II

GATHERING USEFUL DATA FOR STRATEGIC GUIDANCE

5

Research Decisions and Data Collection

Chapter Contents

Traditionally, public relations practitioners have relied on strong media relations skills and key media placements to succeed in public relations. Practitioners, executives, and clients generally bought into the myth that public relations works with nuances of public opinion and other intangibles that simply cannot be measured (Cutlip et al., 2006). Public relations campaigns were based on practitioner hunches, knowledge of the market, and simple common sense. Practitioners used savvy media relations skills and well-honed campaign tactics to generate media attention for publicity-seeking organizations and relied on thick binders filled with clippings of their media placements to demonstrate the value of public relations to organizations.

Although many practitioners continue to operate this way—a recent survey indicated that more than 80% of practitioners still use clip-based counts to measure the outcomes of their campaigns ("2005 Challenge," 2005)—several organizational and environmental changes have made this model of public relations nearly obsolete as a credible practice.

Fewer financial resources, increasingly competitive markets, and increasing costs, in particular, have resulted in greater organizational attention to public relations programs and a greater demand for evidence-based validation that public relations programs are effective. The result is that practitioners who enjoyed past success based solely on their practical understanding of local media markets, a well-developed network of contacts, and strong media relations skills increasingly find themselves struggling to gain organizational resources and maintain organizational support in an era of greater program accountability (Pinkleton et al., 1999; "What Trends," 1997).

Even though practitioners' reliance on research has increased, not every successful campaign requires original research. Often, research requires a substantial investment of resources, and many organizations prefer to plan and evaluate campaigns based on their existing understanding of markets and their assessments of key audience responses. Some situations may require only the tracking of public responses to media placements, for example, or votes on political initiatives. In addition, some public relations efforts are so limited in scope that they simply do not require or receive the resources necessary to conduct even small-scale research. In these situations, both practitioners and the organizations with which they are working may be satisfied with subjective interpretations and the outcomes that, on their face, appear to result from public relations programs.

Unfortunately, practitioners who make campaign recommendations without research typically are limited to arguing that, perhaps based on their years in the business, they know a situation and can recommend a solution. With no concrete evidence to support these claims, they have little basis for organizational support of such recommendations, and others with different backgrounds or similar levels of experience commonly recommend different options. Research reveals the perceptions, interests, and opinions of targeted audiences; produces evidence used to select from among competing solutions; and provides a benchmark from which to evaluate campaign success. Research also allows campaign planning and evaluation based on facts rather than on intuition, rule of thumb, or past practices. Practitioners find research particularly useful as the costs and importance of a campaign increase or as the certainty concerning an issue or public decreases.

In practice, each research setting is unique, and research decisions often are affected by several constraints, the greatest of which typically are time and budgetary limitations. The result is that no single "best" research method exists. Instead, the best research method is the one that most completely meets managers' information needs within the constraints of a given project. Given the often confusing decisions that concern research projects, the purpose of this chapter is to discuss the practical issues that practitioners should consider before they make final decisions concerning a

research project. These issues include questions asked and answered before starting a research project; various constraints that affect research method choices; an overview of formal and informal research techniques; the steps taken in a typical research-planning process; and some issues to consider when dealing with research firms, in-house departments, or consultants.

APPLICATIONS OF RESEARCH

Managers use research throughout the campaign planning, implementation, and evaluation phases, as shown in Figure 5.1. The ways public relations professionals use research, however, change as the program evolves and typically depend on a manager's communication needs. Practitioners may use precampaign, or formative, surveys, for example, to better

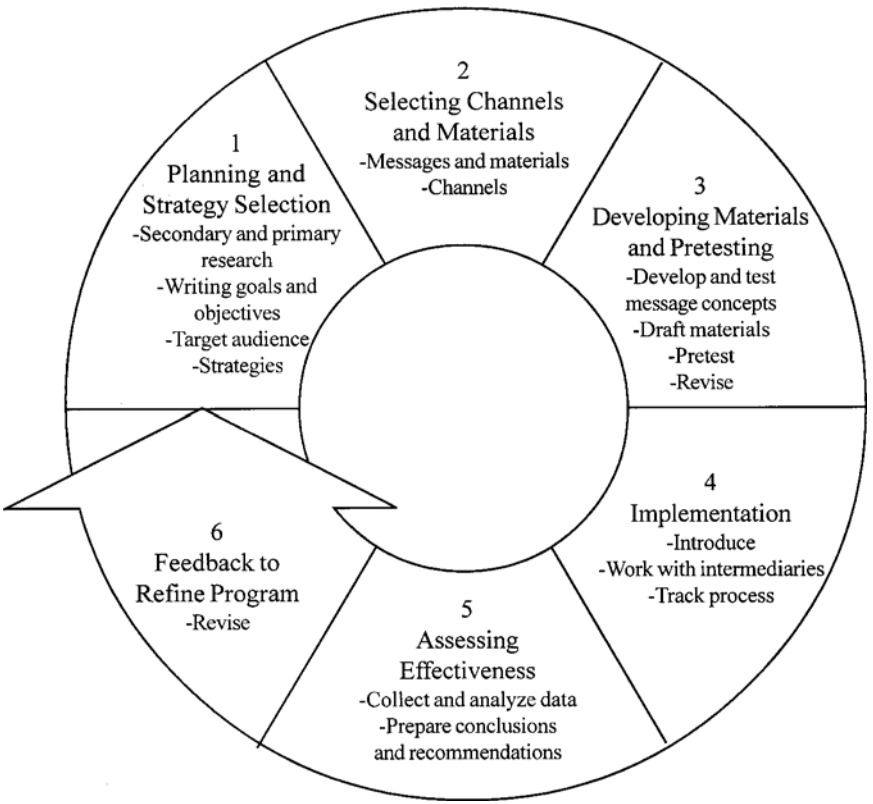

FIG. 5.1. Stages of communication. Strategic planning of communication programs is an ongoing process in which previous experience informs the planning of new programs and the refinement of old programs. Developed by the Center for Substance Abuse Prevention for the planning of alcohol and other drug communication programs.

