The intersection between work and family life has changed considerably during the 20th century. For much of the industrial period, separation of work and family activities and a gender-based division of responsibilities were the norm. But we have seen in recent decades a dramatic increase in the proportion of two-income families, many more single-parent/single-earner families, more telecommuting and other work-at-home arrangements, and some changes in the household division of labor. Social scientists who seek to understand these changes in the social structure have had plenty to keep themselves busy.

Ohio State sociology professor Catherine Ross (1990) wanted to know how these changes shape people’s sense of control and, in turn, how their sense of control affects feelings of depression, anxiety, and distress. To answer these questions, she proposed to the National Science Foundation a survey of adult Americans. In this chapter I will use her successful project to illustrate some key features of survey research, after an initial review of the reasons for using survey methods. I explain the major steps in questionnaire design and then consider the features of four types of surveys, highlighting the unique problems attending each one and suggesting some possible solutions. I discuss ethics issues in the final section. By the chapter’s end, you should be well on your way to becoming an informed consumer of survey reports and a knowledgeable developer of survey designs—as well as a more informed student of the relationships among work, family, and well-being.
Survey Research in the Social Sciences

Survey research involves the collection of information from a sample of individuals through their responses to questions. Ross turned to survey research for her study of social structure and well-being because it is an efficient method for systematically collecting data from a broad spectrum of individuals and social settings. As you probably have observed, a great many social scientists—as well as newspaper editors, political pundits, and marketing gurus—make the same methodological choice. In fact, surveys have become such a vital part of our society’s social fabric that we cannot assess much of what we read in the newspaper or see on TV without having some understanding of this method of data collection (Converse, 1984). Although survey research is more popular in sociology than in economics or social psychology, it accounts for more than a third of published research articles in all three disciplines.

Attractions of Survey Research

Regardless of its scope, survey research owes its continuing popularity to three features: versatility, efficiency, and generalizability.

Versatility

First and foremost is the versatility of survey methods. Although a survey is not the ideal method for testing all hypotheses or learning about every social process, a well-designed survey can enhance our understanding of just about any social issue. Ross’s survey covered a range of topics about work and health, and there is hardly any other topic of interest to social scientists that has not been studied at some time with survey methods. Politicians campaigning for election use surveys, as do businesses marketing a product, governments assessing community needs, agencies monitoring program effectiveness, and lawyers seeking to buttress claims of discrimination or select favorable juries.

Efficiency

Surveys also are popular because data can be collected from many people at relatively low cost and, depending on the survey design, relatively quickly. Catherine Ross contracted with the University of Illinois Survey Research Laboratory (SRL) for her 1990 telephone survey of 2,000 adult Americans. SRL estimated that the survey would incur direct costs of $60,823—only $30.41 per respondent—and take five to six months to complete. Large mailed surveys cost even less, about $10 to $15 per potential respondent, although the costs can increase greatly when intensive follow-up efforts are made. Surveys of the general population using personal interviews are
much more expensive, with costs ranging from about $100 per potential respondent for studies in a limited geographical area to $300 or more when lengthy travel or repeat visits are needed to connect with respondents (Fowler, 1998; see also Dillman, 1982; Groves & Kahn, 1979). As you would expect, phone surveys are the quickest survey method, which accounts for their popularity in political polling.

Surveys also are efficient because many variables can be measured without substantially increasing the time or cost. Mailed questionnaires can include up to 10 pages of questions before respondents begin to balk. In-person interviews can be much longer, taking more than an hour; for example, the 1991 General Social Survey included 196 questions, many with multiple parts, and was 75 pages long. The upper limit for phone surveys seems to be about 45 minutes.

Of course, these efficiencies can be attained only in a place with a reliable communications infrastructure (Labaw, 1980:xiii–xiv). A reliable postal service, which is required for mail surveys, has generally been available in the United States—although residents of the Bronx, New York, have complained that delivery of local first-class mail often takes two weeks or more, almost ruling out mail surveys (Purdy, 1994). Phone surveys can be effective in the United States because 95% of households have phones (Czaja & Blair, 1995), and only 4% of persons live in households without a phone (Levy & Lemeshow, 1999:456).

Also important to efficiency are the many survey organizations that provide the trained staff and the proper equipment for conducting high-quality surveys.

Generalizability
Survey methods lend themselves to probability sampling from large populations. Thus survey research is very appealing when sample generalizability is a central research goal. In fact, survey research is often the only means available for developing a representative picture of the attitudes and characteristics of a large population.

Surveys also are the method of choice when cross-population generalizability is a key concern, because they allow a range of social contexts and subgroups to be sampled. The consistency of relationships can then be examined across the various subgroups.

