some measure that looks at how the family handles conflict, and how it changes over time, would seem logical.

Professor Kathy. Professor Kathy just wants to know if playing music cuts down on errors. She is going to minimize the role of theory in her work and test just the expected relationship. This is because she doesn't care at all why music might reduce errors, she just wants to see if it does. Based on her review of the literature, it looks as though she will want to use some kind of easy-listening or classical music, because music that is more modern might be intrusive or distracting. Her key concepts are listening to nonintrusive music and performance in research coding tasks. Her population is going to be her research assistants. Her overall goal is to see if she (and other researchers) should use background music for her coders.

SECTION 3.5.10: ETHICAL ISSUES FOR OUR SAMPLE PROJECTS

There are no ethical issues at this stage that prevent the researchers from going forward with their questions of interest. In other words, none of them are proposing something so dangerous to them or so potentially harmful to subjects or so unimportant as to be a waste of resources. There will be, however, ethical considerations for our researchers as they move forward into the design of their study. These will be dealt with in detail in subsequent chapters but are overviewed here.

Maria will be using data at the zip code level from the census, assuming that similar aggregate data can be found for suicide and homicide. Her study involves little human subjects consideration, low resources, and is important. If she uses only publicly available data, then she will have no concerns about confidentiality.

John will have to carefully consider potential vulnerability due to immigration status, the sensitivity of the questions he will ask, how to address issues if a subject seems to need services, and confidentiality. It will be important for John to get to know more about the culture and the local population. Finding a local leader and discussing the issue will be an important next step.

Abigail's sample will be dealing with a traumatic issue, so care will be required to have a counselor or other resources available to support subjects who may have negative reactions. It will need to be made clear to subjects that their employment will in no way be affected by their decision to participate and that their employers will not be given access to confidential data. Yuan's topic is important, and the agency is likely to support access to a sample. One concern is that he may be studying mandated clients, and they may potentially feel coerced into participating. Because recidivism is a harmful occurrence for the partner of the subjects as well as the clients, it is especially important that the study must not include withholding treatment that would otherwise have been provided.

Kathy has already selected a nonintrusive form of music, is sampling adults, and is not asking potentially harmful questions. She will just have to insure that students are not feeling pressured to participate due to grades or fearful of termination of a job as a research assistant. She might also have to consider possible stress reactions to the task.

SECTION 3.6

YOUR CONCEPTUAL FRAMEWORK

This is where you move from simply reporting what others have said to more carefully defining your personal area of interest. We use the term conceptual framework to mean what constructs and relationships you are interested in, how they might fit together, whom you are interested in (your sample), and what theories underlie your work. The issues of how, where, and when you do your study are all part of your design and will come in the next chapter. Students (and most professors) typically jump to the "how" of design before they understand the constructs they are studying (what), their population of interest (who) and the practical issues and theories underlying their work (why). This leads, almost without exception, to people who don't really understand what they're doing. This results in people having bad experiences and needing to go back to the proverbial drawing board.

TRUE STORY

Many years ago, one of the authors sat in on a session in which a senior professor's initial draft of a grant was being critiqued. Two of us (including the author) thought the grant looked fine. The final reviewer, however, pointed out that when you really looked closely, the theory being used as a basis for the work had absolutely nothing to do with the constructs that were being measured. As the reviewer went on, it quickly became apparent that the single-spaced 20-page draft we had in our hands was built on a bad foundation and needed almost total revision. The problem was that the professor had done the design first and added supporting theory only later. Because the design was not built on the theory, theory and design did not really fit together. There was no amount of revision or creative writing that could cover up the fact. As a side note, it might be worthwhile focusing on the researcher's response. She was taking rapid notes. She did not get defensive and did not argue, she understood that the person was right, and that the person was doing her a real service. Instead of getting annoyed, she asked questions like, "How can I approach this in a different way?" or "Do you know of any other theoretical approaches which might be a better fit?" Not only did her response show tremendous strength of character, but it was exactly the best way for her to get the feedback she needed to move forward. The grant was later funded by the federal government.

So don't go backward. Don't start with a plan for what to do; start with a clearly defined framework that describes what you are interested in. A good conceptual framework is shown in Table 3.1.

SECTION 3.6.1: CONSTRUCTS

Constructs are the things we study. They can be almost anything, from traits to opinions to events to treatment interventions to virtually anything you can think of. They all share several things in common, though. Usable constructs are easy to understand and specific and can be transformed into variables that are clearly operationalized and measured. Constructs can be concrete things, like weight (that's already a variable), or they can be more conceptual, like "depression." The less clear and specific your constructs are, the more work you will have to do in transforming them into measurable variables. Ideally, constructs should also have practical importance. Just as all questions are not equally important, all constructs are not equally important. For example, hunger was a serious social problem in the United States

TABLE 3.1. Key Elements of a Conceptual Framework.

Constructs

- A description of the constructs you are interested in
- A description of the practical relevance and importance of these constructs
- A description of what theories relate to these constructs

Relationships between constructs

- A description of the relationships between constructs you expect to find
- A description of how the theories you use lead you to expect these relationships

Populations to be studied

- · A description of whom you are interested in studying
- A description of how the constructs and theories you use are appropriate to this particular population

50 years ago. It is a less critical issue today. Even among the very poor, obesity is probably a far greater threat to health than hunger. Concepts relating to poor nutrition (lack of the right foods, surplus of empty calories) would be a far more important thing to measure than low caloric intake, at least in the United States.