understand and help segment audiences. Similarly, campaign managers may employ focus groups to help them explore changes in people's opinions regarding a key issue or to help them refine message strategies as part of the campaign-monitoring process.

Campaign planners often use research to provide initial benchmarks against which they can measure postcampaign accomplishments. Initially, practitioners may rely on survey research to provide measurements of the awareness, attitudes, and behaviors of targeted audiences. Once practitioners have concluded a campaign, they commonly conduct additional research and compare their postcampaign results with their precampaign findings. In many cases, postcampaign research really is between-campaign research because practitioners use it as a platform from which to begin another campaign. In an ideal world, public relations professionals' use of research results in fact-based evidence of a campaign's accomplishments (or failures) and may serve as the basis for requesting additional organizational resources or creating new campaign initiatives.

This use of research to measure campaign effectiveness following a communication program helps practitioners achieve credibility with organizational management. Organizations are looking for a concrete return on what they perceive as an investment of limited resources in public relations. In today's highly competitive organizational environments, practitioner intuition and past experience rarely provide an acceptable basis from which to plan a communications campaign. Practitioner voices are drowned out by competing voices in an organization when their experience and intuition are pitted against quantitative research data. Managers who have access to such data have a strong credibility advantage over their intuition-reliant peers when it comes to influencing organizational decision making, developing communication strategies, and receiving organizational resources.

Practitioners also can use research to help management monitor changes in internal or external environments. It is too easy for organizational managers to become insulated from key publics in their busy and often-chaotic world. The rigorous demands of their schedule often leave decision makers unaware of the critically important attitudes and opinions of consumers, community members, employees, government leaders, and other key groups. In this case, public relations research can be used as what Peter Drucker called an organizational "hearing aid" ("Reflections," 1998) to keep management in touch with the attitudes and opinions of those individuals on which organizational success or failure depends.

Organizational managers also may use research to keep in touch with their competition. The current public relations environment is extremely competitive. An increasing number of organizations are battling for access to limited media space and the fragmented attention of target audience members. Savvy public relations practitioners and their clients make it

a priority to understand the strategies and tactics of their competition, to increase their own chances for success. Research can provide insight into various interest areas, such as an analysis of the features and appeals used by competitors in their messages and of audience responses to those messages.

Finally, practitioners can use research to generate publicity for organizations and clients. In most cases, organizations produce legitimate research with newsworthy results that benefit the sponsor of a project. In other cases, however, organizations manipulate participants' responses and purposefully misinterpret research results to attract as much media attention as possible. The result is that the media, and ultimately the public, may be misled by unscrupulous research firms or practitioners who engage in unethical practices in an attempt to make a media splash. Serious research scientists and public relations practitioners must use care when conducting research for publicity purposes. Journalists increasingly are skeptical about projects sponsored by organizations with a vested interest in the results. Despite these concerns, the potential uses of research in public relations are nearly endless; practitioners can rely on research results to inform nearly every aspect of the public relations process.

BEFORE STARTING THE RESEARCH PROCESS

Before starting a research project, campaign planners must consider some basic issues that often are important to the successful completion of a project. Initially, it is important to determine what you want to know from the project with as much specificity as possible. Even exploratory projects need to have a clear purpose. Although this may appear obvious, relatively few research projects start with well-defined objectives. Instead, project managers commonly have such a vague sense of purpose that it is nearly useless. Organizations that want to use research to "better understand the market" or "see what people think of us" probably are wasting their time and money. Keep in mind that research projects are an expensive investment that are intended to provide an anticipated return. The company that engages in a poorly conceived research project and receives a relatively small benefit as a result will pay just as much for its research as the company that uses a well-designed project with specific objectives and benefits accordingly. Although determining informational needs and project objectives can be time consuming and challenging, it is the first important step in the successful completion of a research project and helps provide the best return on an organizational investment.

Practitioners need to ask several questions when considering a new research project, as shown in Figure 5.2. The first is, "What do we already know about the subject of our research?" Answering this question is intended to help narrow the scope and focus of a project. Once a project is

