Perils and Pitfalls of Survey Research

ABSTRACT

The various stages of a survey—sampling, questionnaire design, and data collection—all present potential problems. Decisions about sampling include the type and size of the sample as well as the selection of the population to be sampled. In questionnaire design, there are a number of stages, including wording the questions, pretesting the questions, and finalizing the questions. After determining the questions to be asked, the advantages and disadvantages of different data collection types need to be considered—e.g., self-administered questionnaires, telephone interviews, or face-to-face interviews. A final concern is who will administer the survey.

INTRODUCTION

A survey is a very complex undertaking with ample opportunities for going wrong. Consider a brief list of some of the stages involved: research design, sampling, questionnaire design and construction, data collection, data processing, data analysis, and reporting. One of the problems is that the linear progress implied by the list is quite misleading. The design of the research must be influenced by the type of data analysis contemplated; if it is not, something is sure to go wrong at the end. The survey must ask the right questions in a way that is sensible to respondents; if not, there will not be the right data to analyze. A sample must at once be feasible to draw and reflective of the population that it is supposed to represent; if it is not, the information you produce could be irrelevant or, worse, misleading. Data collection presents a
whole set of problems of its own, one of which is getting an acceptable completion rate; if you do not, your sample is not what you think it is; you will not know what you are talking about because you will not know who you are talking about. In short, survey research is just one quality control problem after another. It is also a whole bunch of quality control problems at the same time.

SAMPLING

Sample Types

With sampling, there are a number of quality control problems and some solutions to those problems. There are two basic types of samples—samples of many and samples of one. Samples of many are the sort of thing people think about when they think about surveys. You want a lot of "representative" cases pertaining to the population you are interested in. Well-designed samples of many are known as probability samples because the probability that each element will fall into the sample is known.

Most people are also familiar with samples of one. When you write a paper, you may ask a colleague to criticize it. Writers know that they are poor judges of whether they have actually said what they meant to say. You do not choose your critic to represent any particular population—a sample of one could not do that anyway—you choose her or him to tell you about possible trouble spots. From that point of view, several samples of one are better than just one. Thus we have a third kind of sample, samples of several, which are basically accumulations of samples of one and which are used to look for and find trouble. Because surveys are so complex and involve so many different activities, using samples of several for quality control is particularly important.

Another kind of sample of several can masquerade as a sample of many. Known as convenience samples, their distinguishing characteristic is that there is no way to estimate the probability of an element's falling into the sample. A common example is freshmen in Psych 100 classes—unless you want a theory of freshmen in Psych 100 classes, in which case freshmen in Psych 100 classes at the University of Illinois would still be a convenience sample. There are lots of freshmen in Psych 100 classes, but if you are interested in saying something about a wider spectrum of humanity, that does not make any difference. No matter how many observations there are in a sample, if its observations are not drawn with known probability and if it does not correspond
to the population you want to represent, you are still dealing with a convenience sample. The bottom line here is that a good small sample is better than a bad large sample.

Sample Size

A common question about sampling is: "How large should my sample be?" Unless there is one variable that you are interested in beyond all others, this is one of the hardest questions that you can ask a survey researcher. One answer is: "How much time or money do you have?" Another is: "It depends." It depends on how accurate you want your estimate to be. That is the easy part. It depends on what kinds of comparisons you want to make. If you want to compare men and women, you can let the chips fall where they may because each is roughly half of the population. If you want to compare blacks and whites, you need to begin thinking about drawing a supplemental sample of blacks because the usual sample has about nine times as many whites as blacks. Unfortunately, your comparisons will basically be as valid as your sample of blacks. It therefore makes sense to allocate some of your resources to increasing the number of blacks at the expense of decreasing the number of whites. Since finding blacks is costlier than finding whites, you might not aim for a 50-50 distribution. There are actually formulas that will tell you what the optimal distribution is, as long as you can estimate how much it will cost to collect data from each subgroup. (An excellent reference for problems of this kind is Leslie Kish [1987], Statistical Design for Research.)

Population Selection

Now for some of the perils and pitfalls—and also some of the opportunities—in sampling. As you know, samples are necessary because it is usually too expensive and time consuming to enumerate an entire population. The U.S. Census does a Post-Enumeration (sample) Survey (PES) in order to evaluate the completeness and accuracy of the enumeration. As you will remember, the Secretary of Commerce made news last summer by deciding to stick with the enumeration, even though the PES showed that the Census had an undercount of about 5 million people. The professionals at the Census Bureau would have gone with the PES.

