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COMMUNICATION RESEARCH

Asking Questions, Finding Answers

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Joann Keyton

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Communication Research

ASKING QUESTIONS, FINDING ANSWERS

SIXTH EDITION

Joann Keyton

North Carolina State University





COMMUNICATION RESEARCH

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PREFACE

Thank you for picking up this book and reading the preface. I am a communication researcher who conducts and publishes quantitative and qualitative research. I am always learning something new about research methods, and, perhaps, most central to this preface—I really enjoy teaching research methods courses. I designed this research methods book to help students overcome their fear of research methods and to provide instructors with foundational material for classroom use. Over the previous editions, including this one, I have received a substantial amount of feedback of how the book could be more effective for both instructors and students. Most directly, I receive feedback from my students when I teach undergraduate and graduate research methods courses. More formal feedback has come from the publisher who seeks professional reviews of textbooks before an author begins work on a new edition. Other times, feedback has come informally from conversations at conferences or in e-mails from instructors or students using the book. I'm grateful for everyone who has taken the time to comment, to point out what's good or bad, and to suggest what they would like to see in a new edition—and what they hope I will remove.

So, simply, the goal of this book is to be helpful to instructors in teaching research methods and to be supportive to students who are learning research methods.

My other goal is to focus on communication research. I emphasize *communication*, as all of the examples used in book are drawn from the published research of communication scholars in communication or communication-related journals. I hope you will (and you will encourage your students to) go back to these cited sources.

I've written this book to be most useful to students (undergraduate or beginning graduate level) who have little or no familiarity with communication research. I have used previous editions at both the undergraduate and graduate levels, and know others have done the same. I hope that the book hits a middle ground that

is engaging for undergraduates but can also provide a foundation for beginning graduate students (with the help of additional reading material and more sophisticated in-class exercises). Across the chapters, I've selected techniques and methods that are foundational to more advanced methods and ones that students can learn to use in research settings.

What I've learned from the publisher's examination of the research methods book market and from my conversations with colleagues who teach research methods is that no two instructors teach the research methods course in the same way. Some faculty focus on quantitative; some faculty focus on qualitative; and some do a mix of the two. Some of us insist that students *do the math*; others of us want statistics presented conceptually. Some of us want more of the philosophical traditions that are the underpinning of quantitative and qualitative methods; some don't. Thus, I've had to make choices. But my choices were guided by a principle I've long believed in: Researchers must have a broad understanding and appreciation of all methodologies—quantitative and qualitative—to read and understand published communication research and to conduct their research effectively.

To that end, the sixth edition of this book continues to emphasize three important points:

1. All research starts with an initial research question or problem.
2. Research is a process in which the researcher makes important decisions at crucial points about what to do and how to do it. This is in contrast to viewing research simply as a series of steps to be completed.
3. To answer the varied nature of questions about communication, one must be familiar with both quantitative and qualitative methodologies.

Communication Research: Asking Questions, Finding Answers covers basic research issues and processes

for both quantitative and qualitative approaches appropriate for communication students with little or no previous research methods' experience. The text's guiding principle is that methodological choices are made from one's research questions or hypotheses. This avoids the pitfall in which students learn one methodology or one methodological skill and then force that method to answer all types of questions.

WHAT'S NEW TO THE SIXTH EDITION AND ORGANIZATION OF THE TEXT

The book presents a balance of quantitative and qualitative research because the communication scholarship embraces both approaches. In addition to updating the published research examples and research references sources (over 100 new references are included), I've retained the organization and the continuation of the increased focus on qualitative research initiated in the fourth edition.

Based on feedback from reviewers for the fourth edition, the book is divided into three sections. In the first section, Research Basics, students are introduced to the research process, its basic principles, and research ethics. Chapters in this first section are introductory to research in general and are neutral with respect to methodology. The issues raised in these initial chapters are issues that both quantitative and qualitative researchers must address. Section 2 focuses on quantitative communication research methods whereas Section 3 focuses on qualitative communication research methods.

Across all chapters, emphasis was placed on updating examples and reference sources to align the book with current research practices in the communication discipline. All of the new references are drawn from the most recently published literature. Across all of the chapters, I continued to be more inclusive of examples drawn from research conducted in other parts of the world and by researchers outside the United States. Likewise I updated technology examples to reflect the current mediated environment.

The book uses the APA (7th ed.) style manual for presentation of examples and references, as that is the style requirement of most social science communication journals.

Material previously in the print appendices has been moved to the book's website, www.mhhe.com/keyton6e, where instructors and students will also find PowerPoint presentations for each chapter, test banks, and an instructor's manual. As with the last edition, a note about online resources available to students concludes each chapter. I update the resources at my own website (www.joannkeyton.com/research-methods) each academic year. There, you can also find short quizzes. Additional instructor resources and assignments can be found on Connect. Whether you assign students to work with the resources inside or outside of class, or expect students to use these materials on their own, the online resources provide students with ways to enhance and test their knowledge of research methods.