SECTION 3.6.2: RELATIONSHIPS BETWEEN CONSTRUCTS

Relationships between constructs are the things we test in our models. Many of the relationships between constructs are so obvious that you might not even notice them. For example, anyone studying delinquency is likely to understand that the construct of gender is strongly related to delinquency (there are more delinquent boys than girls). Relationships between constructs are a big part of what social science is all about. You are probably not very interested in just measuring your constructs in isolation but instead want to know how they relate to something. For example, if people using my new cancer-fighting drug have a recovery rate of 30%, I have no idea if that is good or not. I need to compare that rate to a recovery rate among similar people who don't get my drug but instead get treatment as usual. I have two constructs, treatment recovery rate with my drug (0 to 100%) and recovery rate without my drug (0 to 100%). If people who take my drug have higher recovery rates, I say that giving my drug is associated with higher rates of recovery.

The big issue is this: How do you know what relationships to look for? This is where theory comes in. There may be any number of theories relating to your constructs. These theories may describe how your construct develops or is caused (etiology), how it is spread across society (epidemiology), and what other constructs are related to it. You must know these theories. The relationships you will be looking for will come from them. If you cannot show how the relationships you are exploring or testing are derived from or related to theory, your work may not be taken seriously.

Sometimes your area is so new that there is little theory present. In these cases, your work will probably be mainly descriptive (describing what's out there) or exploratory (finding out what's there) and inductive (gathering facts on which to build new theory). However, you still need some kind of theoretical framework to specify what you want to describe. You never just go charging out with nothing in your head. It just isn't possible. Your reasons for choosing to look at what you look at in a descriptive study are probably based on some general perspective, such as a systems approach (the idea that we have to understand not only the individual, but the social systems he or she is a part of) or a developmental approach (the idea that people think, act, feel, and require different things at different ages). In such a case, go ahead and state that your work is being done under the general theoretical orientation you choose and discuss how this orientation shapes your work.

This last point deserves some emphasis. If you can't find a specific theory that relates to your question, you may have to move out to broader theories or paradigmatic approaches. This is undesirable but may be necessary. You should try to find the smallest-level, best-fitting theory you can. At the broadest level, a surprisingly large number of scholarly works claim to be based on an "ecological" or "systems" theory, framework, or paradigm. This often happens when a researcher can't find a theory to tightly fit the question. What to do? Because a good deal of social research attends to factors in the environment of the subject, one can often fall back and call one's work "ecological." Of course, this is having a theory only in the vaguest possible sense and is really more of having a "paradigm" or "approach."

SECTION 3.6.3: POPULATIONS TO BE STUDIED—SPECIFICATION AND ETHICAL CONCERNS

Your conceptual framework must reference whom or what you are studying. This includes a description of the people, organizations, or whatever that you will be including in your research. You need to explain clearly how the populations you include in your conceptual framework are appropriate to the constructs you have chosen and the theory you are using. For example, many studies have been criticized for using only easily available populations. College students are common subjects, but this might not help you find out about the population as a whole.

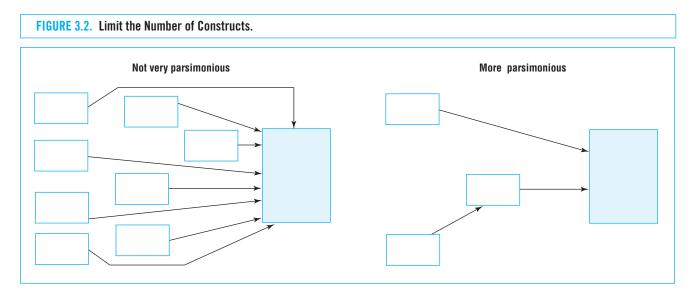
A serious ethical concern is the underrepresentation of women and minorities in the literature, which was especially serious in decades past. People applying for grants to many federal agencies (e.g., NIMH) are required to write special sections that explain how the proposed research will sample and apply to a broad range of people. This is so that the benefits of the work can be shared by all kinds of people. There are exceptions to this, obviously. If you are studying something that mainly affects one type of person (e.g., male pattern balding, Tay-Sachs, or sickle-cell anemia), then it is reasonable to include only the people to whom that issue pertains. Furthermore, you may have theoretical reasons for only sampling one segment of the population. For example, you may want to look at African American male homosexuals exclusively, because you believe the issues facing this population may be quite different than those faced by Whites or other ethnicities. In our own work, we have often limited our research on child abuse and neglect to poorer, urban populations. We justify this on the grounds that this is a population of particular practical importance, comprising a large part of child welfare caseloads. In short, you do not have to study everyone all the time to be ethical, but you also should try not to contribute to the tendency of research in some areas to hurt a group of people by chronically ignoring them.

SECTION 3.6.4: PARSIMONY

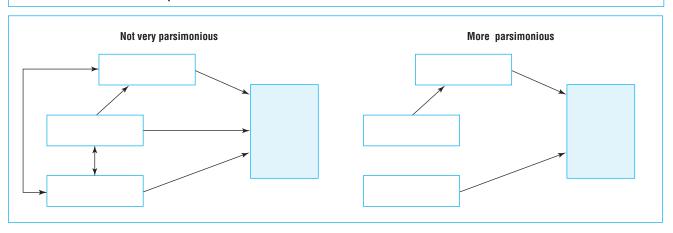
Parsimony is a ten-buck word for "simplicity." We are all familiar with the advice, "Keep It Simple, Stupid," often abbreviated as KISS. This applies to conceptual models just as it does to most things in life. You can achieve parsimony in your model by doing the following:

How to BE PARSIMONIOUS

Limit the Number of Constructs. Just include those constructs that you expect will have meaningfully large effects on the model (Figure 3.2). If income was previously shown to account for 1% of the variance in what







you're studying you probably should leave it out of the model.

