2 FINDING IDEAS TO RESEARCH

> Imagination is more important than knowledge. For while knowledge defines all we currently know and understand, imagination points to all we might yet discover and create.
>
> —*Albert Einstein, physicist*

LEARNING GOALS

Discovering topics to study by searching for research ideas and finding existing studies is one of the goals of this chapter. Learning to write a good literature review is discussed, especially in the context of using theory to guide your research. The chapter also raises the ethical issues involved in doing research. By the end of the chapter, you should be able to search for topics in the library and in computer databases, write a coherent and focused review of the research literature, and note the ethical concerns various kinds of research topics might raise.

You've just been handed an assignment by your boss to gather data for a work-related project about customer satisfaction using a self-administered questionnaire. Or maybe a professor is asking you to develop a research topic for your education major honors thesis. Now what do you do? Where do you even start? You're probably thinking: I wish I had written down all those ideas I've had over the years because now I can't think of anything to study! Figuring out what to research or how to begin an assigned project can be a daunting task for many people. For some, curiosity generates too many broad questions. Others begin with too narrow an idea that goes nowhere beyond a simple query. What follows are some strategies that can be used to develop a research agenda that is meaningful and focused and that can help in creating a successful research design.

GENERATING TOPICS

Ideas come from many sources, and part of any research design is translating those ideas into reliable and valid ways of measuring them. Developing an idea that is carried out to completion in a scientific research program is a powerful and creative process. To experience taking a topic, constructing research questions, and collecting evidence to support or refute your ideas can be exhilarating. And the first step—generating researchable topics that are unique ideas—is often one of the most innovative parts.

Curiosity and Experience

Where do we get ideas and topics for research? One way is with our own curiosity. Look around. Listen attentively to what people are asking, and see what they are doing. Be conscious and questioning of your own experiences and focus carefully on what you read about or hear in everyday encounters. Do these lead you to wonder about something in particular? For example, you learn in a linguistics class that women's body language when listening to others speak appears to be different from men's body language. Are women nodding frequently, providing more verbal signals, and smiling more than men? Or perhaps you notice that voting patterns vary among people from different social classes and ethnicities. Maybe you overhear students complaining about the amount of time they spend posting photos on Instagram. Or you might just simply wonder if studying so much really makes a difference in the grades you get.

One of the first ways, then, of generating a research topic is to use your own curiosity and experiences as a source for further inquiry. But be careful: Personal experiences can result in either a topic so broad that it would be impossible to study ("are men really different from women?") or so narrow that it would be difficult to go beyond a very limited set of questions resulting in the most specific and trivial of findings ("which is the favorite Beatle of my friends' parents?").

Assignments, Theses, and Grants

Of course, another way to find a topic is to be assigned one by a teacher, a supervisor, or some agency offering research grants. Perhaps you get a notice (called a request for proposal or application, or RFP or RFA) stating that funding is available for research on alcohol use among the elderly. This sparks your interest, and you begin to develop some questions that you feel need answering in this area.

Similarly, you might be asked to do a thesis for completion of a degree in political science, for example. Reflect on the courses you have taken and see if the books you

have read or the lectures you remember raise questions that need some systematic analysis. You know that the topic has to be in the area of political issues, so you decide that voting behavior among "millennials" is something that interests you. Studying voting behavior is quite general and not focused yet, but it is a good start.

Consider a situation where you are an employee at a social service agency that specializes in working with the homeless. The agency is required to file a report at year's end about the services it provided, the kinds of people who have been assisted, and the strengths and weaknesses of the program. Your supervisor assigns you to develop a questionnaire that can be used to assess these outcomes. You may not have a choice in the topic, but you do need to make some important and creative decisions about the research design and the kinds of issues to be covered. Again, you start out with a general idea or topic, and you now need to begin focusing more specifically on its multiple dimensions.

Other Research

By reading published academic research, you learn what has been done already and what needs to be accomplished. An *academic article* is a paper that has been reviewed by peers and published in a journal read primarily by researchers and scholars. Normally, these are original reports of research. Such publications as the *Huffington Post* online newspaper, *The New York Times*, or *The Economist* may be sources for original information, but they often summarize and report on research published elsewhere. In such cases, they are secondary sources, not primary ones like academic journals. Your search for further information about your topic should begin with the primary literature of original research.

Sometimes your goal is to *replicate* studies. In such cases, prior research gives you the questions, methods, and information you need to redo the study with a similar or perhaps different sample. An important aspect of science is the ability to repeat results under similar conditions or with different respondents.

Another goal might be to fill a gap in the research by focusing on what hasn't been done. Most published articles conclude with what the researchers couldn't do and with suggestions for additional studies. Sometimes they even suggest particular lines of research that their project has generated and that need further analysis (see Box 2.1). Not only are academic articles a good source for a topic, but they also give you direction once your topic has already been selected. Reviewing the published literature continues even after you design your study; it helps immensely when analyzing data, interpreting the outcomes, and writing up the final report.