FEATURES

The primary purpose of this textbook is to introduce students to communication research methods by meeting two objectives. The first objective is to help students become better consumers of the communication research literature by emphasizing effective methods for finding, consuming, and analyzing communication research. This objective is important because students are consumers of the communication literature through their participation in communication courses. The second objective is to provide a path for students who wish to develop and conduct research projects. To those ends, this book provides coverage of the entire research process: how one conceptualizes a research idea, turns it into an interesting and researchable question, selects a methodology, conducts the study, and writes up the study's findings. I believe that students who can effectively navigate, select, and use the communication research literature can become effective researchers, and, reciprocally, that students engaged in communication research will be able to more effectively use the existing research literature. Regardless of the role in which students use their research knowledge, they must be able to read and understand the communication research literature.

This book provides several features to help students succeed in both roles.

1. The research process is situated in communication research about symbols, messages, and meanings.

2. Over 100 new research and reference source citations were added; these new citations were pulled from the 2018 through 2021 (at the time of book's production) published communication and communication-related journals found on Communication and Mass Media Complete.
3. Examples cover the breadth of the discipline (e.g., persuasion, interpersonal, group, health, organizational, mass communication, and public relations).
4. A boxed feature labeled *Design Check* alerts students to the practical and logistical issues that student researchers should consider when designing a study. These are the same issues that students should ask of the research studies they read, as how these issues are addressed by researchers influences study outcomes and data interpretations.
5. A boxed feature labeled *An Ethical Issue* alerts students to issues of research ethics and integrity. Not only must researchers balance practical and logistical issues, they must do so while addressing ethical issues that occur when *people* and their communication artifacts are used as the basis of research. *Chapter Checklists* begin each chapter to highlight for students the essential learning objectives for each chapter. End-of-chapter summaries provide point-by-point summaries of information presented in the chapter. Stated simply, these factual statements can help direct students' study of the material. Key terms are boldfaced within the text and listed at the end of chapter. Key term definitions can be found in the glossary at the end of the book.
6. Continuing the active pedagogy approach of the book, *Try This!* boxes are placed throughout the chapters to engage students in short research activities that can be used in the classroom with individuals or groups, or as short homework assignments. Finally, the book focuses on students. It is written for them—to their level of knowledge and understanding about human communication, the communication research literature, and the relative research processes.

My goal in writing the chapters was to explain the research steps and identify the steps researchers take in developing and conducting communication research. With study and instruction, students should be able to use this material and integrate it with what they know and are familiar with from their other communication

courses to accomplish two objectives: (1) to be more analytical and make more sophisticated interpretations of the communication research they read and (2) to design and conduct basic quantitative and qualitative research studies.

TEACHING AND LEARNING SUPPLEMENTS

The sixth edition of *Communication Research* is now available online with Connect, McGraw-Hill Education's integrated assignment and assessment platform. Connect also offers SmartBook for the new edition, which is the first adaptive reading experience proven to improve grades and help students study more effectively. All of the title's website and ancillary content is also available through Connect, including:

- A full Test Bank of multiple choice questions that test students on central concepts and ideas in each chapter.
- An Instructor's Manual for each chapter with full chapter outlines, sample test questions, and discussion topics.
- Lecture Slides for instructor use in class.

In addition, assignments can be found on Connect, including sample syllabi, teaching tips, chapter and course assignments, exercises, and worksheets for each chapter. Typically one or two pages in length, worksheets can be used as a homework or in-class assignment for students to review their knowledge and understand about the material presented. Also included on the website are PowerPoint outlines for each chapter and a test bank. Question types include objective (e.g., fill in the blank), comprehension (e.g., explain how academic research differs from proprietary research), and behavioral (e.g., given a set of variables the student is asked to write research questions and hypotheses). For those chapters that cover statistics or the analysis and interpretation of qualitative data, additional worksheets are available, which provide students with the opportunity to work several examples from raw data through to interpretation.

Student content can also be found at the same website (www.mhhe.com/keyton6e). Student content is not password-protected and includes short online quizzes and PowerPoint outlines for each chapter.

ABOUT THE AUTHOR

Joann Keyton (B.A., Western Michigan University; M.A., Ph.D., The Ohio State University) is Distinguished Professor Emerita of Communication at North Carolina State University. She specializes in group communication and organizational communication. Her current research examines the collaborative processes and relational aspects of interdisciplinary teams, participants' use of language in team meetings, the multiplicity of cultures in organizations, and how messages are manipulated in sexual harassment. Her research is field focused and she was honored with the 2011 Gerald Phillips Award for Distinguished Applied Communication Scholarship by the National Communication Association.

Her research has been published in *Business Communication Quarterly*, *Communication Monographs*, *Communication Research*, *Communication Studies*, *Communication Theory*, *Communication Yearbook*, *Group Dynamics*, *Journal of Applied Communication Research*, *Journal of Business Communication*, *Management Communication Quarterly*, *Small Group Research*, *Southern Communication Journal*, and numerous edited collections including the *Handbook of Group Communication Theory and Research*, *The Cambridge Handbook of Group Interaction Analysis*, *The Oxford Handbook of Organizational Climate and Culture*, *The Sage Handbook of Organizational Communication*, and *Annual Review of Organizational Psychology and Organizational Behavior*.