Include Only Relationships That You Have Good Theoretical Reason For or That Other Studies Have Found in the Past. It is tempting to say, "Gee, maybe everything relates to everything! Let's see!" This is bad. A model that specifies (draws lines for) all possible relationships between constructs is "saturated" and can cause some statistical analysis programs to refuse to run (Figure 3.3). Your model must reflect your best judgment about the most important relationships you hope to find. *Warning:* Later we will use again use the word *saturated* in the qualitative analysis chapter. *Saturated* has two totally different meanings in research. A saturated theoretical model is bad, but reaching saturation in a qualitative analysis is good. Sorry about that.

Does this mean you must always use the simplest possible model? Absolutely not. In the above example, the diagram on the left is very heavily specified (almost everything is related to almost everything): If that's what theory or evidence suggests is best, however, you may have to sacrifice some parsimony. Your models don't have to be parsimonious, but you should have a darn good explanation for why they aren't.

SECTION 3.6.5: EXAMPLE PROJECTS— CONCEPTUAL FRAMEWORKS

Let's have a look at the conceptual frameworks for our five sample cases.

John. John is interested in the constructs of strengths and acculturation. He has found relatively little on this, however, and feels that he should start his research by consulting the Bosnians themselves and getting their perspective. He believes that he may therefore be

pursuing a more qualitative approach. Because John is planning to go into the community and get the perspectives of the people he is studying, he feels he should allow them considerable scope in defining strengths. As for acculturation outcomes, he is planning on seeing how well Berry and Kim's (1988) model will serve as a framework for understanding what the Bosnians have to say about their own experience. This model specifies four different acculturation outcomes. These are assimilation, in which an immigrant abandons his or her prior culture and becomes Americanized; integration, in which the immigrant maintains parts of his or her culture but also joins with the American culture; separation, in which the immigrant retains his or her culture entirely and rejects American culture; and marginalization, an early stage in the process in which the conflict and crisis of immigration cause the person to be isolated from both his or her culture and American culture. John expects that he will find that the Bosnians he talks to will be able to give him information on what strengths lead to more positive acculturation outcomes (integration) and relatively rapid transition through marginalization. He expects his subjects will report a lack of strengths to be associated with separation and extended marginalization. John expects to find local Bosnian immigrants and interview them, either individually or in groups. He intends to give them wide latitude in how they respond, but he also wants to get his core questions answered.

Abigail. The more Abigail thinks about it, the more she realizes that her question might best be phrased "Are environmental (work, family, friends) factors associated with different responses to child fatality among child welfare workers?" She consulted a reference book of psychological tests (Corcoran & Fischer, 2000) and has found some measures that look like they might be helpful in capturing her constructs of interest and answering her theoretical questions. These include the following:

- The Impact of Events Scale (IES), by M. Horowitz, produces two subscales measuring bad psychological outcomes of a traumatic event. These include intrusive experiences (can't stop thinking about the event, bad dreams, and the like) and avoidance (trying not to think about the event, avoiding places that make you remember it, and so on).
- The Social Support Behaviors Scale (SSB), by A. Vaux, S. Reidel, and D. Stewart, measures five different kinds of social support. Abigail is especially interested in the subscales on emotional support and advice/guidance.
- The Organizational Climate Scale (OCS) by A. Thompson and H. McCubbin measures various aspects of organizational climate as perceived by the respondent.

It seems to Abigail that these scales will let her capture many of the key constructs that her literature review cited as important. There will be a number of other constructs she may also want to measure, but the IES appears to be a good dependent measure, and the SSB and the OCS seem to provide a range of key environmental predictor factors.

Maria. Maria's constructs are homicide and suicide (in San Diego zip codes) and community characteristics (mainly race, housing, and income in those zip codes). She expects crowded housing and low income to be associated with both suicide and homicide. Her population will be the population of San Diego County but aggregated at zip code level.

Yuan. Yuan is interested in the concept of different treatment types (CBT versus treatment as usual) and how they are associated with conflict strategies and violence. He will test to see if either type of treatment has clearly better outcomes. His population is determined for him and will be people using his agency's services.

Professor Kathy. Kathy will look at nonintrusive music (classical, easy listening) and see if it improves correct coding by her researchers.

SECTION 3.7 FORMALIZING AND PRESENTING YOUR CONCEPTUAL FRAMEWORK

In communicating your conceptual framework to others, you will have to be able to present your ideas in a clear manner using terms that others will understand. To do this, you will have to know the terms we use to describe variables, and you will need to know how to graphically represent your conceptual framework so that others can see an understand it. We will start out by becoming a little more technical in how we discuss variables. Variables are operationalized constructs.

But what does **operationalized** mean? Something is operationalized if it is clear how it is measured. For example, "suicide attempt history" is not operationalized, but "number of prior suicide attempts reported by the subject during the interview" is operationalized. There are lots of ways to operationalize constructs. For example, another researcher might operationalize suicide attempt history as "number of hospital admissions for attempted suicide." The goal here is simply to be clear about what concrete measure your construct is represented by.

Let's get back to variables. Variables are therefore measurable in some way, usually either through counting (e.g., number of arrests) or through scores from instruments (e.g., your SAT score).

SECTION 3.7.1: FOUR TYPES OF SCALES FOR VARIABLES

There are four different ways in which variables may be scaled to represent their constructs: nominal, ordinal, interval, and ratio. If you know French, you can remember this by the fact that the first letter of each scale (in the above order) spells *Noir*, the French word for "black" (as in "film noir").

Nominal scales (categorical) are just names or types that have no numerical significance. "Blond," "Republican," "Joan," and "Female" are nominal.