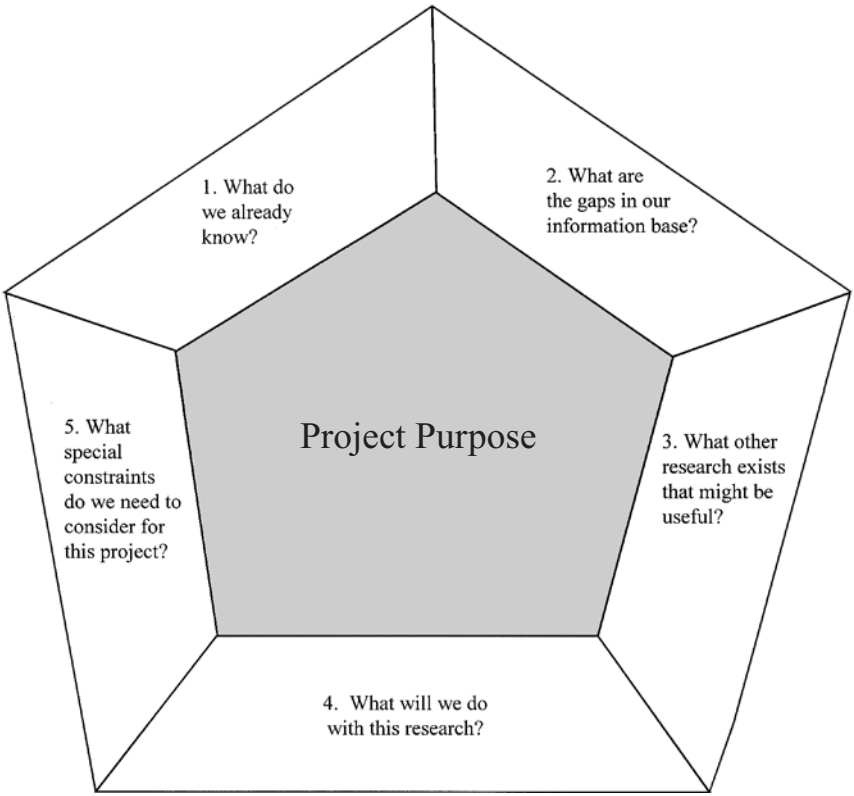

FIG. 5.2. Guiding questions for research decisions. When considering a research project, managers should ask these five questions. All decision making should focus on the purpose of the project to prevent unnecessary or useless research.

started, several potential topics and questions typically compete for limited project resources. Unfortunately, research managers typically eliminate a number of potentially important questions and even whole topics as time and budgetary realities force unrealistic expectations into real-world constraints. When research managers must make difficult decisions about what to keep and what to discard in a research project, it is critical that they have an understanding of their current knowledge base.

The next question is, "What are the gaps in our information base?" Although it seems obvious, the answer to this question provides concrete direction to organizational managers as they consider research topics and potential methods. Managers need to avoid approaching a research project as a single study and instead approach a project as part of an ongoing program of research concerning a topic. In reality, no single project can answer all the questions managers have concerning a topic, particularly given

the increasingly complex and competitive environment in which many organizations exist. In fact, research studies often raise new questions. When practitioners view single studies as part of a larger, ongoing program of organizational research, the result is more likely to provide a valuable contribution to an organization's base of knowledge concerning key audiences and issues.

The third question project managers must ask is, "What other research currently exists that might be useful?" An organization typically has an array of research available that it can use to inform its decision-making processes. Various syndicated research exists, for example, that provides useful information about target audiences' product and service usage, lifestyle, media usage, and other important characteristics. Similarly, Census Bureau data are available from a university library, and this high-quality, detailed information may be quite useful for organizations. Professional associations often conduct research that benefits association members. This research, although fairly broad in scope, can provide useful background information from which to begin a new project. Additionally, trade or academic publications often report research results concerning topics of potential interest to practitioners.

Researchers also may be able to reuse previously collected data as part of a new research project. This practice, called *secondary data analysis*, essentially is data recycling. It occurs when researchers use a set of data for a purpose different from its original use. Once researchers collect and analyze a data set, they often catalog it and set it aside. In other instances, educational institutions, foundations, and other organizations conduct large, multipurpose surveys and release the results to the public. In either case, practitioners may re-analyze these data for their own purposes if the data are available for use. If an organization is interested in interpreting changes in public opinion during an election year, for example, it may gain access to polling data during or after an election. In this case, the organization is bound by the methods and questions researchers used in the original study; however, the data still may be useful, and they may cost little or nothing to access. Any of these resources, and various additional ones, may provide information that has a significant bearing on a research project in the planning stages.

The fourth question project managers should ask is, "What will we do with this research?" Practitioners often initiate research projects as part of a problem-solving process. Research is most useful in this process when managers know how they will use the results as part of the problem-solving process. Unfortunately, it is not uncommon for organizations to complete major studies and, after a short time, set the results aside and never look at them again. In reality, conducting a study does nothing for an organization by itself. Research findings only are useful when skillful managers use them as part of the planning and problem-solving process.

The fifth question managers need to ask is, "What special constraints do we need to consider for this project?" As discussed in chapter 4, project decisions depend on the time available to conduct the research, budgetary limitations, the expertise available to conduct the research, and the extent to which managers require precision and depth from a research project. In addition, some special situations can arise that make it advisable to consult a research specialist. Practitioners may have trouble collecting information about specific issues, for example, and may have trouble collecting information from hard-to-reach audiences. In some instances, people may be unwilling to discuss their private behavior with intrusive researchers. In other cases, practitioners may find it too difficult to locate sample members. How do you find a random sample of pregnant women, for example, and is such a sample really necessary for the successful completion of a research project? What if you want to survey urban residents, 25 to 34 years old, who use public transportation? In each of these cases, experts typically can develop customized research methods and sample selection strategies to provide practitioners with information concerning specific issues and hard-to-reach populations. Practitioners spend their money wisely when they use knowledgeable professionals who have access to relevant information and appropriate facilities to help them solve difficult data-collection issues.