In addition to publications in scholarly journals and edited collections, she has published three textbooks for courses in group communication, research methods, and organizational culture in addition to co-editing an organizational communication case book. Keyton was editor of the *Journal of Applied Communication Research*, Volumes 31–33, founding editor of *Communication Currents*, Volumes 1–5, and associate editor of the *International Encyclopedia of Organizational Communication*. Currently, she is editor of *Small Group Research*. She was a founder and vice-chair of the Interdisciplinary Network for Group Research.

For more information, contact Joann at jkeyton@ncsu.edu or www.joannkeyton.com

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My Dalmatian family has changed once again. Between the fourth and fifth editions, both Sonny and Zoe passed and are now at The Rainbow Bridge with Cher, Potter, Maggie, and Sally. The Dalmatian

rescues were looking out for me and lead me to Penny, aka Keyton's Lucky Penny. She may be deaf, but she runs 100 yards in 8.3 seconds. She has taken up the mantle of making sure that I live up to my promise that I will not forget what my *real* job is: to let the dogs in, let the dogs out, let the dogs in, let the dogs out. . . .

Jeff—this book is for you. As a student, you would not allow me to let you down. As a friend, you have not let me down. Your invaluable lessons, both professional and personal, helped me write this text in the beginning and through its revisions. Thanks for your continual support and encouragement.

Joann Keyton



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Introduction to Communication Research

Chapter Checklist

After reading this chapter, you should be able to:

1. Identify instances in which you could use or conduct communication research as a student, use or conduct communication research as a professional, and use the results of communication research in your personal life.
 2. Explain the goals of research.
 3. Explain the relationship of research and theory.
 4. Explain communication research as a social science.
 5. Describe how communication research from a social science perspective is different from other forms of communication research and other forms of social science research.
 6. Differentiate among the characteristics of science.
 7. Distinguish between a research question and a hypothesis.
 8. Describe the differences among questions of fact, variable relations, value, and policy.
 9. Identify questions about communication that you believe are worth pursuing.
-

As a student in a research methods course, you have two roles. In one role, you are a consumer of communication research. You read summaries of research in your textbooks. In some courses, you may be required to read and analyze research articles published in the discipline's journals.

In the other role, you are a researcher collecting and interpreting data to answer research questions and hypotheses. These activities may be part of the course for which you are reading this book, an independent study, an upper-division course, or a capstone project. The information in this book can help you succeed in both roles, and hopefully can help you develop methodological curiosity. But before you identify yourself with either or both roles, turn your attention to answering the question "What is research?"

WHAT IS RESEARCH?

In its most basic form, *research* is the process of asking questions and finding answers. You have likely conducted research of your own, even if it was not in the formal sense. For example, as you chose which college or university to attend, you asked questions of students, faculty, and staff at the various institutions you were considering. You might also have looked on websites for answers to your questions or used the survey results from *U.S. News & World Report* that rank America's colleges and universities. As you made choices about your major, you examined the college website, talked to students and an advisor, and perhaps even talked to professionals in the field you believed you wanted to pursue. In these activities, you sought answers to your questions. Which school is best for me? Which school has the type of student experience I am looking for? Which schools are affordable for my major or degree? What is the annual income of alumni with my major? What kinds of career opportunities can I expect? By asking these questions, you were taking on the role of a researcher as you tracked down the information needed to make a decision.

Not only were you asking questions and seeking answers, but more than likely you were also relying on the results of research conducted by others. It would be impossible for you to answer your set of questions without such input. For example, for the question "What is the annual income of alumni with my major?" it would not be realistic for you to survey graduates in your field to discover their annual income. More likely you relied on

a survey conducted by a professional association, an alumni association, or a news organization. You used the reported findings of their research to answer your question. Although someone else did the research, you still needed to evaluate the efficacy of their research to gauge the usefulness of their findings in answering your question.

You are also familiar with other types of research. News reports profile the results of research each day. You have heard the results of medical research reported in the news. During political campaigns, the results of preference polls are reported in the news and archived on news organization websites. And, no doubt, you have heard the results of research on racism and climate change. If you work, your company may have conducted research on the preferences of its customers or the quality of its products.

The point here is that research is all around us, often presented in ways that we would not recognize as research. Thus, **research**, as we will study it, is the discovery of answers to questions through the application of scientific and systematic procedures. Given this basic definition of research, you can see that you probably come into contact with several forms of research on a daily basis. You probably also use the results of research in making both personal and professional decisions.

