Research Designs: Exploratory and Qualitative Research



CHAPTER

Chapter Outline

Types of Research Designs Exploratory Research Tools Used to Conduct Exploratory Research Summary Key Terms Discussion Questions Endnotes

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Learning Objectives

Upon completing this chapter, you should understand:

- Differences in exploratory, descriptive, and causal research.
- How exploratory and qualitative research differs from quantitative research.
- When exploratory and qualitative research should be used.
- How exploratory and qualitative research can improve the development of the quantitative research process.
- Different types of exploratory/qualitative methodologies.



Research design the road map for the researcher, indicating the route the researcher will take in collecting the information to ultimately solve the management problem or evaluate an opportunity under consideration.

As described in our outline of the research process, the next step after stating the management problem, research purpose, and research hypotheses and questions, is to formulate a research design. The starting point for the research design is, in fact, the research questions and hypotheses we have so carefully developed. In essence, the research design answers the question: How are we going to get answers to these research questions and test these hypotheses? The research design is a plan of action indicating the specific steps that are necessary to provide answers to those questions, test the hypotheses, and thereby achieve the research purpose that helps choose among the decision alternatives to solve the management problem or capitalize on the market opportunity (see Figure 4.1).

TYPES OF RESEARCH DESIGNS

A research design is like a road map—you can see where you currently are, where you want to be at the completion of your journey and can determine the best (most efficient and effective) route to take to get to your destination. We may have to take unforeseen detours along the way, but by keeping our ultimate objective constantly in mind and using our map we can arrive at our destination. Our research purpose and objectives suggest which route (design) might be best to get us where we want to go, but there is more than one way to "get there from here." Choice of research design is not like solving a problem in algebra where there is only one correct answer and an infinite number of wrong ones. Choice of research design is more like selecting a cheesecake recipe—some are better than others but there is no one that is universally accepted as best. Successfully completing a research project consists of making those choices that will fulfill the research purpose and obtain answers to the research questions in an efficient and effective manner.

Choice of design type is not determined by the nature of the strategic decision faced by the manager such that we would use research design A whenever we need to evaluate the



FIGURE 4.1

The Relationship between Research Design and the Solution to Management's Problem

extent of a new product opportunity, or design B when deciding on which of two advertising programs to run. Rather, choice of research design is influenced by a number of variables such as the decision maker's attitude toward risk, the types of decisions being faced, the size of the research budget, the decision-making time frame, the nature of the research objectives, and other subtle and not-sosubtle factors. Much of the choice, however, will depend upon the fundamental objective implied by the research question:

■ To conduct a general *exploration* of the issue, gain some broad insights into the phenomenon, and achieve a better feel for the subject under investigation (e.g., What do customers mean by good value?).

■ To describe a population, event, or



phenomenon in a precise manner where we can attach numbers to represent the extent to which something occurs or determine the degree two or more variables vary (e.g., determine the relationship between age and consumption rate).

■ To attribute *cause*-and-effect relationships among two or more variables so that we can better understand and predict the outcome of one variable (e.g., sales) when changing another (e.g., advertising).

These three fundamentally different objectives give us the names of our three categories of research designs: exploratory, descriptive, and causal. Before we discuss each of these design types a cautionary note is in order. Some might think that the research design decision suggests a choice among the design types. Although there are research situations in which all the research questions might be answered by doing only one of these types (e.g., a causal research experiment to determine which of three prices results in the greatest profits), it is more often the case that the research design might involve more than one of these types performed in some sequence. For example, in the case of the Compton Company described in Chapter 1, if research had been conducted, the research objectives might first have required exploratory research to define the problem more precisely, followed by descriptive research that could have determined the frequency that distributors recommended a competing brand, or the extent to which purchase intent covered by previous experience with the Compton brand. Some research questions might have been completely answered using just one of the research design types, whereas others required a sequence of two or all three types. The overall research design is intended to indicate exactly how the different design types will be utilized to get answers to the research questions or test the hypothesis.

A further cautionary note is needed to warn the reader that although it may appear that any sequence would be exploratory, then descriptive, then causal, that is not always the case. For example, some companies may do an annual survey of consumers to determine the frequency with which certain behaviors are performed (e.g., washing dishes by hand) followed by exploratory research that probes to gain an in-depth understanding of the circumstances surrounding that behavior (i.e., descriptive then exploratory rather than exploratory then descriptive). It is not hard to imagine a research design that might sequence as exploratory, then descriptive, then exploratory again; or causal, then descriptive. It is important to remember that, because a research design is a plan of action to obtain answers to the research questions, it is those questions that suggest which design types are necessary and any sequence that is needed. An example later in this chapter is used to illustrate this point. With these cautions in mind, we discuss exploratory research in this chapter and address descriptive and causal methods in Chapter 5.

Exploratory research

research that is undertaken when a problem is not well understood and there is no prior research available. Exploratory research is often used to better develop an understanding of the problem to aid in future research projects.



EXPLORATORY RESEARCH

Exploratory research is in some ways akin to detective work—there is a search for clues to reveal what happened or is currently taking place, a variety of sources might be used to provide insights and information, and the detective follows where his or her nose leads in the search for ideas, insights, and clarification. Researchers doing exploratory research must adopt a very flexible attitude toward collecting information in this type of research and be constantly asking themselves what lies beneath the surface of what they are learning and seeing. An insatiable curiosity is a valuable trait for exploratory researchers.

Such curiosity will serve the exploratory researcher well when, for example, he or she sees the need to ask a follow-up question of a respondent who has mentioned

some unanticipated answer to that researcher's query. The follow-up question is not listed on the researcher's interview guide, but the curious interviewer instinctively knows that the conversation should begin to deviate from the guide because the unexpected response may be revealing much more important issues surrounding the topic for investigation than were originally anticipated by the researcher. A willingness to follow one's instincts and detour into new territory is not only acceptable in exploratory research, but also commendable! Inspired insight, new ideas, clarifications, and revelatory observations are all the desired outcomes from exploratory research, and decision makers should not judge the quality of the idea or insight based on its source.

Although we do not want to give the impression that any approach is acceptable for doing exploratory research, or that all methods are of equal value in providing desired information, it is true that exploratory research is characterized by a *flexibility* of method that is less evident with descriptive and causal designs.