One of the research design problems that you must solve is exactly what population you want to represent. This is usually not a simple issue. Take trying to draw a sample of the users of a library. For public libraries, there are cardholders, and presumably the modern, computerized library has a list of cardholders from which a sample
could be drawn. But what about people who use the library but do not have a card? At least two such groups spring immediately to mind. There are the people who come in on Saturday morning to read their hometown newspapers, but never check out a book. The twin cities—Champaign and Urbana, that is—have a public library each. I have a Champaign library card but have checked out books from Urbana. That makes me a user of the Urbana Free Library. If Urbana wanted to survey their users, should they care about people like me or people from farther afield who have access to the Urbana library?

The reason I raise questions like this is not that there is a single, right answer; there is not. However, you must decide in advance what population you want to represent and why. Then, of course, you must also decide whether there is a list or a way of creating a list of the population that you really want to sample, so that you can draw your sample elements from the list. Often there is not, and then you must decide how seriously your purposes are diluted by the compromises you have to make in order to get some kind of sample to collect data from.

Unless you are the U.S. Census doing the decennial enumeration or a survey evaluating that enumeration, you are not likely to draw a sample of the United States that represents the entire population. Guam is very likely to be left out; Alaska and Hawaii often do not make it either. Probably more important, even large-scale government surveys like the Current Population Survey, which estimates the unemployment rate for states and localities, refer to the "civilian, noninstitutionalized" population. If you were in the armed forces living on base, in jail, or living in a college dormitory, your chance of falling in such a sample would be zero.

I mention this point partly to indicate that everybody makes compromises but mostly to point out that there comes a time when it becomes useful to think about combining different survey designs and therefore different surveys to represent a particular population. If you really wanted to include everybody—and could afford to do so—the solution for the U.S. population would entail doing several basically independent surveys, one for the civilian noninstitutionalized population, one for service personnel, one for college students, another for prisoners, and still others for other institutionalized groups.

I should also mention the problems with publicly available lists. They are often pretty bad because they are incomplete and out of date. Because there are few unlisted telephones in this area, the Champaign-Urbana white pages include over 90 percent of the households in the twin cities. The small percentage without phones would have been omitted, as would anybody who had moved in after the listing was compiled. Thus, the Champaign-Urbana directory would be adequate
for many purposes; however, it would be a bad sampling frame if you were interested in providing outreach to newcomers. If you were interested in doing a survey of Chicagoans, the white pages would be abysmal for just about any purpose. The nonlisting rate in Chicago is something like 40 percent.

There are many other kinds of directories. Some are better than others, and sometimes there are ways of telling how good a directory is. For example, there is a published list of drugstores; it contains about 50,000 entries. The census has enumerated drugstores, as well as other business enterprises, and estimates that there are about 50,000 drugstores in the United States. The list would therefore be adequate for most purposes. The American Library Association (ALA) has a directory of members. It turns out, however, that not all librarians—not even all professional librarians—are members of the ALA, at least according to the census. What we have here is a separate research problem. Which kinds of librarians tend to be members of the ALA and which do not? If you do not know, a sample of librarians based on the ALA directory could be quite misleading.

You may be wondering whether large-scale samples of several could ever be useful—I hesitate to say valid. We have already seen that for finding trouble spots in questionnaires, samples of several are useful. If you are looking for trouble, samples of several can be useful on a larger scale. A couple of years ago, a survey on date rape was done on the Urbana campus, with a response rate of about 37 percent. It revealed that date rape was quite a frequent event and therefore a serious problem. With two possible respondents missing for every one who provided data, it would have been a mistake to attempt a numerical estimate of the incidence of date rape. On the other hand, the rate was so high that, even in the unlikely event that all the nonrespondents had not experienced date rape, it would indicate the existence of a serious problem.

There are other uses for samples of several. Let me outline a sneaky one that should be of particular use to academic librarians. Journals are not only getting more expensive, they are proliferating. It would seem to make sense to eliminate some little used journals so that the more widely used ones can continue to be supported. How to do this? Send out a self-administered survey to faculty members and ask them what journals are crucial to their research. You will have a fairly low response rate, and lots of journals will not be mentioned at all. When the inevitable complaints are made, say, "You had your chance to tell us what you wanted, and you didn’t take it." Duck.