The specific focus of this text is communication research—that is, quantitative or qualitative research conducted by communication scholars about communication phenomena. The focus is also on research conducted from a social science perspective, which is distinct from rhetorical research and also distinct from critical research. Yet, distinctions among these three perspectives—social science, rhetorical, and critical—are not always clear (Craig, 1993), and scholars working from the other perspectives do use some methods more commonly associated with social science research. As Stanfill (2012) suggests researchers and students should ask three basic questions. These are: "When a scholar conducts research, (a) how do they do it? (b) what do they see themselves as doing?, and (c) why do they do it?" (p. 6).

Social science research is conducted through the use of scientific and systematic methods, and it is based on the assumption that research can uncover patterns in the lives of people. When patterns of communication behavior are confirmed or discovered, scholars develop useful theories of communication that speak to the regularity of communication (Bostrom, 2003).

The research techniques and methods presented in this book are used to study the communication behavior of humans and the communication artifacts that people create. Although some people think of social science research as objective research, communication scholars use both quantitative (more objective) and qualitative (more subjective) methods—sometimes separately and sometimes in combination with one another. Both types of methods are **empirical**, meaning that both methods are based on observations or experiences of communication. Both types are needed because it is unlikely that quantitative or qualitative methods alone can provide complete answers to the many questions we have about communication behavior.

Your Relationship with Research

As discussed earlier, your relationship to this material can be conceptualized in two ways—as that of a researcher or as that of a consumer of research. You may take on the researcher role as a student, as an employee, or as a consultant. It is likely that the class for which you are reading this book will develop and conduct a research project as part of a class assignment. You may also decide that the process of research is interesting enough that you plan to take additional courses in research methodology. You might even decide to become a professor and spend much of your professional time as a researcher, finding answers to questions that interest you and matter to others.

After you graduate, you might find yourself in a professional position where research and data analysis is part of your regularly assigned job responsibilities. Positions in marketing and advertising, as well as jobs in political, organizational, and health communication, are just a few in which research plays a central role in decision making. Even though their organizational title may not be “researcher,” many employees at managerial levels are responsible for collecting and analyzing data to help organizations and employees make more effective and efficient decisions. But are these examples of communication research? They could be. Some organizations conduct surveys or focus groups to discover the degree of effectiveness of their internal communication practices. Media organizations regularly use surveys or focus groups to discover if informational, advertising, or promotional messages are being received as intended.

You could become a consultant and conduct **proprietary research**, research that is commissioned

by an individual or organization for its own use. Organizations use consultants to evaluate their internal communication systems and operational effectiveness. Political figures also commission proprietary research to discover how they are doing in the polls and which of their messages have the most influence on potential voters. Marketing and advertising research is also proprietary. Even though the results of proprietary research are private and intended only for the use of whoever pays for the research, the researcher uses the same procedures and practices used in conducting scholarly or academic research.

Your relationship with research can also be conceptualized as that of a consumer. You consume the research of others when you read scholarly books and journals. You also consume research when you see or hear personally or professionally interesting information presented in the media, and use information about products and services marketed to you. You might trust some sources more than others—or be more cautious—if you knew how the data were collected and analyzed.

When a class assignment requires that you find, read, and integrate research findings, you are in the consumer role as you collect information in the library or online to complete class assignments. Your ability to evaluate the information you collect has a direct impact on your ability to learn and prepare assignments.

As a researcher, you seek answers to questions by collecting data, and then interpreting results and findings to draw conclusions and make recommendations. As a consumer, you sort through results and findings others have provided. In this role you still need to distinguish good information from bad, test assumptions and conclusions drawn by others, and analyze the extent to which the research process others used fits your needs and situation. In this case, you need the skills to determine if the information you are using is misleading or misinterpreted from its original source.

It is easy to feel overwhelmed or intimidated by the particular vocabulary and traditions of research. But if you approach learning about research as another way to find information, you are likely to discover that formal research is an extension of the types of informal asking and answering of questions that you have done all your life. After reading this chapter, you should be able to identify how research acts as an influence on your life and in your decision making. Throughout the rest of this chapter and throughout this book as well, specific examples of communication research will be

**AN ETHICAL
ISSUE****Is Communication Public or Private?**

In general, what ethical issues do you believe are raised when researchers study the communication behavior of others? About what communication situations would you feel comfortable answering questions? In what situations would you feel comfortable having a researcher observe you? Should some communication contexts remain the private domain of participants, closed to researchers' inquiries? What about intimate communication between significant others in the privacy of their home? What about the communication between parent and child when discipline is required? What about communication that occurs among co-workers as they joke about ways to ridicule their boss? How would you respond if a communication researcher asked you questions about your communication behavior during these events? What arguments could you develop both for and against communication scholars conducting research about such events? Should some communication behaviors or contexts be off limits to communication researchers? Why or why not?

highlighted as we explore how research is conducted—that is, how research is planned and carried out and how data are collected, analyzed, and reported. The goals of this book are to provide you with the basic skills of a researcher and to enhance your ability to be a better critic of the research reported by others.