Another way of finding research ideas is to make use of *secondary* data sources, such as census data, political polls, or the General Social Survey, some of which are

BOX 2.1
USING RESEARCH TO GENERATE IDEAS

Studying how official sources and dramatic events can influence framing of political issues by news media, Speer (2017) analyzed *The New York Times*' coverage of the Iraq War. His data demonstrated that journalists' portrayal and framing of the war shifted after a dramatic bombing event and moved away from the White House's views. Like most peer-reviewed publications, Speer includes a detailed literature review which could provide references of articles and research related to your topic. Always check the bibliographies in academic journals to uncover key articles and important books you'll need for your own work.

Another good way of generating ideas for a study is to review the suggestions for future research and limitations that are usually presented in scholarly publications by the authors. For example, Speer (2017) notes that his analysis was limited to *The New York Times* over a six-month period, suggesting that others might review other news media and for an extended time period. He also reinforces the importance when doing communications and media research on the framing of political coverage to distinguish statements made among outside sources, journalists, and officials. In addition, Speer (2017: 299) adds "my study indicates that future communications research would benefit from comparing coverage before and after dramatic events as a way of assessing the influence of events on news coverage."

By carefully reading research studies and their literature reviews, limitations, and suggestions for further research, you should be able to develop some important ideas, concepts, variables, and hypotheses for your own studies, dissertations, and reports.

available without a fee through the Internet. These sources are called secondary because you are not the primary or first person designing the study or collecting the data. By reviewing the variables and questionnaires from available data sets, you might be able to create your own research project or develop a new way of interpreting earlier findings.

The best data sets have the advantages of probability random sampling (discussed in Chapter 5); larger comparison groups across various ethnicities, regions of the country, international locations, and other characteristics; and reliable and valid questionnaires that have been tested and professionally developed. Yet the questions might not be as directly relevant as you would construct for your project, and the data sets might not have enough questions for your particular research goals. Furthermore, the subsamples sometimes aren't large enough for your purposes. But reviewing the methodology and questions used in the collection of publicly available data is a good way of finding research topics and developing hypotheses to study.

Serendipity

An idea can also derive from the research we are already doing. It is not unusual to discover a finding that was totally unexpected; this is what is often called *serendipity*. By accident, a result that wasn't anticipated jumps out, and we become intrigued to figure out why this occurred. This leads to a new line of research in an attempt to study this serendipitous finding in more depth. For example, a study is designed to assess the relationship between dropping out of college and grades. Several items of information are gathered during the study, including sex, ethnicity/race, social class, outside work commitments, course load, and major. In the process of reviewing the data, a researcher notices that other items such as whether a student was on academic probation, received low grade warnings, and had meetings with advisors might be interesting to analyze.

Unexpectedly, after further data analysis is completed, it's discovered that some students who received low grade notices tended to drop out rather than get their act together and study harder. Low-income students were more likely to see these warnings as statements verifying that they were not "college material" and could not make it at the university, as they had secretly feared all along. They tended to leave college more than the middle-class students who received the notices and used them as a "kick in the butt" to work harder. Because studying low grade notices wasn't the main focus of the research, it is not possible to go beyond this anomalous finding, but these results can lead to the development of another research project on how probation and low grade notices affect various ethnic/racial, social class, and gender groups differently.

Whether from astute observations of the world around you, an assignment at work or school, serendipitous findings in another study, or incentives from a funding agency, a topic is generated and the process of refining it to a more manageable project starts. At this point, the primary task is to carve out something that is focused, informative, unique, and fun to do. After all, if you don't enjoy the topic, you are not going to be motivated to do a thorough job!

SEARCHING FOR RESEARCH

A good way of figuring out if an idea or research topic is still too general or too specific is to type some key words into a computer search of resources. You can always use one of the Internet *search engines* (such as Google), but this will turn up lots of information (some of dubious quality) that is not likely to serve the needs of scholarly research. Imagine, for example, how many millions of responses you'll get if you search for "alcohol and elderly" (I actually got almost 60 million!) (see Box 2.2 for more tips and resources to aid your online search).

BOX 2.2
LIBRARY DATABASES

There are many resources in the library to guide us in searching for books and articles on specific topics. They are typically available through computer databases, which are lists or collections of information about books and articles organized by such various fields as name of authors, title, year of publication, and key words about the topic. Most of these resources rely on a system using Boolean logic to search for information. *Boolean logic* is based on dichotomous, or two-category, questions: Is it true or false? Is it an odd-numbered playing card and a red one? Is it a heart or a diamond? The logical operators "or," "and," "and/or," "less than or equal to," among others, form the basis for the search.