By answering these questions, practitioners will gain a better understanding of the purpose of a research project and the conditions that must be met to make it a success. They also will be able to use research results to give a project the direction necessary to make it a worthwhile investment with an anticipated and valuable return.

FORMAL AND INFORMAL APPROACHES TO PUBLIC RELATIONS RESEARCH

At its most basic level, research simply is collecting information, and practitioners can use any number of methods to gather information, each with its own strengths and weaknesses. The most basic designation researchers typically make concerning research methods is formal versus informal—researchers also call these *casual*—approaches to data collection. Rather than fitting neatly into one of these categories, however, research methods generally fit along a continuum. As Figure 5.3 shows, the continuum ranges from nonscientific, casual research methods on one end to fully formal, scientific research methods on the other end. Just because a research method is casual does not mean it has no benefit or practical application. Instead, casual research methods simply fail to meet the standards required of formal, scientific research.

A quick look at some informal research methods makes it clear why researchers consider them nonscientific. One of the most common forms

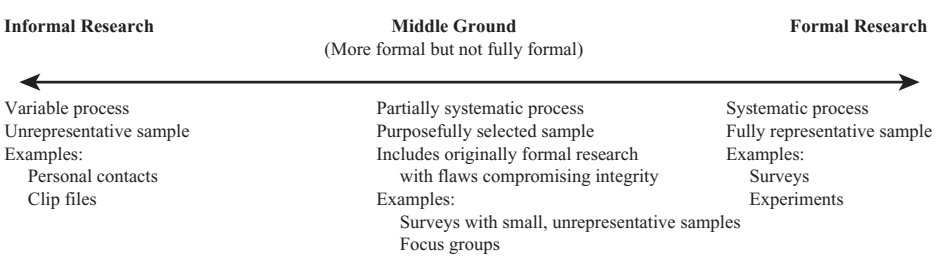

FIG. 5.3. The range of research methods. Research methods fall along a continuum ranging from casual and informal to systematic and formal.

of public relations research, for example, involves practitioners' use of clip files to monitor newspaper and magazine coverage of an organization or issue. A clip file simply is a collection of news stories about an organization, and clipping services can provide practitioners with both print and broadcast clips. A practitioner using a clip file can examine the messages targeted audiences receive, gain a rudimentary understanding of public opinion concerning an organization or issue, and even determine the need for potential responses to media coverage, if necessary.

A network of personal contacts is another common form of casual research. When practitioners want to know how members of a targeted audience might respond to an issue or event, for example, they may simply call several acquaintances who generally fit the audience description and ask them for their opinions. Practitioners can use such information as the basis for organizational decision making, even though it is not scientific. Other types of casual research include analyses of letters or e-mail messages organizations receive or a even a consideration of field reports from organizational sources such as salespeople or recruiters. In each instance, information collected by these methods may provide an organization with information from which to make decisions about key issues or events, so what is it about this information that makes it casual and nonscientific?

For one thing, the informal research methods typically rely on information gathered from a sample that is not representative. When researchers collect data, they normally collect information from a sample, or subset, of the population. When a sample is representative, it has the same distribution of characteristics as the population from which it is drawn. Because of this, the opinions collected from a representative sample generally represent the opinions or behaviors that exist in a population. Thus, a sample of registered voters in Michigan, for example, theoretically represents the attitudes and behaviors of all registered voters in the state. Although researchers never draw a perfectly representative sample, some samples—based on probability sampling methods (discussed in chapter 6)—have a greater likelihood of being representative than other samples. When

practitioners contact just a few people to ask their opinions, participant's opinions are unlikely to represent the range of opinions that exist in a target audience consisting of thousands or even millions of people. When practitioners use informal research methods, they typically collect information from a sample that is not representative.

A second characteristic of informal research methods is that practitioners collect information in a manner that lacks a systematic process. When practitioners contact personal acquaintances to ask their opinions, for example, they are unlikely to use a standard set of questions with predetermined response categories for each person. Such a process would defeat the purpose of the research by not allowing practitioners to take advantage of the different areas of expertise and experience of each of their contacts. As a result, this research does not benefit from a formal process or set of procedures that practitioners can use to collect information in a precise, reliable manner.

As an additional note, practitioners cannot accurately know or understand public opinion based solely on media portrayals. This practice fails the test of formal research because it is not based on a scientific test of the nature of the relationships among media coverage and the attitudes and opinions of target audience members. There are times, for example, when information and portrayals in the media have an obvious and direct effect on public attitudes or behavior. Tickle-Me Elmo, for example, was launched as a 1996 Christmas-season sellout because the toy appeared on the *Rosie O'Donnell* and *Today* shows, arranged by a public relations agency for the toy's manufacturer, Tyco. In this instance, Tyco's mangers actually canceled advertising for the toy as stores ran out of the product and skirmishes broke out between parents trying to get their hands on this must-have toy (Fitzgerald, 1996). In other instances, however, media portrayals have little or no effect on attitudes or behavior. In fact, the media are full of persuasive messages warning people not to do some things and encouraging them to do other things. Although some people heed these messages, many others simply ignore them. As these examples show, practitioners' observations and assumptions about public opinion based on media placements are risky and necessarily informal.

In the middle of the casual–formal research continuum are various methods that typically require a more formal process than purely casual methods but still do not fulfill the requirements of formal, scientific research. The most commonly used research method in this category is focus grouping. A focus group is a directed group discussion typically consisting of 6 to 12 people. Participants usually share similarities with respect to key characteristics such as age, gender, product brand usage, political party affiliation, or any other characteristics deemed important by a project's sponsor. The discussion is led by a moderator who asks questions and probes participants' responses. The process is recorded and transcribed,

and research professionals and their clients attempt to gain key insights and draw meaning out of the participants' comments.