SCHOLARLY RESEARCH

With this introduction to research in general, we now turn our attention to the formal and systematic method of scholarly research. Researchers, or scientists, who have been trained in research methods and procedures conduct research. These scholars formalize their questions into research questions or hypotheses, which provide the scope and direction of the research project as well as guide the researcher in selecting quantitative or qualitative methods to answer the questions. The questions or hypotheses direct what data the researcher collects. After the data are collected, the researcher or research team analyzes the data to draw conclusions about the hypotheses or answer the research questions. Essentially, conducting research is a matter of making claims based upon data (O'Keefe, 2004). Different types of claims require different types of evidence, or data, which may be quantitative data, qualitative data, or both.

But the process is not complete. Scholarly, or academic, research is also public and available to others. However, the process of making it public is certainly

different than it is for research conducted by a polling organization, for instance. Scholarly researchers describe what they have done in a paper that is submitted to a conference for presentation, or to a journal or book for publication. Other experts in the field review the paper. This review serves as a test. Have the authors used an appropriate methodology to answer their questions or hypotheses? Have the authors explained the results thoroughly and logically? Are there critical flaws in the research process that jeopardize the results? The papers that make it through the review process are then presented at a conference or published in an academic journal or book. This is where the results become consumable.

Pick up a text that is assigned reading for one of your other communication courses. You will find many references to research within the chapters. As an example, the following passage is from my text *Communication and Organizational Culture: A Key to Understanding Work Experiences* (Keyton, 2011):

For organizations such as AT&T, Cisco, and Red Hat, the culture is technologically grounded. That is, “the organization is not simply a culture that uses a technology; instead, it is a culture whose image, identity, and relationship to its environment are strongly associated with—indeed, dependent upon—the functionality of the technology it produces, services, or sells” (Leonardi & Jackson, 2009, p. 397).

The reference to the authors Leonardi and Jackson is called an in-text citation. If you turned to the references

listed at the back of the text, you would find the publication information, so you could look up the 2009 journal article written by these authors. As the author of the text, I relied on the research of Leonardi and Jackson. As the reader of this passage, you are also a consumer and could verify my interpretation of their work by going to the original source.

Goals of Research

Accumulating knowledge through research is a continuous process. One research study cannot answer all the questions about any one issue or topic. This facet of learning—building on the research of others—is central to any academic discipline. Thus, the primary goal of communication research is to describe communication phenomena as well as discover and explain the relationships among them. Continuing with the example just given, discovery occurred when Leonardi and Jackson conducted qualitative research using three types of data to explore the concept of technological grounding.

These scholars first built a case for their study by drawing on the published research of other scholars. Next, they collected data to be able to analyze each organization's culture before the merger and the organizational culture of the merged organization. Finally, they provided an explanation of how one company's organizational culture prevailed after the two companies merged. Thus, research is the process of discovery and explanation.

The research process, if approached systematically, can have one of four results: It allows the researcher to describe behavior, determine causes of behavior, predict behavior, or explain behavior. *Describing behavior* entails describing outcomes, processes, or ways in which variables (another name for the concepts we study) are related to one another. The following example illustrates a research project that enabled a researcher to describe behavior.

Guthrie and Kunkel (2013) analyzed participants' diary entries to answer the research question, "What are the motives for using deception in long-term romantic relationships?" (p. 145). Across 68 participants who kept diaries about the use of deception with their romantic partners, 332 motives for using deception were identified. From the participants' diary entries, the researchers identified six overarching categories for using deception. These were engaging in relational

maintenance (e.g., engaging in deception to avoid a fight), managing face needs (e.g., protecting the partner's feelings), negotiating dialectical tensions (e.g., balancing the need for independence vs. togetherness), establishing relational control (e.g., ensuring that the partner behaves as desired), continuing previous deception (e.g., continuing a lie from the past), and motive unknown (e.g., a participant could not identify their motive for using deception). Guthrie and Kunkel (2013) asked a descriptive question; that is, what motives do people give for deceiving their partner? Their coding and analysis of that coding produced five different types of motives for lying. Thus, their results describe why people use untruthful messages in long-term relationships.

Determining the cause or causes of behavior is of interest to communication scholars because knowing the cause of something allows scholars to later plan interventions or develop training to increase the effectiveness of communication. For example, Cowan and Horan (2021) asked this research question: How and why are ICTs (information and communication technologies) used to initiate, maintain, and dissolve workplace romantic relationships? In interviews, the researchers asked participants to tell their story, and then "asked questions relating to ICT use in the (de)escalation of the relationship. If the relationship had terminated, [the researchers] asked questions about this dissolution including if, how, and why ICT was used" (p. 61). After analyzing the interviewee's responses, they found that "privacy was a predominant concern in both the initiation and maintenance stages" of the relationships, and that "technology was used to end many of these relationships including text messages and SNS because they are asynchronous and help both parties avoid more direct communication" (p. 69).