For example, in its simplest form, if we are interested in finding an article about attitudes toward capital punishment among teenagers, then we would search for "capital punishment AND teenagers." Both pieces of information need to be present in an article for it to be selected by the search engine. If we inadvertently typed "capital punishment OR teenagers" then we would get every article written about teenagers and every article written about capital punishment. Research about elderly people's attitudes toward capital punishment would appear, as well as articles about teenagers and movie attendance, for example. Checking the "Advanced Search" help feature often provides better searching options.

In addition to using something like Google Scholar, there are numerous databases available specific to various disciplines. They include *PsycINFO* to search the major psychology journals, *Education Resources Information Center* (*ERIC*) for articles about education topics, *Sociological Abstracts* for sociology, *Worldwide Political Science Abstracts* and *Public Affairs Information Service* (*PAIS*) for government and political science areas, *EconLit* for economics, *Anthropology Plus* and *Human Relations Area Files* (*HRAF*) for anthropology, and *MEDLINE* for medical research. LexisNexis is a great reference for finding newspaper, magazine, and trade publication articles. More comprehensive databases like JSTOR search hundreds of journals in different fields simultaneously.

Your goal at this point in the research journey is to search for published academic studies on your topic. Using library *databases* and entering the relevant information generates lists of academic articles and studies on your subject. Still, you must narrow your focus. Even when I limited the search of "alcohol and elderly" to published articles using Google Scholar, I was able to narrow the results down to a still-unmanageable two million. But also be careful not to select too specific a topic such that prior research cannot be found or the outcomes will not be interesting beyond one specific answer (e.g., "Did women in Florida under the age of 25 vote in the last election?"). Perhaps uncovering just a few key articles or books on the topic will assist you in narrowing your search.

You also have to begin focusing on what you really want to know; don't ask questions for which you already have the answer. For example, what is it that you actually

want to learn about voting behavior and millennials? How frequently they vote, for whom they vote, ethnic/racial and sex differences in party registration? Once you decide on some other categories of interest, search again using several additional key words, for example, "voting behavior," "youth," "gender," and "political party," and see what happens now. Ideally, a more reasonable number of articles show up, and you can begin the next phase of reading and analyzing the studies.

Once you have found some well-designed research and academic articles on your topic, a review can provide additional concepts and ideas for further focusing your study. The articles also list other publications to find. Look at the bibliographies and references in these journals and see if there are some articles or books regularly cited. These might indicate a classic study in the field that is important to read, or it may simply provide a new set of articles you hadn't discovered in the database searches.

Searching the academic databases can be followed up with a search of more popular newspapers and magazines, the Internet, and other media to help you understand the popular culture's take on the subject and to suggest other avenues of research. But be careful: A lot of what is in the nonacademic literature may represent inaccurate reporting of results, personal opinion, anecdotal data, poor sampling strategies, pseudoscience, and the other pitfalls of nonscientific reasoning discussed in Chapter 1. You need to develop critical thinking tools in order to discover the quality material when searching in this era of information overload (Nardi 2017). Journalism sometimes sounds like social science, but it rarely does more than provide information. Analysis, theoretical interpretation, and systematic evaluation are what make social scientific approaches different from popular culture writing.

LITERATURE REVIEWS

At this point, you should have narrowed your focus and found many articles and books on the subject you are studying. This doesn't mean you have arrived yet at a final topic or set of questions. Evaluating the previous research is an important step in developing a high-quality study. Not only does this provide further ideas, but it also generates a set of questions, concepts, and methods relevant to researching your topic.

When reviewing the literature, it is essential to develop a detailed database, using index cards, computer note-taking programs, or simply sheets of paper in a notebook. Plan ahead and prepare a list of information you need about each publication reviewed. The complete title of an academic article or book, its authors, the publication date, page numbers, and the volume and issue numbers are just some of the items required when writing up a bibliography or list of references in a final report (See Box 2.3). Review the "References" section of this book to see one example of the format and items needed for a literature review bibliography.

BOX 2.3
CREATING A DATABASE OF REFERENCES

1. As you search for and read relevant books and articles, keep track of these important elements that go into your bibliography, footnotes or endnotes, and references:
   a. Title of article or book
   b. Author(s)
   c. (For an article) Journal name, volume, issue, page numbers, date
   d. (For a book) Publisher, city, date
   e. (For a document or article on the Internet) In addition to the title, author(s), and name of the online publication, be sure to copy the URL (the http:// website address), date written, date when the item was retrieved.
2. While reading an article or book:
   a. Summarize key points (such as who or what was sampled, methods used, major variables, questionnaire items, and main findings).
   b. Write down exact quotations with page numbers or paraphrase relevant information and findings you need to support your research.
   c. Record your own opinion about the quality of the research, how well the article or book is written, and the importance of the results or theoretical positions.
3. Once you have put together a list of references you reviewed for your project, check with the style format used in different fields and publications (such as MLA, Chicago, or APA styles). For example, look at the "References" at the end of this book for a format used by many sociology publications.