Ordinal scales (categorical) are not common in social research and relate to the rank order something has. For example, a ranking of the worst earthquakes in terms of fatalities (most killed, second most killed, and so on) and Olympic medals (first, second, third) are ordinal variables. Notice that these are numeric only in the sense that you know who came first and second; you do not know how much difference there was between them. For example, the winner of the 500 meter freestyle may have beaten the second place person by only .01 second, while the second place person beat the third place person by a whopping 9 seconds, but they're still listed as "first, second, third."

Interval scales (continuous) are different from ordinal variables in that the differences between numbers are the same. If we record the temperature each day on the Fahrenheit scale, then we are recording numbers where the difference between each number on our scale is the same (one degree). Interval scales lack "true zeros" (see the following).

Ratio scales (continuous) are like interval scales but have "true zeros." A true zero is when a value of zero means that the amount being measured is nothing.

RESEARCH QUESTION	INDEPENDENT VARIABLE	DEPENDENT VARIABLE	CONTROL VARIABLES
Which detergent will make my sheets their whitest?	Type of detergent	Amount of stain removed (from identically stained sheets)	
Are there more fire department calls on hot days?	Daily high temperature	Number of fire department calls	Humidity, precipitation, day of week, holiday, and the like
Does lower classroom size help learning?	Number of people in classroom	Average class score on standardized test	Teacher experience, spending per pupil, and the like

TABLE 3.2. Examples of Research Questions: Independent, Dependent, and Control Variables.

For example, the number of apples I have involves a true zero (no apples). Similarly, the Kelvin scale has a true zero (zero Kelvin is "absolute zero," a theoretical condition where there is absolutely no heat of any type present). On the other hand, many scales lack a zero altogether (you can't get a zero on the ACT, for example) or have zeroes with no real meaning (on the Fahrenheit scale, zero is just a number; it doesn't mean "no heat present"). Similarly, degrees Celsius is also not a ratio scale; even though "0 degrees" means something (the freezing point of water), it does not mean "no heat."

SECTION 3.7.2: CATEGORICAL AND CONTINUOUS VARIABLES

Variables measured with nominal or ordinal scales are generally called "categorical variables." Variables measured with ratio or interval scales are called "continuous variables" because the difference between each point on the scale is the same. Many statistics require that your variables be continuous. One confusing point is that most researchers treat scores from psychological or similar tests as continuous (usually interval), even when there is no reason to really believe that they are, if you use a strict definition.

SECTION 3.7.3: INDEPENDENT, CONTROL, AND DEPENDENT VARIABLES

Independent variables can be though of as "predictor" or "causal" variables. Independent variables are those things you believe will predict or cause a change in the dependent variable. When drawing models, independent variables are to the left.

Dependent variables can be thought of as "outcome" variables. They are those things you believe are affected by other things in your model. When drawing models, the independent variable is the item furthest to the right. There are also "mediating" and "moderating" variables, which we will discuss below. **Control variables** are other possible influences on your dependent variable that you decide to keep track of. They are included in your model to make sure that the relationship between independent and dependent variables is not due to other factors. (See Table 3.2.)

SECTION 3.7.4: DRAWING MODELS

Next, we need to talk about how to draw ideas out on paper. There are specific conventions that are used in social science in presenting models. If you do not use these conventions, then people will not know what you are trying to say. These graphic models are most commonly used with nonexperimental designs, which generally include more variables and more complex possibilities for relationships between variables.

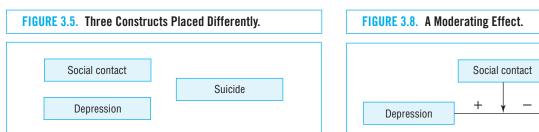
CONVENTION 1

Use Boxes for constructs and move from left to right, with causes or earlier factors being to the left and outcomes or later events being to the right. If things happen at the same time, stack them, one above the other (Figure 3.3). Earlier stuff or causes should be to the left. Later stuff and final outcomes should be all the way to the right. In the example in Figure 3.4, we want to look at social contact, how that relates to later depression, and how that relates to later suicide. If we were interested in looking at depression and social contact at the same point in time, and how that relates to future suicide, we'd set up the boxes like those shown in Figure 3.5.

Notice that these diagrams already tell different stories. The first says, "Social contact comes before depression, which comes before suicide," while the second says, "Social contact and depression both happen before suicide."

FIGURE 3.4. Three Constructs.						
Social contact	Depression	Suicide				

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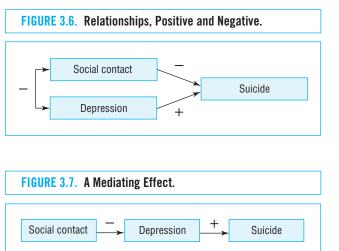


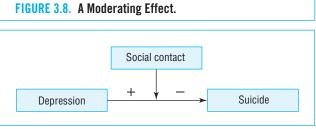
CONVENTION 2

Use arrows to indicate direction of expected relationships. Obviously, because time goes from left to right, arrows shouldn't go backward, except in recursive models, when you are trying to show that two variables have effects on each other. Arrows can be marked with a plus to indicate a positive relationship (they both go up or down together) or a minus to indicate an inverse (or negative) relationship (one goes up while the other goes down). In the example in Figure 3.6, depression and social contact are (inversely) associated with each other, and both are (positively) related to later suicide. This means that people with high social contact are less likely to be depressed (and vice versa), and that people with high social contact are less likely ("-") to commit suicide and that people with depression are more likely ("+") to commit suicide.

CONVENTION 3

Mediating variables are another issue. Sometimes A causes B and B causes C. In this case, B is termed a "mediating" or "mediator" variable. This can easily be portrayed. In the example in Figure 3.7, we are asserting a model where lack of social contact leads to depression which leads to suicide. Depression is therefore *mediating* the relationship between social contact and suicide (less social contact leads to more depression, which leads to more suicide).