That is the bad news (only part of it, actually). There is good news. A surprising number and range of sampling problems have legitimate solutions. If you wanted, you could sample the fish in a pond and
come up with an estimate of the number of fish in that pond. You could sample clouds so that you could seed some and not others. You could estimate the number of homeless in a community. You could also sample a variety of other rare or hard to reach populations, such as people who had a particular form of cancer, veterans of Operation Desert Storm, or work organizations of all types and sizes.

The University of Illinois is fortunate to have one of the world’s foremost experts in the sampling of human populations, Seymour Sudman. His book, *Applied Sampling*, is an excellent and accessible introduction to the topic, and a recent article that he coauthored in *Science* outlines a variety of ways to sample rare or hard to reach populations (Sudman, 1976; Sudman, Sirken, & Cowan, 1988). In short, if you have a sampling problem, consult a sampling expert. There are lots of ingenious ways of producing a probability sample, even when a convenience sample may seem the only way to go.

**QUESTIONNAIRES**

**Asking Questions**

Even when you have an adequate list or a good substitute for one, your problems are far from solved. You must draw your sample and then obtain data from as many of the elements in it as possible, and you must get your respondents to answer the right questions. I will discuss the problems of data collection later. First I want to examine some of the problems and pitfalls in asking questions and getting valid answers to them.

For the most part, I am talking about factual questions—questions to which there is a real answer that you could learn if you only had access to the right data, like official records. Of course, there are lots of problems with attitudinal questions; I am simply assuming here that you are most likely to want the facts. Factual questions have lots of problems of their own.

Let’s start with the classical problems, the ones covered in most textbooks. You all know that you should not ask loaded questions or double-barreled questions, and that you should keep your questions simple. It is easy to find examples of bad questions that violate these principles, and some of them are kind of fun—like this one purportedly asked of French coal miners by Karl Marx: “Does your employer or his representative resort to trickery in order to defraud you of a part of your earnings?” (Babbie, 1990, p. 43). The loading is pretty obvious—“trickery,” “defraud,” and also “resort.” The question is also double-barreled. Why just trickery? What about brute force? Or, for something
completely different, employees of the University of Illinois will recognize that trying to get money out of the legislature is a good way to keep salaries down. “Do you favor keeping the library open past midnight?” is also a loaded question. A better wording would be: “Do you favor or oppose keeping the library open past midnight?”

I want to call your attention to another bad question in order to make a point not made so frequently in the textbooks. This one was asked by a British Royal Commission just after World War II: “Has it happened to you that over a long period of time, when you neither practised abstinence, nor used birth control, you did not conceive?” (Moser and Kalton, 1972, p. 321). There is a whole catalog of things wrong with this question. It is too long; it is too complex; it uses big, Latinate words when smaller or at least English words would do—“practised abstinence,” “conceive.” It includes three negatives. The underlying mistake was this: the researchers were trying to get respondents to operationalize their (the researchers’) research question in their (the researchers’) words. Ordinary people cannot do this, and no one should expect them to. The example I have just given is an obvious one. Sometimes the problem is not so obvious, but you should be aware of it.

Those were some of the classical problems with factual questions. There are many more. Take social desirability. It turns out that having a library card is a socially desirable behavior. That is, if you ask members of a community whether they have a library card, more people will say that they have one than actually do. Then there are socially undesirable behaviors, like drinking. People tend to underestimate—or at least underreport—the amount of drinking that they do.

There has also been a fair amount of research on the memory problems involved in answering survey questions. One of these problems is telescoping. Let me illustrate from personal experience. The question is: “Did you visit the library in the past month?” Leaving aside the possibility that I should have been asked about the Champaign library, the Urbana library, and the University library, preferably separately, what is my answer? These words were written on July 27, and I will stick to that date because it is a useful reference point. In late June, I was involved in interviewing respondents to a survey of mine that was in the field at the time and in preparing to go on vacation. Somewhere around the end of June, I went to the Champaign library to get some books on the area we were going to visit and to the University library to look up the address of a potential respondent. Several things are involved here. When was the last time I went to a library? Was it before or after June 27? I cannot remember. What would I have said if I had actually been asked? I could easily have said “Yes” on the grounds that I knew I was using the library at about the right time. If I had not used the library after June 27, I would have been telescoping.
I would have reported doing something during one time period when I had actually done it during an earlier one. This is a common problem when respondents are asked to recall the timing of things that they have done or that have happened to them.

Another problem is that some things are not important enough—to the person—for them to remember. Until I started thinking about it, I had forgotten about my visit to the University library. Even though I have told other people about it in other contexts, the visit itself was so brief (albeit successful) that I might easily have forgotten it in the context of being asked in a survey interview.