Exploratory research is needed whenever the decision maker has an objective of:

- 1. More precisely defining an ambiguous problem or opportunity (e.g., Why have sales started to decline?)
- 2. Increasing the decision maker's understanding of an issue (e.g., What do consumers mean by saying they want a "dry beer"?)
- 3. Developing hypotheses that could explain the occurrence of certain phenomena (e.g., Different ethnic groups seek different levels of spice in our canned beans.)
- 4. Generating ideas (e.g., What can be done to improve our relationships with independent distributors?)
- 5. Providing insights (e.g., What government regulations are likely to be passed during the next year that will affect us?)
- 6. Establishing priorities for future research or determining the practicality of conducting some research (e.g., Should we try to survey all our salespeople on this issue or just talk with the leading salesperson in each region?)
- 7. Identifying the variables and levels of variables for descriptive or causal research (e.g., We will focus our attention on determining the level of consumer interest in these three product concepts because exploratory research shows no interest in the other two.)

Research Project Tip

Your choice of a research design goes beyond simply saying which type(s) of approaches you will use (exploratory, descriptive, or causal). You must indicate the specific way you will get answers to each research question.

TOOLS USED TO CONDUCT EXPLORATORY RESEARCH

As previously noted, our research design is a plan of action indicating the specific steps that are necessary to provide answers to the questions we have developed and, in some cases, to test hypotheses. It is possible, however, that we do not know enough about a question to formulate a hypothesis, or that we are more interested in describing a particular event or discovering the meaning of an event for the research subjects than we are in frequency of event occurrence or differences between groups. The research method we use in these situations is known as **qualitative research** and is outlined below.

Explanation of the Qualitative Research Process

Qualitative research is beneficial for studying ill-structured problems, which are defined as "non-routine problems that have no clear solution."¹ Traditional survey research methods are inadequate for this type of problem because, by definition, the problem cannot be verbalized. Effective qualitative methods may help by eliciting images, nonverbal cues, and unconscious thoughts that lead to a statement of the problem.

Qualitative research refers to a variety of methods and, as such, a variety of definitions. There are differences between qualitative and quantitative research that address not only research questions to be investigated but the role of the researcher and assumptions about the world in which we live. Additionally, qualitative research is often a multi-method process with the particular method employed depending, at least to some extent, on the results of the ongoing study.

Qualitative research is often conducted in a natural setting. An underlying assumption is that humans create their own reality, and that observation and description of this reality is the only way to understand human behavior. Often a qualitative researcher will immerse herself in the situation. For example, in order to understand the consumption behavior of homeless people, the researcher may join a homeless community and live as they do for the duration of the study. Thus, qualitative research is phenomenological in that it is concerned with the meanings people attach to events, the dominant culture, advertising, and business.

Qualitative methods include ethnography, extended case studies, immersion techniques, **in-depth interviews**, focus groups, projective techniques, and grounded theory. Data is collected in a variety of ways including field notes, videos, voice recordings, historical artifacts, company reports and advertisements, and storytelling. Thus, qualitative research can be defined as a set of methods that are investigative in methodology, naturalistic in approach, and are dependent on description, observation, and categorization.²

As previously noted, market researchers employ qualitative methods when not enough is known about a problem to develop a workable hypothesis, or when the researcher is

interested in discovering the root cause or deeper meaning of an event, such as a purchase decision. Thus, researchers can use qualitative research to explore questions that people are unwilling or unable to answer. For example, a study subject may be unwilling to admit that his decision to buy a gift for his girlfriend was to reflect on his financial success rather than attempting to please her. A more acceptable answer would be that the gift was practical or the right color. Various qualitative methods (such as projective techniques discussed next) can develop the true reason for the purchase.

People often make decisions for reasons they do not understand or cannot articulate. Depth interviews, projective techniques, ethnography, and other qualitative research methods can help the



Qualitative research a type of exploratory research used to examine a problem involving underlying attitudes, opinions, and motivations in order to develop a hypothesis for future research.

In-depth interview

interviewing subjects with experience, expertise, or position that gives them a unique perspective on the subject of interest. researcher tap the subject's subconscious and help him or her articulate the decision process. These methods are also valuable in discovering which sensory feelings are important in areas such as purchase decisions.

Qualitative methods differ from quantitative research methods, and there is tension between those who favor one method over the other. We examine these differences and the controversy surrounding them next.

Qualitative versus Quantitative

Many academic and practitioner business researchers are skeptical of the value of qualitative research. Increased sophistication of statistical software results in less measurement error than was true in the past. Additionally, managers and business researchers find value in the ability of quantitative studies to generalize from a sample to the population. Qualitative research, however, is catching the attention of both industry and researchers. There are three primary issues that arise in the qualitative versus quantitative argument.

First, there is a difference between a numbers approach and word approach to research. Words, actions, and records are emphasized in qualitative research, whereas numerical assignments to words, actions, and records signify qualitative methods.

Next, the qualitative researcher attempts to understand study subjects in the context of their environment. In fact, many qualitative researchers do not consider themselves objective observers (as do quantitative investigators) but as actors who are part of the research process. That is, they are observers and participants.

Finally, qualitative research is designed to discover patterns and trends that take place in a particular context. This differs from quantitative research that takes a relatively small sample and attempts to generalize findings across contexts.³

Table 4.1 outlines the differences in qualitative and quantitative research in terms of various research processes.

Qualitative research has been criticized as "soft science" or just plain journalism. Qualitative researchers who immerse themselves in the study context are accused of bias, value-laden results, or even a political agenda. At best, critics of qualitative research believe that it is valuable only as an exploratory method and is unsuited for descriptive or causal research designs. Yet, each approach has limitations. Quantitative methods tend to force people into groups that are artificial, whereas qualitative research often fails to provide results that can be generalized beyond the current study. Despite these criticisms, businesses have embraced qualitative research as part of an overall, effective business research program.

	Qualitative	Quantitative
Objective or Purpose	Gain understanding of underlying motives; explore ill-structured problems.	Test hypotheses; generalize from sample results to the population of interest.
Sample or Data Collection	Small sample; unstructured, flexible, data collection involving observation, interviews, and field notes.	Large sample; numerical values assigned to subjects' responses; primary survey data or secondary data.
Data Analysis	Continuous as data is collected; analysis affects next step in the research; nonstatistical analysis.	Analysis takes place after all data collected; statistical methods used.
Planned Outcome	Develop an initial understanding description; begin theory development.	Provide a specific recommendation.