Even after all this effort, researchers still understand that focus group research is not formal research because of the size of the sample and the lack of systematic research procedures. A study must have an appropriate sample size (discussed in chapter 6) to qualify as formal research. Even the largest focus group normally is too small to meet the sample size required of formal research. In addition, under the best circumstances, scientific research follows a formal set of procedures that researchers apply equally to everyone in a study. When researchers conduct focus groups they typically do not apply the same procedures equally to every participant. In some cases, for example, a moderator may wish to ask certain participants follow-up questions based on their initial question responses, which is a strength of focus groups. Other participants may be reluctant to speak up or may hesitate to express their true opinions. In these situations, focus groups do not follow a standard procedure closely enough to qualify as formal, scientific research.

Other research methods that fall between formal and informal research include surveys that suffer from methodological limitations such as the use of nonrandom sampling methods. When mall intercept surveys are conducted, for example, members of an interview team typically position themselves at key locations throughout a mall and interview willing shoppers. The shoppers who participate in the survey make up what is called a *convenience* or *incidental* sample because survey team members select them solely on the basis of accessibility. Convenience sampling, however, is a nonprobability, nonrandom sampling method. Even though standing in a mall and talking to shoppers as they happen by appears to rely on a random-selection process, this sampling procedure falls short of the requirements of probability sampling. When researchers use truly random sampling methods, every person in a population has an equal chance of being included in the sample. In a mall intercept, even when researchers use a carefully constructed questionnaire that contains specific response categories, the sampling procedures still render the project's results potentially unrepresentative because they are not random. This leaves the project short of the standards necessary to qualify as formal, scientific research.

INFORMAL RESEARCH CONCERNS

When researchers label a method *casual* or *informal*, it does not mean that the method is without benefit. In reality, practitioners use informal research methods on a regular basis and successfully apply their findings to many different public relations problems. It is important to note, however, that managers' use of such research comes with risk. Practitioners who use focus groups, for example, must be careful in their interpretation and

application of study results. It is easy to misinterpret focus group results because no matter how many focus groups researchers conduct, the results potentially suffer from significant flaws. Because focus group results provide no numerical measurement, for example, researchers may find it difficult to understand and interpret participants' ideas and comments. Ultimately, two practitioners who view the same focus group may interpret the results very differently, and it is quite possible that both interpretations may be incorrect.

More importantly, the results of focus groups and other informal research methods have little generalizability, or projectability. As already noted, researchers typically collect information from a sample of population members rather than from all population members. When researchers use formal research methods, they typically select a sample using probability sampling methods. Probability sampling methods have a greater likelihood of accurately reflecting the wide variety of attitudes and behaviors that exist in most populations because each member of the population has an equal chance of being included in the sample. The result is that practitioners can generalize or project research results from a probability-based sample to all members of a population with relative confidence. Practitioners have no basis for such projection when they use informal research methods because the sample typically does not accurately represent the population from which it was drawn. When researchers use informal research methods, they have no scientific basis for projecting research results from a sample to a population because not everyone in the population is represented in the sample.

Other problems with nonscientific research methods involve selective observations and ego involvement, both of which contribute to research results that are subjective instead of objective (Baxter & Babbie, 2004). When research findings are objective, they unbiasedly reflect the attitudes and behaviors of study participants, regardless of the personal views of researchers or project sponsors. Nevertheless, selective observation may occur when researchers purposefully interpret focus group results so that they match the ego needs of a client. When this happens, research results are worse than meaningless; they are wrong. These results will misdirect the decisions of organizational managers who are counting on accurate research to inform their decision-making process. Both formal and informal research methods can suffer from selective observations and the ego involvement of researchers, but these concerns are greater when researchers use informal research methods rather than formal research methods.

The potential problems with informal research were exemplified by the experiences of Milwaukee-based Marquette University when it decided to change the name of its sports teams to the "Gold" based in part on the results of focus groups. The university had nicknamed its teams the Warriors from 1954 until 1994. In 1994, Marquette dropped the name in response to

concerns that it was offensive to American Indians and adopted the name Golden Eagles. Additional research conducted later by the university revealed that its fans generally were unenthusiastic about the new nickname, and the issue built to a climax in May 2004 when a member of its board of trustees offered the university a $1 million gift, which would be matched by another anonymous trustee, if it would return to its Warriors nickname (milwaukee.bizjournals.com). Although university administrators refused to return to the Warriors nickname, they eventually settled on the Gold as a new moniker, a name that originally emerged in some focus groups conducted by the university in 1993 (Seigel & Norris, 2005). Unfortunately, students, alumni, and news media responded quite negatively to the name, resulting in campus protests and an avalanche of unwanted media attention. Marquette recently returned to its Golden Eagles nickname, based on the results of a voting process that included students, alumni, and faculty and staff.

Why did a relatively simple decision result in so much rancor when Marquette administrators followed a process that has become fairly standard among organizations? There likely is more than one reason but it is apparent that the conclusions of the focus group did not accurately reflect the opinions of university stakeholders. Although focus group participants apparently liked the Gold as a nickname, the results of the research lacked external validity or projectability from the research sample to the larger population of university publics. This situation points out the problems practitioners face when they rely on informal research. Informal research findings misled university administrators and, as a result, they made an unpopular decision.