For each academic article or book, attend to the methods used: Who or what is sampled and how many, what questions are asked, what are the variables, how are they measured, what statistics and data analyses are used, are the conclusions linked clearly to the data collected, is there a discussion of the limitations of the study and suggestions for future research? What major findings result from this research? The material in the rest of this book provides information you should use to be a critical evaluator of the methods, sampling, statistics, and overall research design of the studies you read, in addition to teaching you how to do your own survey research.

Once you have assessed the studies, the next task is to decide if you want to replicate any parts of them. If so, you might consider using the same measures (such as questionnaire items with the permission of the authors) or modifying them if you are duplicating the study with a different sample. If you feel something is missing from these studies, pick up on something the authors said they wished they had done, or

see if the results suggest a further line of research to take. Then consider which aspects are worth keeping and which should be changed or expanded. For example, if you believe that studying students in an introductory psychology class was a weakness in an otherwise interesting study, then choose a better sampling strategy. If you feel the questionnaire items written for a study on satisfaction in the workplace did not accurately capture what represents satisfaction in the specific organization you are studying, then modify the questions for your particular sample. Remember, though, that comparisons with other research cannot be exact unless the same measurement tools and methods are used. But this is primarily important only if comparison or replication is your main goal.

A good literature review is necessary to help design the research. There is no need to study something that has been done over and over again unless you have a unique perspective on the subject. A good literature review is also important in assisting you in becoming more knowledgeable about the research subject. Too often, people jump into a topic and fail to understand the range of issues involved, ignore important cross-cultural or subcultural differences that might impact a study, and make the same methodological mistakes others have. Critically evaluating the historic research record contributes to an expertise that becomes relevant when presenting the findings, contextualizing the research, and responding to queries about the work.

There are several ways of reading the existing academic literature and writing up your review of the key research articles and books. When reading the material that will become part of your literature review, remember that not every article you find is relevant. It is not necessary to write a summary for each item you read, especially if it is not primary research. You should not summarize a study that another author has reviewed in her or his research if you haven't yourself read the original study. The author may not be reporting it accurately or may be selectively describing aspects relevant to his or her research and not yours. Try to read primary sources, not only secondary sources.

While reviewing the literature, focus on the elements you are most interested in evaluating. When you are seeking information about how to measure your variables, for example, compare studies that use different scales and questionnaire items and evaluate the differences. For example, one survey might have a question asking how many years of schooling the respondent has, while another study might ask the education question in broader terms like "elementary school only," "high school graduate," "some college," and so on, as explained in Chapter 4. Other studies might be used to assess the strengths and weaknesses of various sampling strategies (like random sampling versus convenience sampling, as Chapter 5 discusses). Every article or book you read may not always provide information for all the elements of your study, so read selectively and critically.

Use your research questions and goals as a guide to which articles or books are most important in providing you with contextualizing information. Remember, the purpose is not to overwhelm the reader with every piece of research ever done on your topic. Rather, the goal is to provide you with guidelines for your research design and to situate your research in a particular theoretical or research context for the reader.

For writing up a literature review, one good organizing structure is to begin with a brief overview summary of your main research goals, focus, and theoretical perspective. Then, using your research questions, develop a set of categories or themes to discuss the prior literature most related to your goals. Reading the literature involves a type of content analysis in which you seek out thematic links among the articles and books and organize the information into those themes. Reflect on the readings and uncover common threads and differences that run through the work. For example, in a review of the academic literature on friendship formation among elementary school children, you could summarize the studies into categories of age, gender, race/ethnicity, and social class. Or you might notice that the best research focuses on parental involvement in friendship development and the emphasis on value congruence among friends, so you organize your literature review according to those topics. Your goal is to analyze the research that has been done, raise questions about what may be missing from the prior research, and make a case that your research will extend, revise, or replicate what has gone before.

Some people prefer to write a literature review by summarizing each key article or book, one after another. These kinds of reviews are like annotated bibliographies that describe the goals, methods, and results of each study as related to the overall topic of your research. However, a literature review should have some analysis of the material and not just be a descriptive listing of research studies with brief summaries of the findings. A review should consider specific themes that emerge from the research that has been done and be organized according to the issues, variables, and theories you are using. How generalizable are the results of the past research? Do the findings apply to the sample your study is using? Are certain variables and measures more valid than others for studying your topic? What theoretical perspectives guide previous studies, and how do they relate to your research goals?

When you are summarizing others' research, it is best not to use lengthy quotations directly from the articles or books. Try to paraphrase the information in your own words; use direct excerpts only when necessary to clarify meanings, provide complex ideas, or display the author's unique phrasing and interesting wording. But be careful in summarizing others' ideas and quoting their findings so as not to engage in *plagiarism*. It is ethically responsible to learn how to properly cite excerpts from someone else's work and not pass them off as your own ideas and words. Look carefully at the research you are reading as a model of how to present quotations and to reference books and articles in various disciplines.