TABLE 4.1 Qualitative vs. Quantitative Methods

Another criticism of qualitative research is that, because of the methods used, there is no way to statistically determine the validity of a study. To answer this criticism, there are several steps that the qualitative researcher can take. First, and most important, researchers should be very careful and precise in designing the study—from deciding on the management question to the interpretation and reporting of results.

Another method of increasing the validity of a qualitative study is to view the management question from different perspectives. This method is known as triangulation. In this approach, the same questions are addressed from a different perspective. For example, an ethnographic study may observe children's television viewing habits. To look at the question from a different perspective, depth interviews may be conducted with the children's parents.

A third approach is to combine qualitative and quantitative methods into one study. This often happens when one method alone is not sufficient to measure all aspects of a phenomenon. Refer to the example of children's TV viewing habits; a survey might be given to the parents while the children are observed in their homes.

Designing the Qualitative Study

Qualitative methods require the researcher to be able to tolerate ambiguity and vagueness. Both require flexibility and patience on the part of the researcher. Ambiguity refers to a situation that can be understood in more than one way, and vagueness means the situation lacks precision. Qualitative researchers need to approach a project with a willingness to change qualitative methods as the situation begins to take a specific direction or the meaning becomes clearer. With qualitative methods, data unfolds as the study progresses. In this sense, qualitative research is in some ways akin to detective work-there is a search for clues to reveal what happened or is currently taking place, and the detective follows where his or her nose leads in the search for ideas, insights, and clarifications. The keys to success in qualitative research are flexibility and an insatiable curiosity.



In contrast to quantitative methods that use random sampling to recruit study participants, qualitative researchers rely on purposive sampling where the research participants and the setting (school, business, consumption experience) are carefully selected depending on the study question. A qualitative sample needs to be information rich.⁴ For example, if we are conducting a study to determine the consumption pattern of problem gamblers, we would look for participants who display this characteristic, rather than recreational gamblers who stay within their budgets. In other cases, we may want to select participants who are experts on the subject under study, or we may want the most heterogeneous sample we can assemble. The qualitative researcher needs to be aware, however, that as the study progresses, newer participants may be quite different from those originally chosen. Again, as previously noted, the qualitative researcher needs to be flexible and go where the study leads. Following is a list of factors to consider when designing a qualitative study.

- 1. The management question should not be narrowly drawn but should be exploratory and descriptive. Qualitative studies evolve as data is collected and analyzed. The analysis of collected data often determines the next set of questions or subjects to be interviewed.
- 2. Spend time determining the initial sample of participants. Study subjects reside in the context of the phenomenon being investigated. For example, if we are studying the breakfast eating habits of elementary school children, we would want to select

families where both parents worked outside the home and families where one parent stayed home. This gives us variability in our sample. In contrast, quantitative methods use random sampling, which is designed to achieve the same variability with a large sample size.

- 3. An important characteristic of qualitative research is that personal meaning is tied to the context within which a behavior takes place. Therefore, it is best to collect data from participants where they live, work, or play.
- 4. The data we collect in qualitative research is often people's language and behavior. In order to be accurate, researchers might use field notes, audio, or videotapes, and a collection of relevant documents. It is important that the data-collection process be organized and complete because the decision about which data is relevant may change as the study progresses.
- 5. Data is constantly analyzed and interpreted during a qualitative study. This allows for important aspects of the study to emerge as it processes. Again, this process differs from quantitative research in several ways. First, data is analyzed at the end of a quantitative study. Second, quantitative research is designed up front, and the design does not change as the study progresses. Finally, and not critically, the quantitative researcher decides what is important in a study, while the qualitative researcher takes a participant perspective. That is, the data collected and analyzed is based on what is important to the study participants.
- 6. Qualitative findings are best reported in a narrative such as a case study. The length of the report may range from a few pages to an entire book. The longer the report, the more excerpts from interviews and observations can be included. While quantitative reports suggest to readers that generalizing the results depends on the sample, qualitative reports provide enough information for readers to make this determination on their own.

Qualitative Research Methods

Literature Review

More often than not the proper place to begin a research study is to investigate previous work related to the research issues under study. Exploratory research seeks to generate ideas, insights, and hypotheses, and reading what others have done and discovered about the topic in which you are interested can save valuable time and resources in the search for those ideas. For example, if your research objective consists of developing an instrument to measure customers' satisfaction with your product or service, a search of previously published studies measuring customer satisfaction could generate many ideas and insights useful in developing your own instrument. This can be done by using one or more of numerous books on the subject currently available, or by doing a search of a library



database where key words such as "customer satisfaction" or "customer service" are used to reveal articles published on the subject during a specific time period (e.g., the previous three years) or searching the Web for information. Chapter 3 discussed sources and uses of secondary data in more depth.

In-Depth Interviews

One of the best ways to obtain desired insights, hypotheses, and clarifications is to talk with someone whose experience, expertise, or position gives that person unique perspective on the subject of interest. Although in some cases such key informants are obvious, such as talking with secretaries about changes in your word-processing software, sometimes valuable

Literature review an investigation of previous research related to the research

research related to the research issues under study.

insights come from not-so-obvious sources, such as talking with shoeshine people about executive footwear or golf caddies about golf equipment. The key to achieving your research objective of gaining insight and ideas through exploratory personal interviews is to be flexible and think about what you are hearing. Your objective in conducting the interview is not to get your seven questions asked and answered in the course of the conversation. The questions are the means to the objective of gaining insights; they are not the objective itself. My objective is to gain *insight* and I might be able to achieve that objective far better by asking questions related to what I am hearing than doggedly pursuing my original questions.



Researchers should never confuse the exploratory in-depth interview with one conducted in

descriptive research. Descriptive research interviewing requires a consistency in the questions asked and the way the questions are asked, which is not conducive to achieving exploratory objectives. With descriptive, we need to eliminate the variance of results due to differences in interviewing circumstances so that we can attribute the results to variances in respondent attitudes and behaviors, hence the need for consistent interviewing behavior. With exploratory, we are not trying to precisely measure some variable, we are trying to gain penetrating insights into some important issue. Hence, each of our exploratory interviews might take a different tack as we seek to probe and query each key informant to gain full benefit of their unique experiences.