When conducted properly, however, scientific research methods are more likely to result in accurate observations that are high in projectability by following a formal process and well-conceived research design to its logical conclusion. As Nachmias and Nachmias (1981) noted, scientific research methods differ from other methods of acquiring knowledge based on their assumptions. At a philosophical level, the assumptions of science include, for example, that nature is orderly and regular, that it is possible to know nature, that nothing is self-evident, and that knowledge is derived from experience. At an applied level, scientific research methods are built on a system of explicit rules and procedures that, when correctly applied, have a high likelihood of producing accurate, reliable results. These research methods are by no means perfect, and social scientists regularly work to develop new research methods and to improve existing ones. The result is that formal research methodology has slowly grown in sophistication, as scientists exchange ideas and information.

The scientific research methods available to practitioners include experiments, content analyses, and surveys, which are perhaps the most common type of formal research practitioners use (2005 Challenge, 2005). In

addition, practitioners may use a variety of public and private databases and syndicated research resources that rely on scientific research methods. Newcomers to research methods should not be intimidated by the lofty goals and sometimes confusing terminology used in scientific research. Just as math expertise is not required to use a calculator, a scientific background is not required to understand formal research methods. Instead, practitioners should learn the strengths, weaknesses, and assumptions of each research method so that they clearly understand the advantages and limitations of the information they are using for strategic planning and evaluation. Research methods appropriate for some projects may be inappropriate for other projects. Substantial risks are associated with the misuse of research methods that provide unreliable or misleading information, which may result in negative consequences for organizations.

RESEARCH ISSUES TO CONSIDER

Any time researchers collect information, they must consider several issues that affect the quality of the information they collect because they directly affect the degree to which research results can achieve representativeness and objectivity. In some cases, strategic planners should not trust research results as the basis for major decisions because they contain limitations and weaknesses. In other cases, researchers understand potential problems and can negate them through the use of selected research and sampling methods. Ideally, practitioners' trust in research results is appropriate to the level of accuracy, precision, reliability, and validity of a research method and the results it produces (Baxter & Babbie, 2004).

The first of these areas, *accuracy*, concerns whether a research method produces error-free data. Although practitioners may establish a minimum degree of accuracy for every research method, they do not always require highly accurate research results in applied research settings. In some cases, a general understanding of the attitudes, opinions, and behaviors of targeted audience members is enough, and a research method that provides that kind of information, such as a focus group, is appropriate. When managers demand a high degree of accuracy, however, they use scientific research methods and probability sampling methods to provide relatively error-free results. In fact, when researchers use probability sampling procedures in survey research, they can calculate the range of error for participants' responses. Although no study is without some degree of error, when researchers use scientific methods, rely on an appropriate formula to calculate sample size, and use probability-based sampling methods, they are able to evaluate the accuracy of research results with relative confidence.

Research managers also must consider the *precision* of research findings that result from the use of different research methods. When research

findings are precise, they are exact. Consider the difference between asking a friend what the weather is like outside and using a thermometer to determine the temperature. In the first instance, our friend may say it is "warm" or "hot" outside. In the second instance, a thermometer may indicate it is 98°F. Both answers are informative and useful; however, one answer is more precise than the other. Although researchers generally desire precise research findings over imprecise research findings, not all research methods produce results with the same degree of precision, and at times precision may be less important especially if it comes with a high cost. Some research methods produce results that generally lack precision. Because focus groups are essentially a group discussion, for example, it is nearly impossible to measure results exactly within the context of the discussion.

A focus group may provide impressions, ideas, or general group agreement or disagreement, but these results will be broad and interpretive to an extent. When practitioners require precision, they will more likely turn to a survey questionnaire that contains specific questions and numerical response categories to record the attitudes and opinions of respondents. This is not to suggest, however, that practitioners find focus groups or other less precise research methods useless. When researchers are exploring people's attitudes and opinions, for example, a highly precise questionnaire is likely to hurt their ability to gather useful information. At this point in the research process, practitioners typically are more interested in exploring people's attitudes and opinions rather than in precisely measuring them. As an additional note, do not confuse precision with accuracy. It may be more precise to learn it is 98°F outside rather than it is "hot," but both answers are wrong if it is snowing.

Research methods that produce accurate and precise results also should produce reliable results. Strictly speaking, *reliability* is repeatability. If researchers make repeated measurements of sample members' attitudes, opinions, or behaviors, the results should be similar each time. When researchers use informal research methods, a lack of reliability often arises as a concern. If you call some of your friends to solicit their advice on an issue, the results are likely to vary considerably depending on whom you contact. This means the research method is not reliable. The same reliability concerns are true of informal research methods including mall intercepts and focus groups. When research managers use scientific research methods to collect data, however, the results generally are highly reliable. As an additional note, research methods that are reliable are not necessarily accurate. A scale that consistently weighs people 5 lb lighter than their actual weight—we all should have such a scale—is high in reliability but not accuracy (Baxter & Babbie, 2004).

Finally, practitioners must consider the *validity* of results produced using various research methods. At a basic level, valid research results are legitimate or genuine. An IQ test is a valid measure of intelligence, for example,

if it genuinely measures the intellectual abilities of the individual taking the test. Social scientists have divided *validity* into numerous components in an attempt to reflect all of the nuances of the term and their implications for data collection. Although it is important for research professionals to understand validity concerns in all of their manifestations (and readers can learn more in any good research methods textbook), we purposefully simplify this discussion to selectively consider applied aspects of validity in keeping with the purposes of this text and the patience of our readers. Kerlinger (1973) suggested two broad categories of validity: external and internal.