One lesson here is that if you are interested, say, in the ways that people can use a library, you need to come up with a list of those ways and ask your respondents about each specifically. This will give you better data than a single, general question. You will still probably underestimate most types of usage, but not as badly. The last item on your list will be something like: "Anything else?" Given the list, your estimate of the usages not on the list will be even worse than if you had just asked one general question.

I have used such a detailed list in a survey that investigated the extent of volunteer activities in Champaign County. The questionnaire began with a list of 17 different types of organizations for which people could volunteer. Using this list, we estimated that about 75 percent of the adult residents of Champaign County had volunteered to do something for somebody. A survey done elsewhere had asked one general question on volunteering, and this question produced an estimate of about 50 percent. There is good reason to believe our estimate. When we asked a general question about monetary contributions, we came up with about the same estimate as the other study did.

**Questionnaire Design**

The idea of samples of one or several is very important here. Designing a questionnaire is one activity in which more heads are definitely better than one. The first phase of questionnaire design is figuring out what research questions you want answered. The second is trying to formulate specific questionnaire items that will help you answer the research questions. After you have come up with a tentative questionnaire draft, you need to show it to other people, including if possible survey professionals, who have a lot of experience with asking questions. No one person can think of all the ways in which it is possible for a respondent—or for different kinds of respondents—to misinterpret a question. At this stage, you need all the help you can get—and it still probably will not be enough.
A further stage, if you have the resources, is to try your questions out on a small number of people and ask them to help you look for trouble. This is where focus groups come in. You can get focus group members to tell you what a question means to them or which questions cause them trouble. You can also ask people to think aloud when they are answering a question. That is basically what I was doing when I was talking about the timing of my library visits this summer.

Next, you must pretest your questionnaire—in other words, try it out on real people. In contrast to focus groups, the pretest is a kind of dress rehearsal. It is standard practice, therefore, not to tell respondents that you are doing a pretest. Nevertheless, the goals of a pretest are different from those of the main survey. The purpose of a pretest is still to look for trouble—for problems. You should not have any difficulty finding them. One of the good things about real people is that they have virtually an infinite capacity for surprising you. The sample-of-several principle is clearly important here. Pretests are usually small and often not based on probability sampling. You want to give people the opportunity to interpret each question as they see it. If a respondent interprets a question in a way that never occurred to you, you need to fix the question. At the same time, it is important to get all the bugs you can out of a questionnaire before you pretest it. If the pretest reveals a lot of problems that require fixing, you will need to do another pretest. After all, you have just changed your questions, and the new ones could have new problems. (Good treatments on questionnaire design and question wording include Stanley Payne [1951], The Art of Asking Questions, a classic in the field; Howard Schuman and Stanley Presser [1981], Questions and Answers in Attitude Surveys; and Seymour Sudman and Norman Bradburn [1982], Asking Questions.)

Even after taking all the precautions you can, your questionnaire will still be open to misinterpretation, but there comes a stage after which preliminary research has diminishing returns. That means that the surprises are still out there waiting to happen. One such surprise happened in one of my research projects and has achieved a certain notoriety in the trade. In 1961 I was in charge of a project that investigated attitudes toward the Eichmann trial among residents of the San Francisco Bay Area. There were several questions designed to measure respondents' awareness and knowledge of the trial, including the first ones, which asked respondents whether they were aware of ten events that were in the news at the time. The third event was the Eichmann trial. One day an interviewer came back to the office to explain why he had gotten a refusal. When he knocked on the door, a woman answered and he began the interview. Question 3: "Have you heard or read of the Eichmann trial?" The lady replied: "I think President Eichmann is
doing a fine job” and slammed the door. You win some and you lose some. If you do not use samples of several to help you design your questionnaire, you will lose a lot more than you need to.

Since I have had to leave out more than I could possibly put in, you will notice that I have not said much about the research design phase as such and that I therefore have not said anything about that basic activity, the review of the literature. In the usual sense, I am still not going to say anything about it. I do recommend, however, that you look for other people's questionnaires and questions, if any exist on your topic. For one thing, if you use their questions, you will have the opportunity to compare your situation with theirs. For another, their questions have presumably undergone some of the tests to which you will submit yours. To some extent, therefore, they are "pre-pretested." Nevertheless, you will still need to pretest these questions in the context of your questionnaire. Still, as far as questions are concerned, heed the immortal word of Tom Lehrer: “Plagiarize.” (Given the attention that plagiarism has received in the media lately, this may seem like dubious advice, but in designing questionnaires plagiarism is legitimate.)