If researchers can describe communication events and identify their causes, then they can turn to *predicting behavior*. If behaviors are predictable, then we can anticipate what will happen in the future. In turn, this knowledge can help us make better decisions. Working from the principles of self-determination theory, Stephens and Pantoja (2016) wanted to test the prediction that students who participate in an activity for the purpose of experiencing stimulation and having fun are more likely to be those students who use mobile devices in classrooms. Almost 300 students studying a variety of disciplines responded to a survey measuring students' desires to multitask, how actively students

participated in class, and their academic motivation. The researchers used statistics to test the prediction that those students who multitask to increase their understanding, influence others, and provide social support to others in the classroom were more likely to multitask during class. The researchers verified their prediction by testing their hypothesis.

Going beyond describing, determining causes, and predicting, *explaining behavior* means understanding why a behavior occurs. For example, if researchers were able to determine how and why health campaigns work, more effective campaigns would ultimately result in a healthier society that spends less money on health care. But finding such an explanation is difficult and often requires a series of sophisticated research projects. Working from a well-developed and validated theoretical basis is an effective way to develop explanations for communication behavior. For example, Roberto et al. (2003) surveyed 488 junior high students about four aggressive behaviors: watching a fight, telling friends about a fight that is going to happen, insulting others, and fighting. For each of the aggressive behaviors except fighting, the explanatory model provided by the theory of reasoned action (i.e., the best determinant of actual behavior is behavioral intention) explained students' participation in aggressive behaviors. That is, students' attitudes about a behavior created behavioral intention, which, in turn, caused their participation in that behavior.

These four outcomes—description, determination of causes, prediction, and explanation—are closely related. New knowledge in one area will affect how questions are asked and answered in another.

Research and Theory

When researchers discover that one explanation about the relationship between phenomena occurs regularly, a theory can be constructed. Although many definitions exist for the term *theory*, in general, a **theory** is a related set of ideas that explains how or why something happens. In other words, a theory provides a way for thinking about and seeing the world (Deetz, 1992). More formally, a theory is a set of interrelated concepts, definitions, and propositions that presents a systematic view of phenomena. A theory specifies the relationships among the concepts with the objective of explaining and predicting the phenomena being studied (Kerlinger, 1986). As a result, theory helps us

understand or make sense of the world around us. Of course, communication theories can help us understand our own communication behaviors as well as the communication behaviors of others (Miller & Nicholson, 1976).

With respect to communication, a theory is one or more propositions about people's communication behavior that enables a communicator to figure out how to communicate with particular individuals or in a given situation. The term *theory*, however, does not have one precise meaning. Rather, different definitions of the term are used because they promote different approaches to research (Craig, 1999; Jensen, 2008). The best research is driven by theory; that is, it validates a theory, further explains a theory, challenges an existing theory, or aids in the creation of theory. Theoretically driven research is built on the results of previous researchers, and it provides a foundation for subsequent researchers. Theory cannot be formulated, tested, and verified in one research study. Rather, theory is developed and tested over time. What we come to know as *the theory* to explain some phenomenon is the result of many research studies and the efforts of many researchers.

Cushman (1998) points out that “human communication is one of the most creative, flexible, and thus anti-theoretic processes in which human beings engage” (p. 9). Why? The complexity of communicating in multiple cultures with multiple, and sometimes conflicting, social goals provides the opportunity for multiple individual interpretations. Moreover, communication occurs in multiple languages with different sets of rules and practices. According to Cushman, this variability is one important reason communication scholars must look for the mechanisms or constructs that are constant regardless of the language used to communicate. Thus, communication researchers use systematic procedures and scientific principles to conduct research about how and why humans communicate as they do.

COMMUNICATION AS A SOCIAL SCIENCE

There are many methods of discovery and explanation, or many ways to view communication problems. Scholars conduct their research from paradigms that provide different explanations and functions for the

role of symbols, messages, and meanings in the process of communication. These paradigms also create differences in what researchers count as data. You have probably explored these different paradigms in courses on communication and rhetorical theory.

Broadly, this book explores the social scientific study of communication for which a wide variety of methods is available. This text will introduce you to both **quantitative methods** (generally speaking, research that relies on numerical measurement) and **qualitative methods** (generally speaking, research in which the researcher observes participants first hand in naturally occurring contexts). Both methods are part of the social science research tradition as practiced in the communication discipline and reported in communication and related-discipline journals and scholarly books. Both quantitative and qualitative methods of research are empirical; that is, both methodologies are based on or are derived from experiences with observable phenomena. This is the critical element of research. Both quantitative and qualitative methodologies can observe and describe human communication. And both can help researchers in explaining or interpreting what was observed.

The study of communication from a social science perspective uses quantitative or qualitative methods to look for patterns of messages or communication behaviors. These patterns can be based on observations or measurements across the experiences of many individuals or on the in-depth observations from one case over time. Either way, the data must be empirical; that is, the data must be able to be verified through observations or experiences.