When you report someone else's ideas, words, or research findings, you must tell the reader whose they are by using endnotes or in-text referencing. Otherwise, you are giving the impression (intentional or not) that these ideas, words, or research methods are your own creations—in effect, stealing someone else's work. When you directly quote someone else's words, you must also provide the reader with the page number where the phrase appears. In-text citation style is used throughout this book and is discussed further in Chapter 10, about writing up research reports.

The best way to learn how to do a literature review is to notice carefully how the academic articles you are reading do them. Read other research not just to get ideas directly related to your work, but read the literature also as a guide about how to write up your research reports. Consider this example from a study that seeks to understand the relationship between fear of crime and television viewing. Kort-Butler and Hartshorn (2011) open the literature review by stating the main goals of the research and then move into a review of previous research. In a section labeled "Literature Review," they organize other published research into three categories: (1) "Television Exposure and Fear of Crime," which highlights research findings on fearfulness and types of programs watched; (2) "Crime Programming as Infotainment," which presents articles about this genre of television crime programs; and (3) "Crime Programming as Ideology," which discusses various theories focusing on research about how "the media, television in particular, is a way through which cultural images about crime are disseminated and reinforced and through which criminal justice policy debates are shaped" (2011: 40). Notice that the authors did not simply summarize a set of academic articles in any random order but instead conceptualized and organized past research studies and theories into three meaningful categories that highlight the central themes and issues related to the key variables of their study on the fear of crime and watching crime-type television shows.

THEORY AND REASONING

Theories are an important source of research ideas; they typically underlie high-quality research. A *theory* is a set of statements logically linked to explain some phenomenon in the world around us. If a theory is used to generate research ideas about certain behaviors and attitudes, then we are using *deductive reasoning*. Homophily theory, for example, posits that people tend to form social friendship ties with others who are perceived to be similar to them. On this basis, you want to study whether first-year students at college start to make friends with other students in their residence building who seem similar to them in political and social values. You have deduced a specific research question from a larger theory. On the other hand, if a set of observations or empirical data is used to construct a general system

of linked statements, then we are engaging in *inductive reasoning*. In this case, after many observations of students hanging out in the cafeteria and their seating arrangements, you end up with your theory of "birds of a feather flock together." You have used inductive reasoning by going from the particular to the general. Most research involves both processes: A review of the literature tells us what theories and explanations we can use to deduce specific research questions that are then used to get data that form the basis for inducing or modifying a theoretical perspective to explain what was observed and measured (see Box 2.4 for a classic example of deductive and inductive reasoning).

A major outcome of investigating a topic through a critical literature review is the discovery of theories and the development of a set of concepts and questions that can be used to test those theories or to create new ones. This set of questions or hypotheses forms the framework of a research design. Learning how to write hypotheses and develop good research questions that can be translated into reliable and valid measures is the focus of Chapter 3.

BOX 2.4
DEDUCTIVE AND INDUCTIVE REASONING

Emile Durkheim's *Suicide* (1951 [1897]) is a classic study in which Durkheim *induced* a general theory about social cohesion and how connected people are to communities, based on data collected throughout France in the late nineteenth century. Across different sets of people, those who belonged to more cohesive groups had lower suicide rates, he theorized. Durkheim did not develop a psychological theory about why any one particular individual commits suicide, but rather a sociological one based on specific *aggregated* information (data pooled from a collection of people). He was interested in explaining *patterns* of behavior across groups and the variables that contribute to an understanding of those patterns. By linking these observations logically into a coherent system of explanation, Durkheim induced a theory about various types of suicide, like egoistic suicide, which is related to a lack of social integration.

As others have done for over 120 years, learning about Durkheim's theory can generate new research questions. Perhaps a study on how people who have large friendship networks tend to be healthier in mind and body, or how a lack of community and shared values contributes to increases in alienation and crime, can be derived from Durkheim's ideas. Going from a more general theory of social cohesion and suicide to a specific set of topics and hypotheses for further study on community cohesion and crime illustrates how research ideas can be *deduced* from theory. Durkheim's contribution to the development of sociology was this creative linking of theory and empirical data.

THE ETHICS OF RESEARCH

When you have selected some specific and manageable topics and ideas to study, the next step is to design a research plan. As you do so, it becomes important to ask whether the topic and the act of gathering information are worth the impact they may have on who or what is being studied. You may have generated a wonderful set of questions and topics, but if they put people in difficult and stressful situations, the research should not go forward. In short, before the study begins, it is crucial to reflect on the ethics of doing research about a chosen topic, with the measures you intend to use, under sponsorship (and restrictions) from the agency providing funds, and with the sample of people or institutions you plan to survey.