For example, if we are researching the use of digital music player devices by college students, the exploratory in-depth interviews may probe issues about what features are desired, when, and how they are used; which devices are currently popular, and why, etc. The order these topics are addressed in the interviews and how the question is asked to elicit discussion of these topics is immaterial and can vary from interview to interview. We are looking for insights, not numbers here, and we must let the interview flow naturally to cover these topics and perhaps digress into areas we hadn't anticipated if those areas promise even greater insights. We might find that after twenty or so of these interviews we start hearing the same responses, so we stop conducting interviews. Or we are continuing to generate more and more ideas from these interviews that we explore in subsequent interviews and end up conducting forty interviews instead of the twenty-five we had originally planned. Again, flexibility in both conducting the interviews and knowing when to stop is the key to getting the most from our exploratory research.

Researching this same topic in descriptive research interviews would not afford such flexibility. Here we want to know how many students prefer one product feature over another, would pay \$50 more for twice as much storage capacity, or intend to buy in the next six months, etc. Every interviewer in the descriptive research must ask each question in the same way and in the same order for each interview in this research design. This is necessary so that the data generated reflects the market characteristics instead of the peculiarities of the interviewer-interviewee interaction. In other words, in descriptive research interviews we want the results of the interview to be the same no matter who did the interviewing. In exploratory, each interview can be a unique experience that results in original insights and ideas.

In the same sense, descriptive research interviewing may require a probability sample of respondents so that we can compute sampling errors and be able to make statements such as, "We are 95 percent confident that somewhere between 77 percent to 81 percent of dealers prefer brand A over brand B." Never, however, should exploratory research use a probability sample because our entire objective in talking with people is to select those who are in a position to shed an unusual amount of light on the topic of interest. They are chosen precisely because they are in the best position to shed some light on the subject.

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Another way of thinking about this is to answer the question "How many people do you need to talk with to get a good idea?" The answer, of course, is one person—the *right* person. In exploratory research we are not measuring behavior, we are seeking inspiration, clarification, and perspective, and so on, so we must seek out those people who can do that for us. Chapter 8 discusses in more detail interviewing approaches that would be used in descriptive research.

Focus Groups

One of the most popular techniques for conducting exploratory research is the **focus group**, a small number of people (usually eight to twelve) convened to address topics introduced by a group moderator. The moderator works from a topic outline developed with input from moderator, researcher, and decision maker. Focus groups have proven to be of particular value in:

- Allowing managers to see how their consumers act, think, and respond to the company's efforts
- Generating hypotheses that can be tested by descriptive or causal research
- Giving respondent impressions of new products
- Suggesting the current temperament of a market
- Making abstract data real—such as seeing how a "strongly agree" response on a survey appears in the faces and demeanor of real people

Focus groups are popular because they not only are an efficient, effective means of achieving these goals but also because decision makers can attend them, observing the responses of the participants live. This observation can be a double-edged sword, for while it does make the abstract real, it can deceive the novice into believing that the entire market is represented by the consumers in the focus group. Conducting more focus groups to see a larger number of respondents does not convert the exploratory findings into descriptive data. Focus groups are one of several means of achieving the objectives of exploratory research and should not be overused or believed to be generating results that were never the intent of this technique.

Why Conduct Focus Groups?

The standard reasons for conducting focus groups include:

- *Idea Generation.* Participants or knowledgeable experts may provide a good source of new products or other ideas in the fertile environment of a group setting.
- *Reveal Consumers' Needs, Perceptions, Attitudes.* Probing participants on why they think or act the way they do may reveal less obvious, but no less important, reasons for their behavior.
- *Help in Structuring Questionnaires.* Hearing the way participants think and talk about a product, activity, or consumption experience not only generates hypotheses that might be tested in a descriptive research design, but also informs the researcher about how to word questions in ways directly relevant to the consumer's experience.

Some less frequently mentioned reasons for conducting focus groups include:

Post quantitative Research. Focus groups are most often mentioned as research done prior to a survey, but they might be of equal value in helping researchers to flesh out quantitative research. Discovering that a certain percentage of participants behave in a particular fashion may make it desirable to probe a group

Focus group a small number of people (usually eight to twelve) convened to address topics introduced by a group moderator. of those participants in some depth to discover why and how they came to act in that manner.

Making the Abstract Real. One of the most memorable qualities of focus groups is their ability to make real what was heretofore only considered in a very abstract manner. For example, it is one thing for a product manager of a brand of dog food to know that many dog owners really love their dogs. It is quite another for that product manager to see dog owners in a focus group take obvious delight in recounting their Ginger's latest adventure with a raccoon, or grow misty-eyed in remembering Jason, now dead ten years, or hear the soft lilt in their



voice as they describe the relationship they have with Kate and Bailey, their golden retrievers. Attendance at a focus group can infuse lifeless data with new meaning and make its implications more memorable and meaningful. One checklist for management using focus groups to obtain a more three-dimensional understanding of their actual customers includes the following advice:⁵

- 1. Do not expect the people in the focus group to look like idealized customers. Fitness seekers may not look like aerobic instructors—they are just *trying* to.
- 2. It can be shocking to find that your customers may not like you very much. Listening to what they have to say about your company's products and personnel and your ideas can be ego-bruising. You cannot argue with them—be prepared to listen to the good and bad news.
- 3. Your customers are unlikely to think or care as much about your product as you do. It may be what you worry about for ten hours a day, but not them.
- 4. Do not expect focus group participants to be just like you are—or to be totally different either.
- 5. People are not always consistent in what they say. That does not mean they are liars or hypocrites—just human.
- 6. Your moderator is a good resource to put the study in a context with other research he or she has done. Are the responses more or less positive than he or she has seen in other focus groups?
- 7. If your screening process was effective, you are looking at real customers—whether you like what you see or not.
- 8. Be honest about what you expected to see. We all have preconceptions, just ask whether yours are based on research or prejudice.
- Reinforcing Beliefs. Judith Langer recounted an experience by The Gillette Company, which illustrated the ability of focus groups to convey a message much more powerfully to employees than repeat admonitions by management:

A focus group with women showed that consumers are more demanding and "educated" about quality than in the past. This comment was typical:

"I think as consumers we're becoming more aware of what goes into a product. For myself, I have become more aware of the ingredients—food or clothing or whatever. I feel that I'm not the same shopper I was perhaps six years ago. That was just fad buying. Now I look at something."