How does the study of communication as a social science differ from humanistic and critical studies of communication? The study of communication from a rhetorical perspective often focuses on how language is used to persuade in a particular case (e.g., a specific speech by a specific person or other one-time event from which a text can be drawn or developed; a website that represents the views of a specific group of people). In addition to the rhetorical event itself, an analysis would include the historical, cultural, and social contexts surrounding it. Probably the most useful distinction is that rhetoric is planned for a specific goal for a specific audience, whereas the social science study of communication focuses on the interactive moment between and among conversational participants. A rhetorical study is more focused on one case, whereas the

social science study of communication looks for patterns across people or situations.

From a critical perspective, the research emphasis is on the hidden assumptions of broad social structures that serve the interests of some people (those in power) more than others. Critical communication scholarship focuses on understanding the domination, inequality, and oppression that can occur through communication practices and structures. For example, what ideological structures in our society control or dominate the dissemination of digital technology? Some critical scholars use qualitative methods in their research, and some of these examples are included in this book. Critical communication research can also be rhetorical.

The definitional boundaries for what constitutes these three perspectives for studying communication (social science, rhetorical, critical) are blurry, and not mutually exclusive. But, broadly speaking, this text focuses on the social scientific methods for conducting communication research.

How does the study of communication differ from the study of other social sciences? Generally, the social sciences are defined as those areas of scientific exploration that focus on the study of human behavior. Psychology, sociology, and political science are other fields in the social sciences. As a social scientist, the communication scholar focuses on symbols used to construct messages, the effects of messages, and their meanings. So, as you read communication research in journal articles and books, and as you design research projects, you should ask yourself, “What characterizes scholarship as communication research?” More specifically, what communicative component (e.g., symbols, messages, or meanings) is being studied? Does the research address social problems as communication problems? Is the research based upon communication theory or contributes to the development of communication theory? How does the research position communication in relationship to our social and cultural lives? (Carbaugh & Buzzanell, 2010).

The social sciences are different from the natural sciences in that the social scientists focus on the study of human behavior. Problems that are significant for study in the social sciences involve several important variables, and untangling the effects of one variable from another is difficult. Moreover, the social sciences recognize that the researcher is a human instrument with biases and subjective interpretations that can

affect the individuals or processes under investigation. Finally, seldom can an entire system of human behavior (e.g., an entire organizational communication system) be observed. Even if it could be, human systems are always subject to new influences; thus, what is being observed is dynamic. As a result of these differences, the study of human behavior is difficult to isolate and control even if the examination is done in the laboratory setting.

One last point is that social science research is contextually and culturally bound. Research is contextualized first by the number and type of people participating and by the type of communication being investigated. Second, research is contextualized by where the investigation occurs—in the lab or in the field. Third, research is contextualized by the culture in which it occurs. Researchers and participants bring cultural norms and values to what they do and how they communicate. All these contextual and cultural factors influence the research investigation, the data produced, and the interpretation of results.

The Scientific Approach

So how do communication researchers incorporate scientific characteristics into the process of conducting research? Generally, research follows procedural traditions that have been tested, validated, confirmed, and accepted by social scientists of many disciplines over time. The research process has five general steps (Kerlinger, 1986). Figure 1.1 illustrates this process.

First, researchers start with a question that interests them. A question may arise from reading the scholarly literature or a communication issue they've seen or heard in the media. Or, a question may arise from their personal experiences or from experiences reported to them by others. In other words, some question, or curiosity, has not been explained or had been explained inadequately.

A question may also be stated as a problem. In either form, the researcher cannot continue the research process without identifying and specifying the question or problem. For example, my own curiosity about why sexual harassment continues to occur in organizations despite clear societal and organizational signals that a perpetrator faces employment, legal, and even financial consequences for sexually harassing another employee caused me to pursue this area in several research projects.

Second, the researcher uses the question or problem to formulate a **hypothesis**, or a tentative, educated guess or proposition about the relationship between two or more variables. Oftentimes, hypotheses take the form of statements such as, "If x occurs, then y will follow" or "As x increases, so will y ." With respect to our sexual harassment research, we used previous scholarship to help direct our inquiry. One of our hypotheses proposed that participants who identified themselves as targets of sexual harassment would identify more verbal and nonverbal cues as harassment (Keyton & Rhodes, 1997).

If the researcher cannot formulate a tentative proposition after reviewing the existing literature, then a research question is developed. A **research question** asks what the tentative relationship among variables might be or asks about the state or nature of some communication phenomenon. For example, we used the research question "Will there be a relationship between ethical ideology and the ability to accurately distinguish between verbal and nonverbal behaviors that have been shown to be associated with flirting and sexual harassment?" (Keyton & Rhodes, 1997, p. 135). Although numerous studies had been published on both ethical ideology and sexual harassment, no study had explored the relationship between these two issues. Thus, we posed a question to help us determine if a relationship occurred. We could not propose what type of relationship would exist.

In the third step, which is often underemphasized, the researcher uses reason and experience to think through the hypotheses or research questions that are developed. A researcher might ask, "Do the research questions and hypotheses I've generated capture the essence of the problem?" or "Are there other variables that affect the relationship between the two variables I've identified?"