Every major academic and professional association engaged in research has developed a *code of ethics* to guide the collection of data. Every institution conducting research also sets up an *institutional review board* (IRB) to evaluate the proposed research using those codes before the studies be funded or can start. When human subjects are involved, the guidelines are especially important.

In brief, codes of ethics state that participants should not intentionally be *physically or mentally harmed* and their *right to privacy* must be respected. Potential for harm and threats to privacy arise in several areas and situations, including in the process of sampling, measuring, and analyzing data; disseminating the findings; and using the data. Consider for a moment what the ethical and privacy implications are when Big Data is collected, analyzed, and distributed. As described in later chapters, it is unethical when researchers deceptively use inappropriate statistics to distort the findings, distribute portions of the study favorable to their beliefs or the sponsoring agency while concealing unfavorable parts that do not support their ideas, use the results in ways for which they were not designed, and reveal information about specific respondents who were assured confidentiality.

Confidentiality needs to be emphasized when information identifying respondents can be linked to their specific answers and is revealed only to the researchers for the main goals of the project. *Anonymity* can be ensured when there is no way of connecting any particular identifying information with the individual person completing the survey. Respondents do not give any names or code numbers linked to their names. Confidentiality is not the same as anonymity: Anonymous information is always confidential since it can never personally be traced back to anyone, but confidential information is never anonymous because the researchers usually know who completed the survey.

Although it is not always clear-cut in advance whether a research topic and the questions asked will invade people's privacy or cause mental or physical danger, it is important to discuss the potential impact the study might have on those involved. This is essential in order to eliminate any situations where intentional harm could

occur and to inform people what is going to happen in the study so that they may determine how much loss of privacy is at stake and decide whether or not to participate. This is what is called *informed consent*. For example, it would be ethical to tell participants that a questionnaire contains items related to alcohol use and family issues and that they are not obliged to complete items that might disturb them. In this way, should those with a painful family history of alcoholism feel uncomfortable about the project or answering certain questions, they would have the chance to *opt-out*. Of course, this might affect the outcome of the study because it alters the nature of the sample responding, but ethical concerns take precedence.

Similarly, volunteers for research must participate of their own free will. Being part of a captive audience—whether in a classroom or a prison—can be a form of coercion unless there are opportunities to decline involvement. For example, the Code of Ethics for the American Sociological Association (ASA) states, "When undertaking research at their own institutions or organizations with research participants who are students or subordinates, sociologists take special care to protect the prospective subjects from adverse consequences of declining or withdrawing from participation" (for a complete copy of the code, go to www.asanet.org/membership/code-ethics). However, *voluntary participation* (an *opt-in* approach) can affect the outcome of a study if the sample ends up composed only of respondents who are willing to get involved. They may be very different kinds of people from those who declined, and depending on the research topic, this can result in distorted findings.

When there is any danger of physical or mental harm, consent must be given, usually in writing, and it must not be obtained through any form of coercion or misinformation about the project. Researchers must balance the amount of information they need to give with the amount necessary for respondents to arrive at a decision. Sometimes disclosing too much about the research can affect the outcomes of the study. Knowing you are part of the group getting a fake (placebo) vitamin, for example, may affect the results. In no case should the researchers *deceive* the participants about the project. Of course, informed consent may not be needed if the questionnaire does not have the potential for harm, or at least no greater harm than what occurs in everyday social interactions, for example, when asking people anonymously about their favorite books, movies, and other hobbies. Occasionally, *debriefing* people (informing them about the complete objectives and methods of the research) after they participate in the study is a good way of providing information that, if given at the beginning, might have led to biasing the results.

For all research, we need to determine ahead of time whether a project has any potential harm, how we will minimize it if there is any, what mechanisms are in place to guarantee the confidentiality of the data gathered, what benefits the research can have, who benefits from the research, and how much we will tell the participants before and

after the study. This is the kind of information typically presented to an institutional review board that determines whether the design of the study (the sample, measurements, outcomes, uses of the data, consent, and privacy concerns) meets the ethical standards of the profession and sponsoring institution.

Other Ethical Considerations

Some institutional review boards hold that learning how to do research by developing questionnaires for *class projects* may not require human subjects' approval when

- the participants are informed that the survey is part of a class assignment and list the course and instructor who will see the data,
- the results are not reported beyond the classroom in any public forum or publication,
- a statement is included to remind the respondents that their participation is voluntary and that they may skip questions or stop at any time,
- no sensitive information is collected that can cause mental harm or discomfort in completing the questionnaire, and
- questionnaires are anonymous.

Publicly available data or data that cannot be linked to subjects' identities are also typically exempt from human subject approval by institutional review boards. Because policies vary and change, before you proceed with any research, inquire about the guidelines and code of ethics in effect at your institution or sponsoring agency.