Business, business research, and research and development people observe the group; the videotape of the session has since been shown to others in the company. Hans Locater, Gillette's research director, says that the focus group made what top management has been saying more tangible and believable.

Early Barometer: Focus groups may provide an early warning system of shifts in the market. Probing consumers on lifestyle changes, consumption patterns, opinions of new competitive entries, and the like may reveal threats and opportunities entering the market long before they might be revealed in a largescale survey. Keeping an open mind and maintaining an active curiosity allow for researchers to see the far-reaching significance of seemingly innocuous observations made by focus group participants.

Focus Group Composition

Conventional industry wisdom suggests that focus groups should consist of eight to twelve people selected to be homogeneous along some characteristic important to the researcher (e.g., do a lot of baking, own foreign luxury cars, manage their own retirement account with more than \$100,000 invested). Usually, recruitment of focus group participants strives to find people who fit the desired profile but who do not know each other—thus reducing the inhibitions of group members to describe their actual feelings or behaviors. Typically, group sessions last from one and a half to two hours. Going against such conventional wisdom may be necessary in some cases. For example, one of the authors conducted research for a food company that wanted a few direct questions asked prior to presenting participants with prepared versions of their food products as well as their competitor's. Although not a taste test per se, the client wanted to hear the subjects' reactions to the products and a discussion of the circumstances under which the products would be used in their homes. For this study, a series of one-hour group sessions was run with five people per group. The more structured discussion and the desire to query each participant made the shorter time and smaller group more conducive to achieving the study's objectives.

Selection and Recruitment of Group Participants

The research objectives and research design will indicate the types of people to be recruited for a focus group. If a facility especially designed for focus group use is contracted, the management of the facility typically will conduct recruitment of focus group members. If a business research firm is being hired to conduct the groups, they usually hire the facility; identify, recruit, and select the participants; moderate the groups; and make an oral and written report of the findings. Sometimes the client organization will provide a list of possible participants taken from a master list of customers, members, users, and others. It is usually necessary to provide *at least* four names for every respondent needed (i.e., approximately fifty names per focus group).

Prospective participants are screened when contacted to ensure their eligibility for the group but without revealing the factors used to assess their eligibility. For example, if the researcher is interested in talking with people who have traveled to Europe in the past year, he or she would also ask about other trips or activities to camouflage the central issue under investigation. This deception is helpful in discouraging respondents from answering in ways strictly intended to increase or diminish chances for an invitation and to discourage

selected participants from preparing "right" answers for their participation in the group sessions. It is advisable to provide a general idea of the topic for discussion (e.g., personal travel) to encourage participation. Actual participants are usually rewarded with an honorarium (say \$25 to \$50 per person) for their time. The size of the honorarium depends upon the type of participant (e.g., physicians expect more than homemakers). The focus group facility's management usually covers the cost of recruiting, hosting, and compensating the groups in their fee. The following are six rules for recruiting focus group members.

- 1. Specifically define the characteristics of people who will be included in the groups.
- 2. If an industrial focus group is being conducted, develop screening questions that probe into all aspects of the respondents' job functions. Do not depend on titles or other ambiguous definitions of responsibilities.



- 3. If an industrial focus group is being conducted, provide the research company with the names of specific companies and employees, when possible. If specific categories of companies are needed, a list of qualified companies is critical.
- 4. Ask multiple questions about a single variable to validate the accuracy of answers. Therefore, if personal computer users are to be recruited, do not simply ask for the brand and model of personal computer they use. In addition, ask them to describe the machine and its function; this will ensure that they are referring to the appropriate equipment.
- 5. Do not accept respondents who have participated in a focus group during the previous year.
- 6. Have each participant arrive fifteen minutes early to complete a prediscussion questionnaire. This will provide additional background information on each respondent, reconfirm their suitability for the discussion, and help the company collect useful factual information.

Moderator Role and Responsibilities

The moderator plays a key role in obtaining maximum value from conducting focus groups. The moderator helps design the study guide, assists the researcher who is seeking the information, and leads the discussion in a skillful way to address the study's objectives while stimulating and probing group participants to contribute to the discussion. The following are ten traits of a good focus group moderator.

- 1. Be experienced in focus group research.
- 2. Provide sufficient help in conceptualizing the focus group research design, rather than simply executing the groups exactly as specified.
- 3. Prepare a detailed moderator guide well in advance of the focus group.
- 4. Engage in advance preparation to improve overall knowledge of the area being discussed.
- 5. Provide some added value to the project beyond simply doing an effective job of conducting the session.
- 6. Maintain control of the group without leading or influencing the participants.
- 7. Be open to modern techniques such as visual stimulation, conceptual mapping, attitude scaling, or role-playing, which can be used to delve deeper into the minds of participants.
- 8. Take personal responsibility for the amount of time allowed for the recruitment, screening, and selection of participants.
- 9. Share in the feeling of urgency to complete the focus group while desiring to achieve an excellent total research project.
- 10. Demonstrate the enthusiasm and exhibit the energy necessary to keep the group interested even when the hour is running late.

Trends in Focus Groups

Several new variations in the traditional focus group approach are being successfully used by some companies. One is two-way focus groups, which involves conducting a focus group, then having a specific group of respondents interested in the comments of the first focus group view the video of the focus group during their own focus group session. This approach could be expanded to a three-way focus group setting. One of the authors of this text worked with a company that supplied food products to fine restaurants that used a three-way focus group approach. In this instance the first group consisted of patrons of expensive restaurants talking about their experiences at such restaurants. The video of





these consumers was then viewed in a focus group of chefs and restaurant managers who commented on what they were seeing and were asked what they might do to address the needs of these consumers. The video of the chef's focus group was then observed by the food brokers used by the food service company who talked about what they could do differently to better serve the needs of the chefs. Managers from the sponsoring food service company attended all three focus groups (multiple groups of each level of focus groups were conducted).

Quads is another variation of focus groups that has been used. In these groups usually four respondents (hence the name quads) discuss a limited set of topics, perhaps engage in a taste test, and might complete a short evaluation of products. Quads take less time to complete than the usual focus

group (less than one hour as opposed to one and one half to two hours), allowing for more of them to be conducted in an evening than traditional focus groups. The attraction of quads is the ability to get 100 percent participation of respondents (in a ten-person focus group, participation by each person is more limited) on a short, specific set of issues, allowing observers to focus on the differences more easily in responses and generate hypotheses regarding those observations. Conducting more groups allows for more fine-tuning of discussion questions and methodology and changes to be made from one group session to the next. Both two-way and quad variations of focus group approaches (and many more variations practiced by research firms) illustrate the flexibility inherent in conducting good exploratory communication research.