DATA COLLECTION

When it comes to data collection, a whole new set of perils and pitfalls opens up. As you know, the three basic types of data collection are self-administered questionnaires, telephone interviews, and face-to-face interviews. They share some problems, but each has its own problems as well. One of these shared problems is actually achieving the sample that you designed and drew. Another is making certain that each question is answered—adequately and accurately.

Response Rate

The measure of how well you have achieved the sample that you drew is known as the response rate. It is simply the number of completed questionnaires divided by the total number of eligible possible respondents who fell in your sample. It is usually expressed as a percentage. In telephone and face-to-face interviewing, response rates of 70 to 80 percent are common. Response rates to self-administered surveys range much more widely than this, although it is possible to achieve a response rate of 70 percent or even higher.

Let's think about response rates for a minute. If your response rate was 90 percent (and federal surveys commonly have response rates at least that high), you would have nine times as many respondents as
nonrespondents. Missing 10 percent of the cases that you wanted would not be a serious handicap. The missing people would have to be very different from the ones that you collected data on for their absence to have much effect on your estimates of population parameters. A response rate of 75 percent is not as good, but you still would have three times as many respondents as nonrespondents. You can see why a response rate of 50 percent is horrible. Now you have as many nonrespondents as respondents. If the two groups differ on the variables you are interested in, your results could be quite distorted. Many self-administered questionnaires have response rates in the 20s and 30s. If, heaven forfend, that is what you get, you have wasted your time and money. There are ways of increasing response rates to self-administered surveys, and I will go into some of them in a little while.

First, I should warn you against a couple of common practices, one being a form of cheating and the other a kind of pious hope that looks good but does not perform too well. The first is using replacement respondents. Say you want a sample of 500, but your best efforts have yielded only 400. Why not draw a new sample and pick up the extra 100 cases? Your first 400 were cooperative, and the missing 100 were not. Your new sample of 100 will also be cooperative. If cooperation is related to the variables you are interested in, you have a biased sample. You are not adding 100 cases worth of new information.

The cheating comes in if you were to take your second 100 cases from a large pool. What would your response rate be? Say you actually drew another 500 possible cases, and you needed to try something like 150 to get your 100 interviews. You certainly would not count the 350 people you never approached in the denominator of the response rate, would you? When supplementary sampling of this kind is done, response rates often go unreported. If a response rate is reported, it is likely to be misleading.

The second practice is known as weighting. Say you have achieved a response rate of 50 percent but that you know from other sources the distribution of your population on certain key variables, like age, sex, place of residence, and education. You discover that the distribution of your sample on these variables differs from the distribution in the population. Your sample is likely to be older, more female, more rural, and better educated than the population. You might think that you could correct for these biases by weighting your sample so that its distribution corresponds to the population distributions. This procedure helps, but research has shown that it by no means completely corrects for whatever biases may exist.

Self-Administered Questionnaires

Since most users of libraries are literate and since self-administration seems to be the least expensive method, I will devote most of my
remaining remarks to that method. As I said, response to self-administered questionnaires varies all over the lot. A major factor influencing the cost of gaining cooperation and the degree of nonresponse is whether the questionnaire can be administered to groups or must be administered to individuals. If all or practically all members of a group are present, the response rate is likely to be high, and the larger the group, the lower the per-questionnaire cost of collecting data. If, on the other hand, there are many absences, alternative methods must be tried, and the cost advantages diminish considerably. A problem with group administration is that some people are likely to fall into your sample more than once. If your groups were classes at the University of Illinois and you drew a sample of classes, some students would be in more than one of the classes that you sampled. You would need some way of identifying respondents and culling out the duplicates so that no one would be represented more than once.

You might expect that a self-administered questionnaire distributed and filled out by mail might be very cost-effective, but the problems of collecting data by mail make some, but not all, of the cost-effectiveness illusory. It would be very unusual for you to send out a questionnaire and get a 75 percent response rate to the first mailing. The 1990 census got about a 60 percent response to its first mailing. Except in comparison with earlier censuses, this is quite a remarkable degree of cooperation. You and I would be doing well to get a 40 percent response rate. Therefore, in your planning, you must include time and money to do follow-up mailings. If, after two or three weeks, you have not received a questionnaire from someone in your sample, you should send out another questionnaire. If, after another two or three weeks, you have not received a questionnaire, send out another one.