The Omnibus Survey
An omnibus survey shows just how versatile, efficient, and generalizable a survey can be. An omnibus survey covers a range of topics of interest to different social scientists, in contrast to the typical survey that is directed at a specific research question. It has multiple sponsors or is designed to generate data useful to a broad segment of the social science community rather
than to answer a particular research question. It is usually directed to a sample of some general population, so the questions about a range of different issues are appropriate to at least some sample members.

One of sociology’s most successful omnibus surveys is the General Social Survey (GSS) of the National Opinion Research Center at the University of Chicago. It is a 90-minute interview administered biennially to a probability sample of almost 3,000 Americans, with a wide range of questions and topic areas chosen by a board of overseers. Some questions are asked of only a randomly selected subset of respondents. This split-ballot design allows more questions without increasing the survey’s cost. It also facilitates experiments on the effect of question wording: Different forms of the same question are included in the split-ballot subsets. The GSS is widely available to universities, instructors, and students (Davis & Smith, 1992; National Opinion Research Center, 1992), as are many other survey datasets archived by the Inter-University Consortium for Political and Social Research (ICPSR) (more details about the ICPSR are in Chapter 9). Catherine Ross contributed her survey dataset to the ICPSR.

**Errors in Survey Research**

It might be said that surveys are too easy to conduct. Organizations and individuals often decide that a survey would help to solve some important problem because it seems so easy to prepare a form with some questions and send it out. But without careful attention to sampling, measurement, and overall survey design, the effort is likely to be a flop. Such flops are too common for comfort, and the responsible survey researcher must take the time to design surveys properly and to convince sponsoring organizations that this time is worth the effort (Turner & Martin, 1984:68).

In order for a survey to succeed, it must minimize the risk of two types of error: poor measurement of cases that are surveyed (errors of observation) and omission of cases that should be surveyed (errors of nonobservation) (Groves, 1989). Measurement error was a key concern in Chapter 3, but there is much more to be learned about how to minimize these errors of observation in the survey process. We will consider in this chapter potential problems with the questions we write, the way we present these questions in our questionnaires, the interviewers we may use to ask the questions, and the characteristics of the respondents who answer the questions.

There are three sources of errors of nonobservation:

- Coverage of the population can be inadequate due to a poor sampling frame.
- The process of random sampling can result in “sampling error”—differences between the characteristics of the sample members and the population that arise due to chance.
Nonresponse can distort the sample when individuals refuse to respond or cannot be contacted.

We considered the importance of a good sampling frame and the procedures for estimating and reducing sampling error in Chapter 4; I will only add a few more points here. We will give much more attention in this chapter to procedures for reducing nonresponse in surveys. Unfortunately, nonresponse is becoming an increasing concern for survey researchers. For reasons that are not entirely understood, but that may include growing popular cynicism and distrust of government, nonresponse rates have been growing in the United States and western Europe since the early 1950s (Groves, 1989:145–155; Groves & Couper, 1998:155–189).

We can begin to anticipate problems that lead to survey errors and identify possible solutions if we take enough time to think about the issue theoretically. Survey expert Don Dillman (2000:14–15) suggests social exchange theory, which asserts that behavior is motivated by the return expected to the individual for the behavior (Blau, 1964). Expected returns are based on the social rewards that the individual thinks will be received for the behavior, the costs that will be incurred, and the trust that in the long run the rewards will exceed the costs. A well-designed survey will maximize the social rewards and minimize the costs for participating in the survey and establish trust that the rewards will outweigh the costs.

Using clear and interesting questions and presenting them in a well-organized questionnaire go a long way to reducing the cost of responding carefully to a survey. Question writing will be the focus of the next section, and questionnaire design will be discussed in the section that follows. Other steps for increasing rewards, reducing costs, and maximizing trust in order to reduce nonresponse in each type of survey will be the focus of the last section.

**Writing Questions**

Questions are the centerpiece of survey research. Because the way they are worded can have a great effect on the way they are answered, selecting good questions is the single most important concern for survey researchers. All hope for achieving measurement validity is lost unless the questions in a survey are clear and convey the intended meaning to respondents.

You may be thinking that you ask people questions all the time and have no trouble understanding the answers you receive, but can’t you also think of times when you’ve been confused in casual conversation by misleading or misunderstood questions? Now consider just a few of the differences between everyday conversations and standardized surveys that make writing survey questions much more difficult:
Survey questions must be asked of many people, not just one.

The same survey question must be used with each person, not tailored to the specifics of a given conversation.

Survey questions must be understood in the same way by people who differ in many ways.

You will not be able to rephrase a survey question if someone doesn’t understand it, because that would result in a different question for that person.

Survey respondents don’t know you and so can’t be expected to share the nuances of expression that help you and your friends and family to communicate.