CONVENTION 4

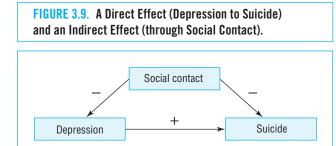
Variables can also moderate. Sometimes A is related to C, but some other factor changes the relationship. We might believe that depression leads to suicide but that social contact can alter or reduce this effect. We would therefore say that depression's impact on suicide is moderated (changed) by social contact. This is drawn by putting a line from the moderating variable to the relationship (not the construct) it changes. In the example in Figure 3.8, more depression leads to more suicide, but the presence of social contact weakens ("-") that relationship (e.g., if two people are equally depressed, the one with more friends will be less likely to commit suicide).

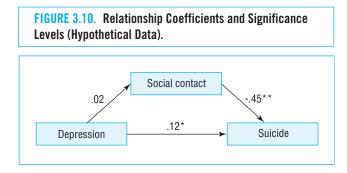
CONVENTION 5

Direct and indirect effects also occur. A may cause C directly but may also do so through a third variable. A causing C is called a direct effect, but A causing C because it first effects the mediating variable B (which then causes C) is called an indirect effect. Both can exist at the same time. In the example in Figure 3.9, depression causes less social contact, which, in turn, is associated with more suicide; this is the indirect effect of depression on suicide through a mediating variable (social contact). Depression also has a direct effect on suicide.

CONVENTION 6

The Strength and Statistical Significance of Relationships can be specified. Numbers that represent the percentage of variance explained (usually these are interpreted like regression coefficients, see Chapter 14) and asterisks showing the statistical significance of the





relationship are often included in models after the data have been analyzed. In the example in Figure 3.10, there is a nonsignificant (no asterisks) relationship between depression and social contact; a small, significant relationship between depression and suicide; and a moderate, also significant relationship (which is an inverse, or negative relationship; see the "–") between social contact and suicide. In plain English, we can't find any association between depression and social contact; depression is associated with a slight increase in suicide; and high social contact is associated with a substantial reduction in suicide (these are fictional data for example only). We'll get into statistical issues more later.

These basic conventions should not only help you to present your models more clearly but will also help you in understanding the literature, where such models are often employed.

SECTION 3.7.5: PUTTING IT ALL TOGETHER—PRESENTING YOUR CONCEPTUAL FAMEWORK

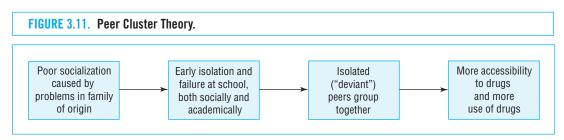
It is always good practice for researchers to put their conceptual framework down on paper. This framework should include the key concepts in the framework and the expected relationships between the constructs. A diagram such as this is a necessary component in most projects and is good practice even in journal articles, although the limitations on space in journal articles often cause such diagrams not to be included. The relationships among the constructs should conform to the theory underlying your conceptual framework.

As an example, let's assume that we are interested in designing a program to reduce adolescent drug use. We think that changing who the subjects associate with will reduce likelihood of drug use. We base this on a simplified version of peer cluster theory (Oetting & Beauvais, 1986), which looks something like Figure 3.11.

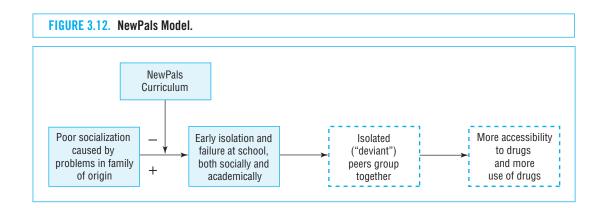
This theory suggests a number of points where we might intervene. We might try to help families before adolescents develop problems; we might try to intervene early with children at school before they fall out into deviant peer clusters; or we might intervene with the deviant peer clusters directly. Let's say that we want to intervene as the children reach school, in kindergarten and first grade. Based on the model in Figure 3.10, we would be trying to make it so that children with poor socialization do not become isolated and thus are less at risk of falling out into deviant peer clusters later and presumably therefore being at higher risk for drug use. We are therefore are most interested in the first two constructs (poor socialization and academic/social failure in early grades). We might try to fix this by providing a special school/peer socialization curriculum ("NewPals") to all kindergarteners and first graders, with the goal of reducing the number of children who become socially isolated. Our model would therefore look like Figure 3.12.

Dotted boxes and arrows can be used to represent parts of the model not tested in the proposed research. You don't have to study the entire theoretical model; in fact, most studies are not complete explorations of a theory or model, but only part of it. Why even include the parts of the theory that we are not actually testing? Because it is important to show the reader how the work fits in with the theory as a whole.

This model makes a number of things clear in a visual manner: We are testing the NewPals curriculum. We are interested in how the presence of that curriculum modifies the relationship between poor socialization among incoming students and subsequent poor outcomes. We are also showing that the outcomes we will study are limited to academic and social outcomes in early grades. Even though we never deal with drugs directly, our theoretical model (which we can show has been empirically supported by reference to prior research) suggests that if we can change early social and academic pathways, then drug use will decline later.



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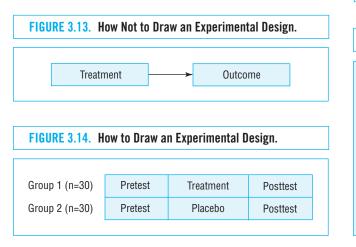
SPECIAL CASE 1

How do you draw a model for a simple experiment? Often, models of the type discussed in the preceding section are not drawn for simple experiments because such a model would not be very informative and would look like Figure 3.13. Instead, people may include a table showing each experimental condition, the number in each group, and what treatments they get over time. That might look like Figure 3.14.