My own rule of thumb is that a follow-up mailing will produce about half as many completed questionnaires as its immediate predecessor. Thus, given an initial 40 percent response rate, you could expect to get about 20 percent more from the first follow-up and 10 percent more again from the second, for a total of 70 percent, which verges on the respectable. Note, however, that a 30 percent initial response would ultimately yield only 52.5 percent, which verges on the awful. Then what?

Sending out questionnaires to nearly half of your sample (a third follow-up) in order to get a 3 percent response is clearly not worth it. (Remember the sequence—30, 15, 7 and a half, 3 and a quarter.) If you are using the mails, you have names and addresses for the people in your sample. If you have phone numbers, you can call people up and try to interview them. Now we are beginning to talk about real money. There is at least a partial solution to the money problem—sampling. If you were to draw a 10 percent sample of your
would fill responding a necessary important. It require different distributions expensive.

Face-to-Face interviewing

I should also mention some of the problems connected with face-to-face and telephone interviewing. You may be surprised to hear that, except in rare circumstances in which you want to collect information in depth from a relatively small sample, I recommend against face-to-face interviewing. Anything on a large scale is likely to be extremely expensive. A statewide or nationwide study would virtually require using a professional survey organization. On that scale, developing and implementing a sampling design alone would blow most budgets out of the water. Furthermore, face-to-face data collection is extremely inefficient. Only about half the time an interviewer spends in the field is spent doing interviews. The rest is spent in travel. Just getting to where the interview is supposed to take place can take a lot of time.
Furthermore, it is often necessary to return to a household in order to interview a specific respondent. If so, even more time is spent getting there and getting back.

There has been considerable research on the differences between collecting data face-to-face and by telephone, with inconclusive results. In other words, conventional wisdom to the contrary notwithstanding, there are few if any advantages to face-to-face interviewing. One clear one is that in telephone interviewing, respondents cannot be presented with visual stimuli, and interviewers cannot observe characteristics of the housing unit or neighborhood.

**Telephone Interviewing**

Telephone interviewing has advantages of its own. First, it is cheaper. Interviewer time can be used much more efficiently. If someone is not home, it is easy to try a different number. If the right respondent is not there, a callback can be arranged in a few minutes. Furthermore, in a well-run telephone setup, all of the interviewers will be in the same place, and they can be given standardized training and subject to constant, consistent supervision. There are therefore some real advantages to telephone interviewing.

One set of points is worth stressing. If you are going to use interviewers, they must be selected, hired, trained, and supervised. They must be taught general principles of interviewing, and they must be instructed in the goals and procedures of any given study. In telephone interviewing, a supervisor should monitor at random the work of every interviewer. In face-to-face interviewing, this is not possible. In both methods of data collection, the interview itself should be edited, first by the interviewer and then by a supervisor. Unsuccessful interviewers should be trained or let go. Note the last point. If you have hired and are paying interviewers, you can fire them. This is an important step in quality control. If you are using volunteers, or staff members whose real job is something else, you may not be able to get rid of them. The volunteers who quit are not necessarily going to be the bad interviewers, and the ones who stay are not necessarily going to be the good ones. (A good reference on data collection is Donald Dillman [1978], *Mail and Telephone Surveys: The Total Design Method.*)

**CONCLUSION**

Enough of my catalog of woes; let me summarize. Before doing a survey, you need to go through a series of steps, like the following: What is the question—what do I want to know? What is the answer—
how will I know when I have found out? Will a survey help? Who should be surveyed? Can I ask them questions that they can answer and that will help me to answer my questions? Is there a list or some other device from which I can draw a sample of all the whatevers that may be out there in the real world? If there is a list, how good is it? How serious is the fact that it is not very good? How can I get the people in the sample to cooperate with my survey? Who is going to process and analyze the data? Do I have the resources to do a decent survey? Do I have the time to do it myself? What kind of staff do I have that might be able to help me? Will we discover that the survey is consuming us?

Hiring somebody else to do the survey is likely to be costly. On the other hand, it is likely to take less time than if you did it yourself. The product is likely to be substantially better, and you will not discover for yourself how frustrating it is to do a survey with inadequate resources.

Whether you can afford to hire a survey organization to do the entire survey or not, the bottom line is: Get Help. Coming from a Survey Research Lab as well as a Sociology Department, I firmly believe in a codicil to the bottom line: Get Professional Help.

REFERENCES