Internet focus groups are rapidly gaining in popularity. Internet focus groups are, like all focus groups, an exploratory research technique that capitalizes on the efficiency afforded by the Internet to engage people in diverse geographic locations together in a discussion of a topic of interest to the researcher and participants. Such groups can be conducted within a company with employees or externally with customers or members of a target market. If confidentiality is a concern with employees, they can use a hyperlink embedded in email to go to a secure website where they can participate anonymously.

Internet focus groups with consumers have an obvious advantage in cost savings over traditional focus groups (approximately one-fifth to one-half the cost) as well as allowing for greater diversity among participants. Participants may in some situations be able to enter their input and reactions to other participants anytime during the extended focus group time frame—twenty-four hours a day. Use of IRC (Internet Relay Chat) or Web chat sites makes it easy for participants to contribute to a discussion set up at that specific site for a specific purpose. It is then possible to immediately generate transcripts of twenty to thirty pages of verbatim responses for analysis. Advantages include speed of recruitment, savings in travel costs and time away from the office, ability of respondents to participate from the comfort of their own home, and anonymity of responses. Disadvantages include a loss of observable information (e.g., facial expressions, body language, sense of excitement, confusion, and the like), which veteran focus group moderators use in analyzing traditional group sessions. Also, it is not possible to ensure that the person engaging in the focus group session is really the person you wanted. It is not possible to effectively screen people for certain desirable and easily verifiable characteristics (e.g., age, gender, or racial background) and be certain that the person on the Internet actually fits the desired profile. Also, unless the topic is about the use of the Internet itself, the people who are available for Internet focus groups may or may not be representative of the complete target market.

Some research companies operate Internet focus groups by recruiting and building a database of respondents from screening people visiting their website or through other recruitment methods. These people are then profiled through a series of questions, which allows the research firm to select respondents with the characteristics desired by the client organization. Potential respondents are emailed, asking them to go to a particular website at a particular time (using a hyperlink embedded in the email). The moderator types in questions and responds, probes, and clarifies during the session by typing in queries. Several companies do these types of focus groups.

Immersion Groups

Some researchers are turning away from the traditional format of focus groups with a moderator and eight to ten people and have instead begun interacting directly with fewer participants in what has

begun being called "Immersion Groups."⁶ At Yahoo!, for example, researchers meet directly with four or five consumers in work sessions to design new services. A new online community for auto buffs who desire more opportunities to chat with other members was designed using immersion research. The advocates of these immersion groups believe that some consumers are not honest about their feelings and behaviors in front of other consumers around the focus group table. Hands-on work sessions with consumers break down such inhibitions.

Ethnography

Companies are increasingly adapting the ethnographic research methodologies of cultural anthropologists to study consumers. Typically, ethnography involves a researcher experiencing life events along with their participants—asking questions, observing, and recording their own feelings as they share the experience. Volkswagen engineers couldn't understand why Americans treat their cars as homes on wheels until they spent three and one-half grueling hours on a Greyhound bus traveling between Seattle and Portland. That experience and spending 18 months traveling across the United States by car, talking with fellow travelers at rest stops and fast-food outlets, going to malls, visiting the Rock & Roll Hall of Fame, tailgating at a NASCAR race, attending drag races, and observing other travelers on similar long car trips helped drive home the differences in the American and European car cultures. "If you lose your car here, you're done," was the revelation of one of the researchers.⁷ Additionally, they took subways, drove rental cars, and took red-eye flights. They shadowed mothers who spent the day taking kids to soccer practice, picking up the dry cleaning, and shopping for groceries. Their conclusion: "In Germany it's all about driving, but here it's about everything but driving." Designs for all VW products sold in the U.S. market are expected to be affected by the ethnographic research results.

Procter & Gamble likewise conducts ongoing ethnographic studies to keep abreast of consumption practices. The company routinely sends scores of researchers armed with video cameras into consumer households around the world to tape daily routines and procedures of consumers in all their boring glory. Typically, the ethnographer-filmmakers arrive at the home of the participant when the alarm clock goes off and stay until bedtime, usual for a four-day stretch. Sometimes the camera is left on without an attendant in a room while family members go about their daily tasks. Taping a mother feeding a child in the consumer's own home can reveal many actions that would go unreported in a focus group session on that subject. Observing multitasking behaviors occurring during such sessions could inspire packaging and product designs that could provide a competitive advantage when they reach the market.⁸ Each year more companies pursue such ethnographic studies to supplement other exploratory research methods.

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Ethnography the researcher experiences life events along with the study participants asking questions, observing, and recording their own feelings as they share the experience.





Netnography ethnography that studies the consumer behavior of online communities.

Grounded theory based on the concept that people act in response to environmental clues. The theory evolves during the research process.

Analysis of selected cases

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case analysis involves the study of a specific situation similar to the current research problem. It is particularly valuable for complex research problems.

Netnography

In recent years, e-commerce has become an important component of retail sales. Moreover, consumers join discussion boards, chat rooms, and other online forums to trade information about products, services, and businesses. Thus, methods to conduct research on the World Wide Web have been developed. One such method is **netnography**, which is ethnography that studies the consumer behavior of online communities. The research methodology is the same as traditional ethnography in that the researcher should begin with specific research questions and learn as much as possible about the online groups to be studied. Data collection can consist of copies of computer-mediated communications of the online community or transcriptions of what the researcher observes in monitoring online forums.

For example, whereas many may believe that the coffee market has been adequately addressed by Starbucks, a study of coffee drinkers using netnography indicates that there is an online community of coffee drinkers with an almost religious fervor about coffee that has yet to be exploited. These consumers possess discriminating tastes and snob appeal. They also are not interested in the in-person social aspects of coffee consumption at a place like Starbucks but are more interested in products they can use at home.⁹

Grounded Theory

Grounded theory is based on the concept that people act in response to environmental clues, objects, and other people based on the meanings people assign to them. That is, grounded theory researchers believe that personal conduct is programmed by social norms. In order to understand behavior in a particular situation, then, the researcher enters into the subject's context.