External validity refers to the representativeness, or generalizability, of research results. When researchers conduct a study, they draw a sample, or subset, of people from a population as potential participants. When they draw a sample, researchers must be certain it accurately represents the population. In many instances, only a few hundred people will actually complete a survey, and research professionals will use the responses of a few hundred participants to make inferences about the entire population, which may consist of millions of people. When research results are representative, researchers can accurately take sample responses and project them onto the entire population. Researchers use probability sampling methods, which require random-selection procedures, to ensure that everyone in a population has an equal chance of being included in a sample. If the sample accurately reflects the population and researchers use a scientific research method, the results of a study will be high in external validity and researchers will be able to generalize study results from a sample to the population with confidence.

In terms of practical implications, informal research methods generally lack external validity, which commonly causes problems in public relations. When researchers use focus groups, for example, they do not use probability sampling methods or choose a sample size large enough to produce results that are high in external validity. In fact, a lack of generalizability is one of the reasons researchers consider these methods informal. Researchers must use fully formal, scientific research methods, including probability-based sampling, to achieve a high degree of external validity.

Kerlinger (1973) illustrated *internal validity* with the simple question, "Are we measuring what we think we're measuring?" If, for example, we want to measure people's voting habits but instead ask for their opinions about how important it is to vote, we have not measured behavior and the measure potentially lacks internal validity. Many methods exist for identifying internal validity.

One of the simplest methods of determining validity is called *face validity*. When researchers check for face validity, they examine a research

measure to determine whether it appears to assess what they want it to measure in an obvious way. This form of validity relies on researchers' judgments and generally is nonscientific. For years market researchers measured brand awareness, for example, when they ultimately wanted to evaluate the effect of an advertising campaign on consumer purchase behavior. It seems obvious that increased brand name awareness should indicate that an advertising campaign is effective. Measuring top-of-the-mind awareness and using it as an indicator of consumer behavior, however, raises issues regarding the face validity of the measures.

Content validity refers to the comprehensive nature of research measures. Questions high in content validity most fully represent, or capture, the idea they are supposed to measure. When examining consumers' media-use habits, for example, a set of questions that measure only newspaper reading and television viewing lacks content validity. In this case, consumers are likely to use a variety of media that are not included in the questionnaire. A lack of content validity leaves a project seriously flawed by compromising its relevance.

A final type of validity, *predictive* or *criterion validity*, concerns the soundness of a research measure when tested against an external standard. In applied research, predictive validity most commonly concerns the ability of a research measure to predict actual performance. When a driving test has predictive validity, for example, it should be able to predict actual driving performance. People who perform well on a driving test should be able to drive a car safely. If they drive poorly despite performing well on the test, the test lacks predictive validity. Predictive validity is critical when organizations use research to understand and predict the behavior of targeted audience members based on research results. In public relations campaigns, practitioners often measure awareness and knowledge presuming that they lead to behavior. These measures often lack predictive validity, however, making the research findings an incomplete or incorrect basis from which to develop campaign strategy and predict campaign outcomes.

STEPS TO RESEARCH PROJECT DESIGN

Once managers consider accuracy, precision, reliability, and validity as they relate to the research project at hand, they can turn to the actual design of the project. Despite the uniqueness of every research project, it helps to follow a series of steps in a more-or-less sequential order to guide the design and implementation of a project, as shown in Figure 5.4. The research plan discussed in chapter 4 largely corresponds to the steps followed to implement the project itself. The research-design process briefly discussed here contributes to an orderly decision-making process that maximizes the