Question writing for a particular survey might begin with a brainstorming session or a review of previous surveys. Then whatever questions are being considered must be systematically evaluated and refined. Although most professionally prepared surveys contain previously used questions as well as some new ones, every question that is considered for inclusion must be reviewed carefully for its clarity and ability to convey the intended meaning. Questions that were clear and meaningful to one population may not be so to another. Nor can you simply assume that a question used in a previously published study was carefully evaluated.

Adherence to a few basic principles will go a long way toward ensuring clear and meaningful questions. Each of these principles summarizes a great deal of the wisdom of experienced survey researchers, although none of them should be viewed as an inflexible mandate. As you will learn in the next section, every question must be considered in terms of its relationship to the other questions in a survey. Moreover, every survey has its own unique requirements and constraints; sometimes violating one principle is necessary in order to achieve others.
Refine and Test Questions

Adhering to the preceding question-writing guidelines will go a long way toward producing a useful questionnaire. However, simply asking what appear to you to be clear questions does not ensure that people have a consistent understanding of what you are asking. You need some external feedback—the more of it the better. This feedback is obtained from some type of pretest (Dillman, 2000:140–147).

One important form of feedback results from simply discussing the questionnaire content with others. Persons who should be consulted include expert researchers, key figures in the locale or organization to be surveyed (such as elected representatives, company presidents, and community leaders), and some individuals from the population to be sampled. Run your list of variables and specific questions by such figures whenever you have a chance. Reviewing the relevant literature to find results obtained with similar surveys and comparable questions is also an important step to take, if you haven’t already conducted such a review before writing your questions.

Another increasingly popular form of feedback comes from guided discussions among potential respondents, called focus groups, to check for consistent understanding of terms and to identify the range of events or experiences about which people will be asked to report. By listening to and observing the focus group discussions, researchers can validate their assumptions about what level of vocabulary is appropriate and what people are going to be reporting (Fowler, 1995). (See Chapter 8 for more about this technique.)

Professional survey researchers have also developed a technique for evaluating questions called the cognitive interview (Fowler, 1995). Although the specifics vary, the basic approach is to ask people to “think aloud” as they answer questions. The researcher asks a test question, then probes with follow-up questions to learn how the question was understood and whether its meaning varied for different respondents. This method can identify many potential problems, particularly if the individuals interviewed reflect much of the diversity of the population to be surveyed. A different approach to identifying problems is behavior coding: A researcher observes several interviews or listens to taped interviews and codes according to strict rules the number of times that difficulties occur with questions. Such difficulties include respondents asking for clarification and interviewers rephrasing questions rather than reading them verbatim (Presser & Blair, 1994:74–75).
Conducting a pilot study is the final stage of questionnaire preparation. Prepare for the pilot study by completing the questionnaire yourself and then revise it. Next, try it out on some colleagues or other friends, and then revise it. For the actual pilot study, draw a small sample of individuals from the population you are studying or one very similar to it (it is best to draw a sample of at least 100 respondents) and carry out the survey procedures with them. This should include as many mailings as you plan for a mailed questionnaire and actual interviews if you are preparing to conduct in-person interviews. You may include in the pretest version of a written questionnaire some space for individuals to add comments on each key question or, with in-person interviews, audiotape the test interviews for later review (a good idea particularly if you have not conducted cognitive interviews).

Review the distribution of responses to each question, listen to the audiotapes, or read all the comments, and then code what you heard or read to identify problems in question wording or delivery. Revise any questions that respondents do not seem to interpret as you had intended or that are not working well for other reasons. If the response rate is relatively low, consider whether it can be improved by some modifications in procedures.

Ross's survey of U.S. households included limited pretesting, as Johnny Blair noted in a letter to Ross summarizing the procedure to be used:

Before being used for data collection, the survey questionnaire will be given a pretest consisting of 30 interviews conducted in Illinois. The pretest will be used to evaluate the adequacy of the questionnaire, to try out systematically all the various procedures in the main survey, to establish and evaluate codes for questionnaire responses, and to gauge the length of the interview. Only upon the basis of the diagnostic information obtained in the pretest interviews will the fully refined version of the survey questionnaire be prepared, ready for administration in the full-scale survey. (Personal communication, April 10, 1989)

Which pretesting method is best? They each have some unique advantages and disadvantages. Behavior coding, with its clearly specified rules, is the most reliable method across interviewers and repetitions, whereas pilot studies are the least reliable. However, behavior coding provides no information about the cause of problems with questions; the other methods are better at this. Review of questions by an expert panel is the least expensive method and identifies the greatest number of problems with questions (Presser & Blair, 1994).

Add Interpretive Questions

A survey researcher can also try to understand what respondents mean by their responses after the fact—that is, by including additional questions in the survey itself. Adding such interpretive questions after key survey