A variety of research methods might be used in grounded research including depth interviews, ethnography, and immersion groups. A researcher might choose to use only one method or more than one method in the same study. The method to use after the initial method is chosen is driven by the research.

The key concept of grounded theory is that the theory evolves during the research process. That is, unlike quantitative methods where the researcher tests an existing theory, grounded theory research is designed to *develop* a theory. Another important element of grounded theory is that there is a constant interplay between the data collected and its analysis. Thus, as data is collected the theory evolves along with the method. Additionally, there is no predetermined sample with grounded theory. Researchers continue to collect data until they learn nothing new from additional data. This is known as theoretical sampling.

Grounded theory is used when researchers want to study an area of interest without preconceptions. Thus, the method is more difficult for study subjects with long, empirically based literature. Grounded theory researchers attempt to avoid even any unconscious predispositions concerning the area of study.

Analysis of Selected Cases

Another means of achieving the objectives of exploratory research is to conduct in-depth **analysis of selected cases** of the subject under investigation. This approach is of particular value when a complex set of variables might be at work in generating observed results, and intensive study is needed to unravel the complexities. For example, an in-depth study of a firm's top salespeople and a comparison with the worst salespeople might reveal characteristics common to stellar performers. Here again, the exploratory investigator is best served by an active curiosity and willingness to deviate from the initial plan when findings suggest new courses of inquiry might prove more productive. It is easy to see how the exploratory research objectives of generating insights and hypotheses would be well served by the use of this technique.

Projective Techniques

Researchers might be exploring a topic where respondents are either unwilling or unable to directly answer questions about why they think or act as they do. Extremely sensitive topics involving their private lives are obviously in this category, but more mundane behaviors may also hide deep psychological motivations. For example, in a case investigating why some women persisted in preferring a messy, expensive spray to kill roaches instead of using a more efficient trap that the women acknowledged to have more benefits than their sprays, researchers discovered that the women transferred hostilities for the men who had left them to the roaches and wanted to see the roaches squirm and die. The method used to uncover these hidden motives is one of the so-called **projective techniques**, named because respondents project their deep psychological motivations through a variety of communication and observable methods. These methods typically include:

- 1. *Word association*. Respondents are given a series of words and respond by saying the first word that comes to mind. The response, the frequency of the response, and time it takes to make the response are keys to understanding the underlying motives toward the subject. If no response is given, it is interpreted to mean that emotional involvement is so high as to block the response.
- Sentence completion. Similar to word association, sentence completion requires the respondent to enter words or phrases to complete a given sentence such as: People who use the Discover credit card are_____. Responses are then analyzed for content.
- 3. *Storytelling*. Here respondents are given a cartoon, photograph, drawing, or are asked to draw a scene related to the subject under investigation and tell what is happening in the scene. In theory, the respondent will reveal inner thoughts by using the visual aid as a stimulus to elicit these deep motivations. Therefore, if the picture is of two people sitting and looking at a computer screen in an office, the story that is told about the people will reveal how the respondent feels about using computers in a work environment.
- 4. *Third-person technique/role-playing.* This technique reflects what Oscar Wilde meant when he said, "A man is least himself when he talks in his own person; when he is given a mask, he will tell the truth." Respondents are told to explain why a third person (a coworker or a neighbor) might act in a certain way. For example, a stimulus might appear as: We are trying to better understand what features people might consider when buying a garden tractor. Please think about people you know and tell us what features would be important to them for such a product. Role-playing requires the respondent to play the role of another party in a staged scenario, such as asking a retailer to play the role of a customer coming into a retail establishment.
- 5. *Collages.* This technique involves asking the respondent to cut pictures out of magazines and arrange them on poster board to depict some issue of interest to the researcher. For example, respondents might be asked to choose pictures that tell a story of how they decided to start exercising daily, or to find pictures that convey their image of a computer brand.
- 6. *Music association*. Here the researcher plays a variety of music selections and asks the respondent to associate the music with one of the brands being evaluated. The objective is to determine a brand's emotional content for the respondent (e.g., associating one brand of vodka with hard rock music and another brand with cool jazz).



Projective techniques a form of research that is effective in discovering the hidden (latent) motives and attitudes of the research subjects. It is also useful when dealing with sensitive subjects.



As can be seen from the description of these techniques, one must be skilled not only in structuring these approaches, but also must be an experienced professional in interpreting the results. Also, their use is often bimodal—either an organization (such as an advertising agency or marketing consulting firm) uses them extensively or not at all. These techniques have been shown to provide intriguing new insights into behavior but are best left to experts to operate and interpret.

The Value of Exploratory Research

All of these exploratory techniques, when properly applied, can be successfully used to achieve the research objectives of generating ideas, hypotheses, and clarifying concepts. Quite often in a multistage research project, one might start with exploratory research, then use the results to help structure a descriptive research questionnaire or a causal research experiment. Although that is frequently the case, exploratory results do not have value only as preliminary work before the real research takes place. Depending on the research purpose or attitude of the decision maker toward risk, exploratory research may be the only research that is done. For example, if in-depth interviews with twenty selected purchasing agents generate only ridicule of a new product idea, it is not necessary to conduct a structured survey of 500 to kill the idea. However, if you want to ultimately produce an ad that says your paintbrush is preferred two to one over a major competitor's by professional painters, exploratory research will not be sufficient to support your claims. If a decision can be reached. If the stakes increase, however, that same decision maker may want to follow up the exploratory research with more structured and quantifiable descriptive or causal research.

The point we are trying to make here is that well-conducted exploratory research can be extremely valuable in achieving the objectives endemic to that type of research, apart from its contributing to later phases of the research study. The fact that it does not generate precise quantifiable data is not a weakness of the approach. When properly conducted and interpreted it can serve as a powerful aid to decision making, depending upon the decisions being faced and the decision-making style of the manager.

To know whether exploratory research is alone sufficient or should be followed by descriptive or causal research, the researcher should examine the research questions, the decisional criteria, the time available to do the research, and the research budget. An example might help to illustrate the interplay of these factors in determining whether exploratory research should be followed by quantitative research.

In the case of the Compton Company described in Chapter 1, the managers decided, incorrectly as it turned out, to get a new advertising agency instead of doing research to discover the cause of their declining market share. If they learned a lesson from this experience and next time decide to do research before making a decision, their preferred decision-making style might be to rely on exploratory approaches rather than a full-scale quantitative study.