Figure 3.14 is not really a picture showing a conceptual framework at all. It is a picture showing who gets what and when measurement occurs. The simple truth is that basic experimental designs are so simple conceptually (give some people X, don't give X to others, see what happens) that conceptual frameworks are generally not drawn out.

SPECIAL CASE 2

How do you draw a model for an exploratory design when you don't even know what the constructs are? Exploratory designs also do not usually include illustrations of their conceptual framework. We feel this is a mistake, because even the simplest research involves basic ideas about what is being looked at. We'd suggest something like Figure 3.15. This gives the reader some idea of what you plan to look at. In this case, the

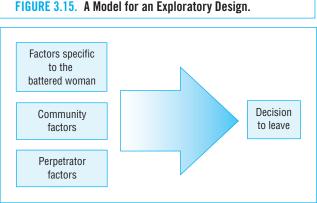


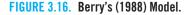
researcher is pointing out that he or she will use an ecological model and will attempt to look at not only the woman who is battered but also at her partner and the broader community.

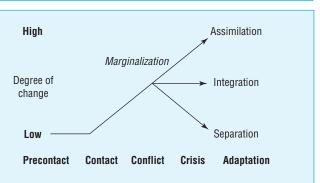
SECTION 3.7.6: EXAMPLE PROJECTS— FORMALIZING CONCEPTUAL FRAMEWORKS

Let's look at our five example cases to see how they are presenting their conceptual frameworks.

John. John is using Berry's (1988) model, which takes time into account and looks something like Figure 3.16.







This model is interesting, because it takes a number of things into account (degree of change, type of acculturation, time) and specifies a particular sequence of events (precontact, contact, conflict, crisis, and adaptation). It also specifies that there will be a period of marginalization during crisis that either one can get stuck in or that can lead to eventual states of assimilation, integration, and separation. This model suggests to John that if he wants to understand how strengths lead to different acculturation outcomes, he will have to look at people either over a long time (contact or conflict through adaptation) or after the crisis stage and ask them to recall what it was like. John only has time for the latter, so that's what he will do. His overall model might look like in Figure 3.17.

His job, of course, will be to identify what the key strengths are relative to acculturation outcomes, and how they affect the acculturation process. Notice that John is really only using the last two timeframes of the Berry model, "crisis" and "adaptation."

Abigail. Abigail could show her model like the diagram in Figure 3.18. She is least sure of the "Personal Factors" category, which has the feel of a "garbage can" construct, being just all the stuff she couldn't fit anywhere else but that seemed important. She's going to have to go back to her readings and see exactly what personal factors seemed to matter in past research. She also isn't sure about the dependent variables. Ideally she'd like some

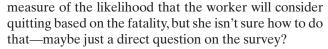
FIGURE 3.17.

Family and friend support

(SSB subscales)

Personal factors

(age, gender, years experience, etc.)



Abigail is feeling pretty good but then realizes that she needs a theory to support her model. What theory to use? Stress and coping? Is she measuring how different kinds of social support help people cope with a stressor? Is she mainly going to use an organizational theory? That doesn't seem to fit too well.

Maria. Maria is interested in looking at how community factors influence rates of homicide and suicide. She really has two questions and two models. She already knows that poverty and housing density look like they might be important, and she wants to test this. She is also interested in exploring what other factors might be important. Her models might look like Figure 3.19a and 3.19b.

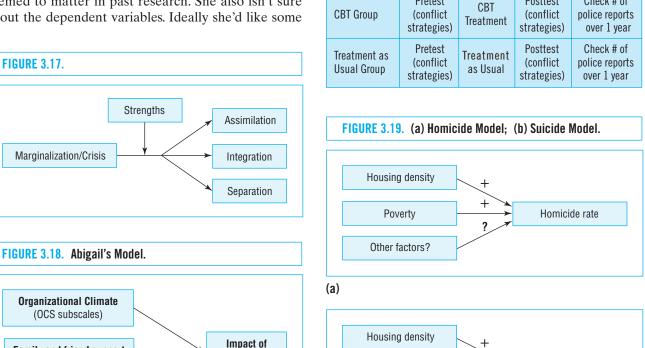
Yuan. Yuan is interested in the degree to which CBT reduces domestic violence through first improving conflict strategies. His conceptual model is shown in Figure 3.20.

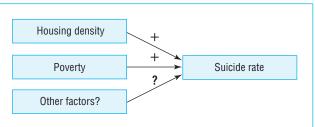
Yuan could also draw his experimental design (not his conceptual framework) like this:

Posttest

Check # of

Pretest



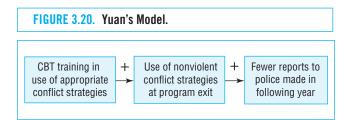


(b)

client death

(IES subscales)

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He will be able to place people either in the CBT or "as usual" therapy groups, then track the degree to which group membership brings about changes in conflict strategies at program exit; finally, he will be able to track the police reports made on families over the following year.

Professor Kathy. Kathy has found that music could be calming (good) distracting (bad) and that tempo could affect speed (Figure 3.21a). She is also interested in seeing if these factors can affect accuracy (Figure 3.21b).

Professor Kathy could draw her experimental design (not her conceptual framework) like this:

No Music (Control condition)	Subjects code files with no background music	Check Number of files coded (speed measure)	Check number of errors per file (accuracy measure)
Easy Listening Music Group	Subjects code files with no background music	Check Number of files coded (speed measure)	Check number of errors per file (accuracy measure)
Classical Music Group	Subjects code files with no background music	Check Number of files coded (speed measure)	Check number of errors per file (accuracy measure)

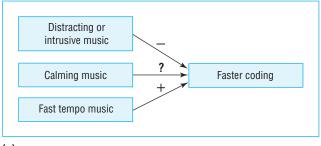
In the above example professor Kathy has included a "no music" control condition so that she can not only compare easy listening to classical, but can also tell how each performs relative to no music.