Specific types of research methods may require raising other ethical questions in addition to the standard guidelines presented earlier. For example, with Internet surveys, ways of contacting potential respondents should reflect both legal and privacy guidelines that restrict sending unsolicited e-mail ("spam") to participate in a survey. Potential respondents should have a reasonable expectation that they might be contacted for surveys, hold the option of declining participation, not be minors who would normally require parental permission to participate, and be able to have their e-mail addresses easily removed from the mailing lists. Organizations or individuals who send e-mail to recruit respondents should provide legitimate return e-mail addresses and information about the sender that can be verified.

Problems in sampling are a major concern with Internet research. Given uneven distribution of computer access based on age, income, and ethnicity/race, researchers must be ethically aware of the potential for making *generalizations* about a population based solely on responses to online surveys. Furthermore, the storage of e-mail responses to surveys and the potential for linking answers or direct quotations to someone through e-mail addresses need to be determined in designing Internet surveys.

Another issue facing Internet research is to consider how public the information people provide in discussion boards, blog comments, Twitter, Facebook, Instagram, and other social media really is. Although most of these sites are publicly accessible, people often participate as if their responses were private to other members. Should the participants writing comments on someone's blog be informed that their words are being monitored and analyzed by a researcher? Should the researcher pose as a member of the Internet community being studied or not even announce a presence as a lurker? How do you get informed consent from people who wish to remain anonymous and who may give false information about their real age, sexual orientation, and ethnicity?

A report on Internet research ethics for the American Association for the Advancement of Science (Frankel and Siang 1999: 9) states,

> Guidelines in the physical world allow for deception in the study of human phenomena, providing that the research has considerable prospective scientific, educational, or applied value, that there are no alternative methods for achieving the expected results, that the risks to subjects are minimal, and that sufficient explanation or a debriefing will be given to participants as soon as possible following the conclusion of the research.

But it goes on to say that for research in the cyberspace world, "Without a clearer understanding of the benefits and risks associated with Internet research, it may be difficult to justify deceptive practices online." Issues related to informed consent, written agreement to participate, privacy and confidentiality of responses, anonymity, and methods of debriefing for Internet research introduce new ethical considerations that have yet to be fully developed or understood. Like all matters dealing with the ethics of research, the benefits to the subjects, to society, and to science and knowledge must outweigh any threats to privacy and confidentiality and to the physical or mental harm of the participants and the communities they represent. The debates and issues unique to research online can be explored further at http://aoir.org/reports/ethics2.pdf.

Quantitative research also introduces ethical considerations uniquely relevant for methods that involve statistical analysis. The American Statistical Association's ethical guidelines for statistical practice (www.amstat.org/ASA/Your-Career/Ethical-Guidelines-for-Statistical-Practice.aspx) state that statisticians should do the following:

- Use only statistical methodologies suitable to the data and to obtaining valid results.
- Remain current in dynamically evolving statistical methodology; yesterday's preferred methods may be barely acceptable today and totally obsolete tomorrow.
- Report statistical and substantive assumptions made in the study.

- When reporting analyses of volunteer data or other data not representative of a defined population, include appropriate disclaimers.
- Report the limits of statistical inference of the study and possible sources of error.
- Account for all data considered in a study and explain the sample(s) actually used.
- Write with consideration of the intended audience. (For the general public, convey the scope, relevance, and conclusions of a study without technical distractions. For the professional literature, strive to answer the questions likely to occur to your peers.)

Autonomy, Beneficence, and Justice

The simplest way of summarizing the key principles of ethical research is to invoke a 1979 document created by the U.S. Department of Health, Education, and Welfare known as "The Belmont Report" or "Ethical Principles and Guidelines for the Protection of Human Subjects of Research" (www.hhs.gov/ohrp/regulations-and-policy/belmont-report/). This report states the three guiding principles that govern research with human subjects and that should be raised whenever any research is proposed and conducted are autonomy, beneficence, and justice.

Autonomy is the principle of respect for individuals as autonomous agents and protection of those with diminished autonomy (such as the incapacitated, mentally ill, or prisoners). Participants in research must voluntarily participate on the basis of adequate information to consent to their involvement in the project.

Beneficence requires researchers to do no harm, to maximize the benefits to knowledge and society, and minimize the risks and potential injuries to the participants.

Justice refers to fairness in distribution so that no particular group of people is systematically denied equal entitlement to a benefit or selected for participation in a research project because of their easy availability and manipulability, especially when unrelated to the purposes of the study.

This statement from the American Sociological Association's Code of Ethics says it succinctly and applies to all fields of study. (Just substitute "psychologists" or "anthropologists" or "political scientists" or any other field for "sociologists.")

> Sociologists respect the rights, dignity, and worth of all people. They strive to eliminate bias in their professional activities, and they do not tolerate any forms of discrimination based on age; gender; race; ethnicity; national origin; religion; sexual orientation; disability; health conditions; or marital, domestic, or parental status. They are sensitive to cultural, individual, and role differences in serving, teaching, and studying groups of people with distinctive characteristics. In all of their work-related activities, sociologists acknowledge the rights of others to hold values, attitudes, and opinions that differ from their own.