So, a research question such as "Are our dealer policies competitive?" might with some decision makers involve doing exploratory research to first clarify concepts, formulate the issue more precisely, and gain valuable insights into dealer relations, then descriptive research to discover the frequency with which dealers rate your company's policies as fair, motivating, and understandable compared to your competitors. The Compton Company managers, however, may merely want you to have in-depth conversations with a few key dealers (i.e., the decision criteria of Compton's decision makers), report the results of your conversations, and then they are ready to make their decision. Whether the research would be staged as exploratory followed by descriptive or exploratory only would therefore depend upon how the decision makers (with the help of the researchers, see Chapter 1) defined the decision alternatives and criteria that would be used to choose among the alternatives, the time available for the research, and the research budget.

In some cases, the research question itself suggests that descriptive research will be needed to follow up exploratory findings. If, in collaboration with the decision maker, the researcher writes the research question as: "What percentage of dealers rate our company as having the best customer service?" then it will be necessary to follow the exploratory research with descriptive research. Here the exploratory clarifies terms such as "best" and "customer service" and identifies what areas of customer service are most important to dealers, and the descriptive determines the percentage of dealers rating the company's and its competitors' customer service along those important dimensions. It is descriptive, not exploratory, that provides quantification of responses.

If your research questions require some exploratory research to gain insights, ideas, and generate hypotheses, either to answer the questions entirely or before you can go on to descriptive or causal research, you should indicate in detail how that exploratory research is to be conducted. For example, indicate not only that a literature search is to be conducted to help answer research question #3, but also describe what literature is to be reviewed. Wherever possible include a photocopy of a page or two of the documents being reviewed. For in-depth interviews, profile the specific types of people you plan to interview and list the topics you plan to cover in the interview. Link each research objective with the exploratory techniques you plan to use to answer the question, along with a detailed discussion of exactly what the use of that technique will involve.

SUMMARY OF KEY POINTS

Differences in exploratory, descriptive, and causal research.

Exploratory research is used to gain some broad insights into the phenomenon and achieve a better feel for the subject under investigation (e.g., What do customers mean by good value?). Descriptive research is used to describe a population, event, or phenomenon in a precise manner where we can attach numbers to represent the extent to which something occurs or determine the degree two or more variables vary (e.g., determine the relationship between age and consumption rate). Causal research is used to attribute *cause*-and-effect relationships among two or more variables so that we can better understand and predict the outcome of one variable (e.g., sales) when changing another (e.g., advertising).

How exploratory and qualitative research differs from quantitative research.

Exploratory or qualitative research is research that is undertaken when a problem is not well understood and there is no prior research available. Exploratory research is often used to better develop an understanding of the problem to aid in future research projects. Quantitative research, on the other hand, is used to find out "who did what, when, where, and how often." Whereas exploratory/qualitative research usually relies on small samples that are not randomly chosen, quantitative research relies on larger samples that are randomly selected and numerical analysis of the resulting data.

When exploratory and qualitative research should be used.

Exploratory and qualitative research are used to define the management problem or issues, to identify the variables involved in a situation, generating ideas, and determining priorities for conducting further research. Like detective work, this type of research uncovers clues that help identify the nature of the problems or issues that management faces and the variables involved that may need to be explored in greater detail to solve the dilemmas facing management.

Research Project Tip

How exploratory and qualitative research can improve the development of the quantitative research process. Exploratory and qualitative research can improve the quantitative research process by identifying key variables that need to be measured in a random sample to provide data analysis that leads to testing hypotheses and details of who to sample and possible differences between groups of respondents. For example, exploratory research might reveal that smaller companies focus on different criteria in decision making than larger companies, but how does the criteria differ among companies in different industries and different organizational structures? This is where quantitative research is needed to identify these differences by the many different factors in their operating environment; in other words, numerical data rather than insights.

Different types of exploratory/qualitative methodologies.

Many different types of exploratory/qualitative methods are identified in this chapter, ranging from in-depth interviews and projective techniques to focus group interviews. The choice of methodology is dependent on not only the management problem/issue involved but also the researcher's own expertise and familiarity with a given methodology. Some researchers may prefer in-depth interviews, whereas others may prefer a focus group and the process of being able to have interaction among group members to generate other ideas or possibilities. However, a more objective approach would let the nature of the problem/issue dictate the methodology to be used rather than just greater familiarity with a given methodology.

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Analysis of selected cases (p. 70) Ethnography (p. 69) Exploratory research (p. 57) Focus group (p. 64) Grounded theory (p. 70) In-depth interview (p. 59)

DISCUSSION QUESTIONS

- 1. What are the objectives of exploratory research?
- **2.** How does exploratory research differ from descriptive and causal research?
- 3. Define qualitative research.

Literature review (p. 62) Netnography (p. 70) Projective techniques (p. 71) Qualitative research (p. 59) Research design (p. 56)

- **4.** What are the main issues in the debate between qualitative and quantitative researchers?
- **5.** If you were asked to study the breakfast cereal consumption habits of children eight to ten, which qualitative method would you use? Why?

ENDNOTES

- 1. Zaltman, G. (1997). Rethinking market research: Putting people back in. *Journal of Marketing Research*, *34*(4), 458.
- Denzin, N., & Lincoln, Y. S. (1994) Introduction: Entering the field of qualitative research. In N. K. Dentin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1–17). Sage.
- Mayut, P. (1994). Introduction: Entering the field of qualitative research. In N. K. Dentin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1–17). Sage.
- Mayut, P. (1994). Introduction: Entering the field of qualitative research. In N. K. Dentin & Y. S. Lincoln (Eds.), *Handbook of qualitative research* (pp. 1–17). Sage.

- **5.** Catterall, M., & Maclaran, P. (2006). Focus groups in marketing research. In R. W. Belk (Ed.), *Handbook of qualitative research in marketing* (pp. 255–267). Edward Elgar.
- 6. See Kiley, D. (2005, November 14). Shoot the focus group. *Business Week*, 120–121.
- 7. Chon, G. (2006, January 4). VW's American road trip. *Wall Street Journal*, B1ff.
- Nelson, E. (2001, May 17). P&G checks out real life. *Wall Street Journal*, B1ff.
- **9.** Kozinets, R. V. (2002, February). The field behind the screen: Using ethnography for marketing research in online communities. *Journal of Marketing Research*, *39*(1), 61–72.