This step of reasoning, or thinking through, may, in fact, change the direction of the research. It may broaden the nature and scope of research, or it may more narrowly focus the researcher's inquiry. By taking this step in refining and formulating the research question or hypothesis, researchers discover the most significant issue that can be addressed given their initial questions or problems. By using the experience we gained in developing sexual harassment training for organizations and by searching the literature, we discovered that one of our proposed hypotheses ("participants who identified themselves as targets of sexual harassment would identify more verbal and nonverbal

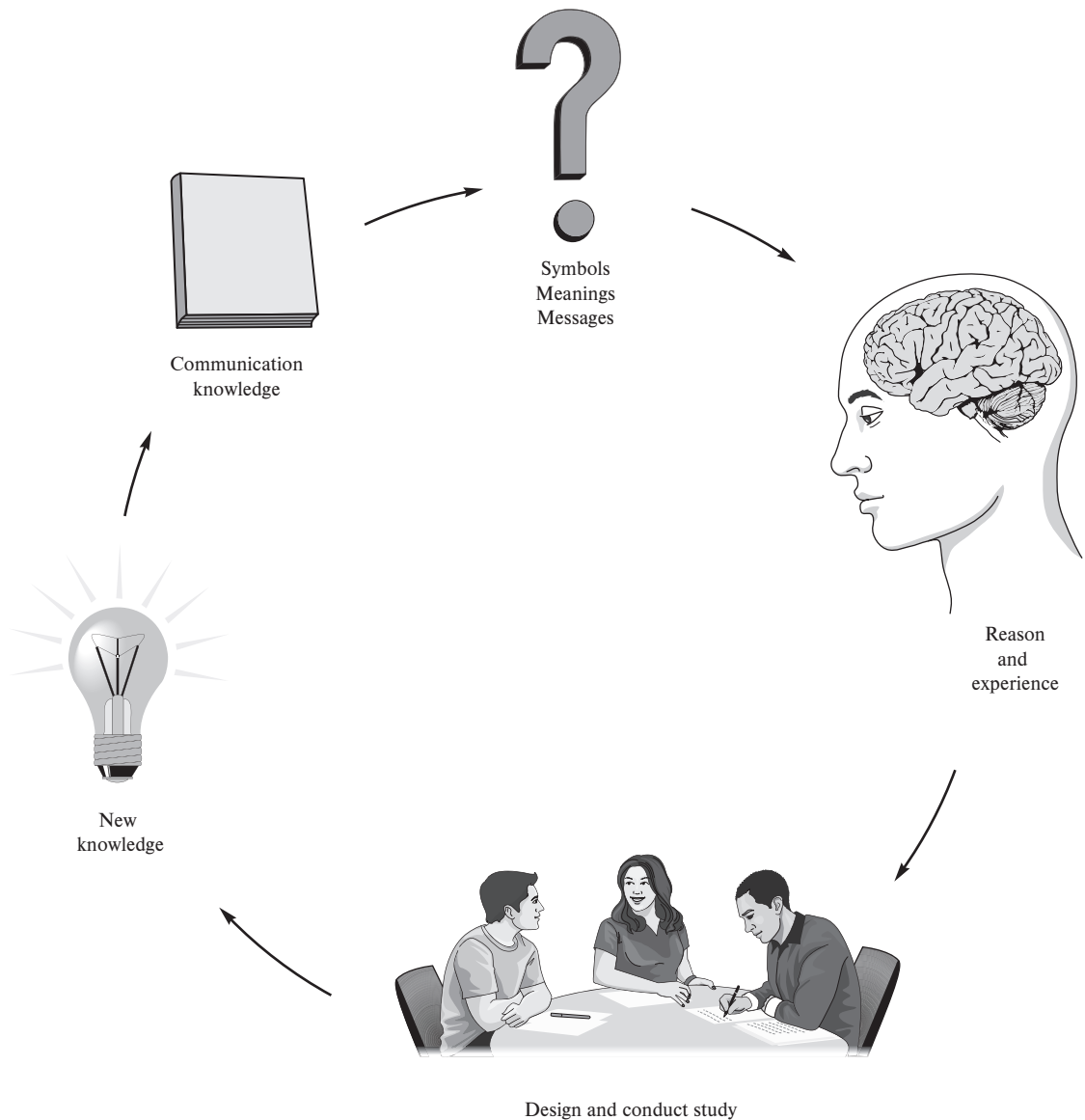


FIGURE 1.1 *General Steps of the Scientific Approach*

cues as harassment”) would not adequately explain why some employees view behaviors as sexual harassment and others do not. In other words, an employee’s perceptions of sexual harassment would not simply depend on whether she or he had been sexually harassed. As a result, we tested three other explanations.

Fourth, the researcher designs and conducts the observation, measurement, or experiment. Although each variable or element identified in the research question or hypothesis must be observed or measured, it is actually the relationship between them that is assessed. Fifth, the data are analyzed and interpreted in