REVIEW: WHAT DO THESE KEY TERMS MEAN?

Academic article
Autonomy, beneficence, justice
Boolean logic
Code of ethics
Confidential versus anonymous
Database
Debriefing
Deductive and inductive reasoning
Informed consent
Institutional review board
"Opt-in" versus "opt-out"
Plagiarism
Replicate
Search engines
Secondary sources
Serendipity
Theory
Voluntary participation

TEST YOURSELF

1. Respondents are given a code number on a survey and assured that only the researchers will know which code numbers are assigned to specific people and only the researchers will see the responses. Explain whether this is an example of confidentiality or anonymity.
2. Explain the three guiding principles of doing research ethically with human subjects.
3. Now that you have finished this chapter, what does the Einstein quotation at the beginning mean to you?

INTERPRET: WHAT DO THESE REAL EXAMPLES TELL US?

1. Vendemia et al. (2017: 30) were interested in understanding why some young people "friended" people on social networking sites (SNS) that they didn't really like or found annoying and how this could lead to attachment anxiety feelings in relationships with others. The following are some excerpts from their literature review (Note: citations within the quotation are provided in the original article and not in the References of this book):

> The uses and gratifications perspective suggests that individuals use media to fulfill needs and wants (Rubin 2002). SNSs satisfy a variety of needs, including entertainment, information, surveillance, diversion, and social utility (Urista, Dong, & Day, 2009). Keeping in touch with friends is the most commonly reported motive for using SNSs, followed by social surveillance (Joinson 2008).

> Previous work examines two dimensions of attachment: anxiety and avoidance; however, it is the anxiety dimension, which assesses the uncertainty individuals feel in close relationships, that may most effectively explain befriending disliked others and monitoring annoying posts on SNSs. Individuals with anxious attachment tend to be uncomfortable with themselves, which causes them to be consumed by relationships with others (Bartholomew and Horowitz 1991).

a. How is theory being used to generate ideas for a study here?
b. Is this deductive or inductive reasoning?
c. How might these theories relate to the topic of their research?
d. What kinds of research questions could you generate from these very brief descriptions of various theories?
e. What are some of the ethical concerns you would raise about such a study?

2. For a study conducted in India about the relationship between intense use of SNS and social psychological well-being, Dhir et al. (2017: 523) describe their methodology:

> The process of self-selected participant recruitment was as follows: First, a pool of junior and senior high schools were randomly taken and were contacted. The selected schools were clearly informed of the research questions and objectives of this research study and related practicalities. Later, a face-to-face meeting was usually organized (if needed) and all the important information concerning research participation was discussed with the interested schools at length. After receiving formal approval, the proposed study was advertised among the target group of users and they were invited to participate in the survey answering sessions . . . . Before the actual study, the lead author briefed the participants on the research questions, objectives, research process and related practicalities. The researchers ensured that all participating students received an equal chance to participate in this research study. Moreover, the participation was kept voluntary and anonymous.

a. Using the code of ethics, how do you evaluate this method of recruiting participants?
b. What other ethical concerns do you feel need to be addressed?

CONSULT: WHAT COULD BE DONE?

Imagine you have been asked to consult on some research projects. Discuss with the researchers the *ethical* issues involved in the following situations:

1. You collect information from Facebook posts about where people travel on vacations and what their ages, gender, and race/ethnicity are.
2. Prisoners in the state penitentiary can get time off if they agree to try a new kind of medication.

3. Students in an intro psychology class get extra credit for volunteering for an experimental study conducted by the professor.
4. An employer announces to workers that a survey about management issues will be conducted and they can opt-out if they so choose.
5. High school students are invited to complete a questionnaire on drug and alcohol use. Monetary incentives will be offered for completion of the surveys.
6. For a study on nutrition and performance, participants are given high-fat-content meals for several days before being asked to solve some mathematical problems.
7. You are led to believe that you are receiving a new vitamin to help in fighting colds, but later realize you were part of the control group receiving a placebo (a nonvitamin sugar pill).
8. You pose as someone of a different race and gender in an Internet discussion group to collect what people have to say about the meaning of friendship in their lives.

DECIDE: WHAT DO YOU DO NEXT?

For your study on how diverse people develop and maintain friendships, especially on social media, respond to the following items:

1. Determine which databases would be most useful for a study of this kind.
2. Develop some key words that you could use in a search of databases to find academic articles on the topic.
3. Identify the pros and cons of using websites like Facebook, Twitter, and Instagram to collect information about friendships.
4. Make a list of categories and themes you would use to organize the research literature after you have reviewed relevant articles and books.
5. If you are doing such a study, list the databases and the key words you used, create a bibliography of at least five articles and books related to your specific topic, and write up a summary of the readings organized thematically.