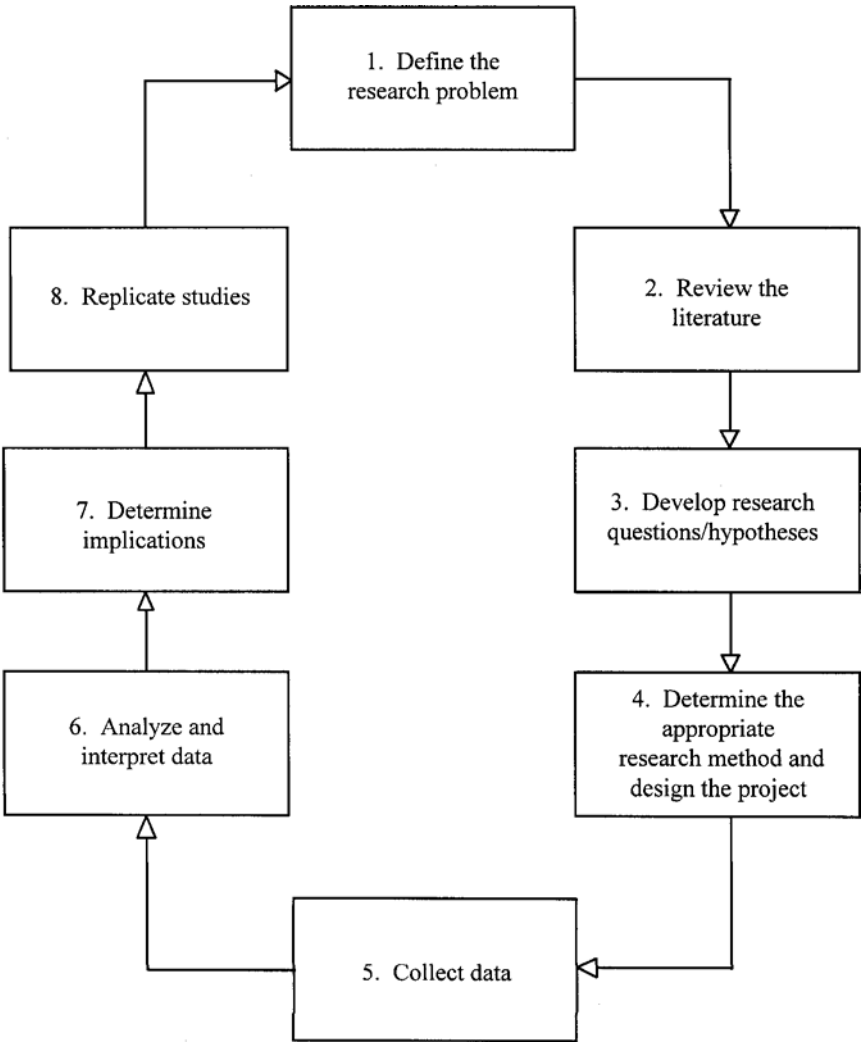

FIG. 5.4. The research process.

benefits of a study and the information outcomes it provides. It also can help minimize study costs and the risks associated with obtaining poor quality data.

1. *Identify or clearly define the research problem.* When research projects lack a well-defined purpose, they produce results that, although interesting, have little benefit. Clients often approach research firms with a relatively vague understanding of what they need to learn, with the expectation that the focus of the project will emerge and they will know what they want

when they see it. Even exploratory research projects should have clear direction.

2. *Review the literature*. This refers to checking existing sources of knowledge for useful information. At one time, managers found it difficult to get accurate, reliable market research. As organizations have increased in sophistication, their reliance on research has grown and the supply of existing research available to any organization has greatly increased. Various academic research publications, trade publications, syndicated market research, and databases can prove useful when practitioners develop a project. These resources can help practitioners define targeted audiences; provide insight into audience opinions, attitudes, and behavior; and answer secondary questions related to the primary research project.

3. *Develop research questions or hypotheses*. After examining existing sources of research information, managers can develop hypotheses or research questions. Essentially, hypotheses and research questions help researchers understand their study and the outcomes it is supposed to produce. In this way, they become part of the problem-identification process and give researchers specific outcomes to look for as they engage in a research project. In academic research, hypotheses (and research questions to a lesser extent) typically drive the research process and provide expectations about variable relationships and other important research findings. In applied research settings, researchers commonly use research questions instead of hypotheses. Both hypotheses and research questions can be used in applied research settings, however, to help determine the project purpose and to help inform the research-design process.

4. *Determine the appropriate research method and design the project*. Several methods exist for collecting information, and in this book we address the most common methods. Whether practitioners do a research project on their own, deal with an in-house research department, or contract with an outside research firm, they must understand the strengths and weaknesses of different research methods to make informed decisions and to gather useful and affordable information. Practitioners who stick to research methods because of familiarity, or who blindly follow the advice of others without understanding the strengths and limitations of different research methods, risk disappointment and, worse, can make decisions based on inaccurate results.

5. *Collect data*. Implementation of the study follows research-method selection and study design. In applied settings, informal research designs commonly require a less systematic application of data collection procedures than formal research methods because of their purposes, which may involve exploration or idea generation. Formal research methods, conversely, require researchers to carefully follow research procedures to ensure that they systematically measure participants' attitudes and behaviors producing unbiased results that are high in validity.

6. *Analyze and interpret data*. Data analysis and interpretation vary depending on the research method used and the nature of the data. Qualitative data, such as comments provided by focus group participants, typically require broad, subjective interpretations. Quantitative data, conversely—which might result from participants' answers to survey questions containing numerical response categories, for example—require statistical analysis and generally should produce objective results and interpretations. In either case, meaningful data analysis and interpretation are the natural outcomes of a well-designed, properly conducted research project.

7. *Determine implications*. After completion of a study, campaign strategists, planners, and others must carefully examine the results for their practical implications. What do these results suggest in terms of strategy or tactics? How should an organization attempt to frame an issue for members of a critical audience? What public affairs programs are likely to have the greatest audience impact according to study results? What media do these audience members regularly use? How do these results help improve understanding or, more important, motivate behavioral change? It is a waste of time and money to conduct a study and, after brief consideration, simply put the results on a shelf where they gather dust.

8. *Replicate studies*. As research projects provide answers to the questions they were designed to answer, they also raise new, important questions. These new questions typically are the genesis for additional research, and as organizational managers address these new issues in a systematic process, they move forward in terms of their understanding and ability to solve problems. This makes it critical for managers to make studies replicable, meaning reproducable, so that results build on each other.

FINAL THOUGHTS

Public relations programs increasingly rely on research-based planning and evaluation. The benefits of research—to illuminate the perceptions, interests, and opinions of targeted audiences; to produce evidence used to select from among competing solutions; and to provide a benchmark from which to evaluate campaign success—often far outweigh the costs of research. Some managers have the luxury of hiring out research projects to specialists, whereas others need to implement research projects on their own. Either way, a personal investment in learning about these sometimes complex topics can lead to increased credibility and autonomy for the communication manager. The following chapters provide a basic grounding in the most important aspects of applied public relations research.