Professor Kathy has therefore decided to pick only easy-listening and classical music. She sees no point in studying distracting or intrusive music, which seems only to hurt. She has also decided to use only mediumtempo music because she does not want to confound her research design with the issue of tempo, which she does not think will increase accuracy. She will also include a control (no music) group.

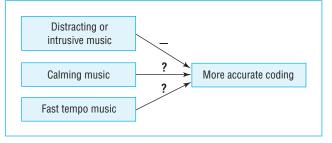
CONCLUSION

If it seems as if this must be a time-consuming aspect of the research process you are absolutely correct! There are many critical issues involved in selecting a topic and constructs and specifying a conceptual framework that are too often given scant attention in research

FIGURE 3.21. Possible effects of music on (a) coding speed and (b) coding accuracy.



(a)



(b)

texts. We provide some further readings related to literature review and doing research across cultures to assist in this process. In the next chapter, we will discuss how to plan out the details of research projects, and we will see how these conceptual models play out in the design phase.

s you recall, there are several steps in doing EBP. The first two steps are formulating an empirically answerable question and finding relevant literature. Chapter 3 has already dealt with these two issues as they relate to forming a research question and searching literature to support research. This section will provide three examples to show how suggest how you can use these same skills as part of EBP.

FORMULATING AN EMPIRICALLY ANSWERABLE QUESTION

You know what *empirical* means, and you know what questions are empirically answerable and what aren't. What kinds of questions might you encounter in practice? Depending on the kind of work you do, these questions could be almost anything. Some examples might demonstrate the range of questions which might be asked.

Example 1. Let's say you have a teenage female client who was anorexic but has been asymptomatic for a year. She and her family want information on relapse. How often does anorexia recur? The question facing you is, "What is the recurrence rate for anorexia nervosa among teenage girls like my client?" That's certainly answerable.

Example 2. You are a state midlevel social service manager who is reviewing how services are provided to abused and neglected children. The agency director has asked for a comprehensive review of service provision gateways within your agency to make sure that the right people are being served. You notice that in the past your state has offered services only to cases that are labeled by the investigative worker as "substantiated." You are aware that most other states do not restrict services in this manner. Should your state continue to restrict services to only substantiated cases, or should unsubstantiated cases also be eligible for services? This would seem to depend on the nature and degree of difference between substantiated and unsubstantiated cases. You frame the following question: "Are substantiated and unsubstantiated cases similar or different with regard to need for services?"

Example 3. You are a mental health care provider for children. You have a client presenting with obsessive-compulsive disorder (OCD). You have heard that cognitive behavioral therapy is an effective treatment for that disorder. You want to find out if that is true. Your question is, "Is CBT effective for children with OCD?"

Basically, if you need to know something to help people better, then you should be able to phrase it as an empirically answerable question using the skills you learned in this chapter.

FINDING RELEVANT RESEARCH

The way you find relevant research will depend on the kind of question you are asking. For most questions, you will follow the procedures described earlier in this chapter. However, if you are trying to answer a question of the form, "What treatment works best for X?," then there are some nice resources you should know about that we did not cover above.

Reviews and Practice Guidelines. In the EBP module in Chapter 1 we discussed the difference between evidence-based Practice and evidencebased practices. If you happen to be looking for EBPs or practice guidelines in a particular area, you're in luck. There are some nifty tools available. Among these are the Cochrane Collaboration (www.cochrane.org), the Campbell Collaboration (www.campbellcollaboration.org). These sites publish reviews of the best available evidence of treatment efficacy and effectiveness. The National Guideline Clearinghouse (www.guideline.gov) is a very useful source for practice guidelines. In addition, a number of specific agencies host sites listing information about empirically supported practices or programs in their area of focus. For example, the Office of Juvenile Justice and Delinquency Prevention's Model Programs Guide (www .dsgonline.com) would be of interest to practitioners and administrators in the area of delinquency. Area-specific collections such as this can generally be found through the Web sites for the appropriate government or professional agency responsible for that area (e.g., the National Institute of Drug Abuse or the American Psychological Association).

Once I Find a Review or Practice Guideline, Can I Stop Searching? Summaries of research and lists of practice guidelines are generally not sufficient for the true EBP practitioner. You want not only to read someone else's summary of what's going on, you want to see the original articles for yourself. They're referenced in the reviews and are easy to locate. There may also be other, possibly more recent articles you should find. Why bother to look at the original work? There are lots of reasons. For example, you need to have some idea of what kinds of people have been used in the studies so that you can understand how well the findings will generalize (see Chapter 4) to your clients. There may be many other things about the research that limit or support its value to you not mentioned in all reviews, such as how long the follow-up periods were. We agree with Sackett and coauthors (2000), who suggest that when you are dealing with issues that you run into frequently or that are particularly important, that you must always go to the primary sources. They also suggest that when dealing with less important or less commonly encountered problems, it may be possible to rely more on summaries or guidelines. This represents something of a trade-off between quality and practicality.

APPLYING BEST EVIDENCE TO PRACTICE

We will now return to our three examples above. We will see what is found, and we will see how the best available evidence might be applied to practice.

Example 1. You want to know about recurrence rates for Anorexia in teenage girls. You go to Psychinfo and enter "anorexia" and "recurrence" as key words (kw). Not finding anything immediately useful, and finding a lot of articles you don't want, you tighten your search, looking for the above terms in the title only. This produces "Remission, Recovery, Relapse and Recurrence in Eating Disorders: Conceptualization and Validation of A Validation Strategy" (Kordy, H., Kramer, B., Palmer, L., Papezoya, H., Pellet, J., Richard, M., & Treasure, J. (2002). Journal of Clinical Psychology, 58(7), 833-846). This very interesting article looks at various ways to think about recurrence and overviews what is known about rates of recurrence in a fairly understandable way. You decide to track down some of the primary sources listed in the article and look them over too. If you think the information in the article is both useful and accessible to your client, you might even print out a copy of one or two of them and share a copy with the girl and her parents, carefully explaining the kinds of things that have been found and how the research might or might not be applicable to your client.

Example 2. Your question is: "Are substantiated and unsubstantiated cases similar or different with regard to need for services?" You happen to feel like using Google this time and put in "unsubstantiated child maltreatment." Right on the first screen, you find a couple of papers that look interesting. The first is Drake, B., Jonson-Reid, M., Way, I. & Chung, S. (2003). Substantiation and Recidivism. Child Maltreatment, 8(4), 248-260. This very nicely written article is an empirical examination of recidivism rates among substantiated and unsubstantiated cases. Bottom line is that unsubstantiated cases come back to the system almost as often as substantiated cases do. This suggests that the substantiation label isn't all that useful as a proxy for service need. Another, older article (Drake, B., [1996b]. Unraveling unsubstantiated. Child Maltreatment, 1[3], 261-271) provides a coherent theoretical framework for why this might be so. Since you don't want to rely on the work of a single author, no matter how well respected, you look for more recent publications. You find one (Hussey, J., Marshall, J., English, D.,

Knight, E., Lau, A., Dubowitz, H., Kotch, J. [2005], Defining maltreatment according to substantiation: A distinction without a difference? Child Abuse and Neglect: The International Journal, 29[5], 479-492), that uses a different (nationally representative) data set to look at similarities between substantiated and unsubstantiated cases. This article also concludes that substantiated and unsubstantiated cases aren't very different. You backtrack the references in the Hussey and colleagues article (it's more recent) and find that there seems to be consensus in the empirical literature. On the basis of this review, you decide that it looks as though unsubstantiated cases are at fairly high risk of recidivism and are probably not all that different from substantiated cases in terms of their service needs. You report to the boss that the policy probably should be changed to allow services to unsubstantiated cases.

Example 3. Is CBT useful for children with OCD? You go straight to the Cochrane Collection and enter "OCD CBT" under their search panel. You find the following review: O'Kearny, R., Anstey, K., Von Sanden, C. (2006) Behavioural and cognitive behavioural therapy for obsessive compulsive disorder in children and adolescents. The conclusion given in the review is that CBT is effective for OCD in children, equally as effective as medication. The review lists find four relevant studies, which you obtain and read. To backstop yourself, you do an independent search on Psychinfo and find a few more interesting articles that were not included in the review. You satisfy yourself that CBT does appear to be an effective intervention for children with OCD. You decide to present this to the child's parents as one treatment option.

We hope this information and these examples have been helpful supplements to the broader search information given in this chapter, and we hope that you have occasion to use such approaches to obtaining the best available evidence so that the people you help can get the best possible care.

REVIEW

- 1. Think of a topic in social science that interests you currently. Do you think it meets the six requirements for selecting an area of interest? Why or why not?
- **2.** How does reviewing the literature relate to the selection of a specific research question?

- **3.** What are the ethical considerations that are key to deciding whether or not to move forward with a question to the research design phase?
- **4.** Explain what independent, dependent, and control variables are. Find a journal article about a study either from this chapter or in your own area. Identify the independent, dependent, and control variables.
- **5.** What are the different scales of measurement for a variable?
- **6.** How might culture influence the way in which a construct is measured?
- **7.** Identify three theories from the literature that can be applied to your area of interest.
- **8.** With regard to the question above, are these three theories best described as models, midlevel theories, grand theories, or paradigms? Justify.
- **9.** Imagine you are interested in violent behavior among youth. Is this a practically important construct? Why or why not? Identify at least two variables that might be used to measure the construct of "violent behavior."
- 10. Juanita is interested in asset development in developing countries. She thinks that government support of new farming technology, proximity to water supply, strength of social networks in the community, and health are associated with accumulation of assets among households. Draw a possible conceptual framework for her study.
- **11.** Go out there and find a research study with a really large and complicated set of variables and relationships between variables. Do you think that

this article is OK with regard to the principle of parsimony? Why or why not?

SUPPLEMENTAL READINGS

- Berry, J., Poortinga, Y., Segal, M., & Dasen, P. (2002). Cross-Cultural Psychology: Research and Applications. Cambridge, UK: Cambridge University Press. The review of various concepts related to culture and connections between culture and behavior is very helpful to students in specifying their conceptual framework when doing research that includes persons of diverse backgrounds.
- Bolker, J. (1998). Writing Your Dissertation in Fifteen Minutes a Day: A Guide to Starting, Revising, and Finishing Your Doctoral Thesis.
 New York: Henry Holt and Company. This quirky and irreverent little book gives loads and loads of practical advice on how to handle a big project.
- Cooper, M. (1998). Synthesizing Research: A Guide for Literature Reviews. Thousand Oaks, CA: Sage. This amazing little book is designed rather like the book you are holding now. It works you through the process of understanding literature in a logical, step-by-step way, with lots of practical applications.
- Girden, E. (1996). Evaluating research articles from start to finish. Thousand Oaks, CA: Sage. This is a nice handbook-style guide to evaluating articles that walks the reader through case studies including some specific advanced analyses (e.g., discriminant analysis) not covered in this book.