COMMUNICATION RESEARCH

THIRD EDITION

JOHN E. HOCKING DON W. STACKS
STEVEN T. MCDERMOTT

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JOHN E. HOCKING
University of Georgia

DON W. STACKS
University of Miami

STEVEN T. MCDERMOTT
California Polytechnic State University, San Luis Obispo

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PREFACE

As with the first edition, the objectives of *Communication Research* are to provide: (a) an introduction to social scientific thinking as it applies to human communication; (b) awareness of ethical issues associated with conducting research with human participants; (c) exposure to the major empirical research methods, particularly surveys, field studies, and experiments; (d) the opportunity to experience designing and collecting data for an empirical study; (e) an opportunity to learn and apply some of the statistical techniques which are important to interpret fully and accurately the results of communication research; (f) exposure to writing a final research report; and, most importantly, (g) an emphasis on information processing and independent critical thinking as the ultimate goal of the book, the course, and a liberal education.

When the book and course have been mastered, the student will be better able to efficiently find and evaluate information presented in other courses, on the job, on the Internet, or as concerned, constructive citizens. Further, he or she may be able to conduct or participate in his or her own empirical research studies. In short, one of the major purposes of this book is to make neophyte communication scientists out of the reader—to develop an attitude such that he or she anticipates future research projects (and the consumption of the research of others) with excitement and enthusiasm instead of boredom or intimidation.

We find ourselves at the foot of the third millennium looking forward towards unimaginable challenges and opportunities. All of us have experienced the last part of the most breathtaking and important century in human history, a century that began with *animals* being the primary means of transportation and with letters, newspapers, and the telegraph, using dots and dashes, being the most sophisticated and fastest modes of communication. The twentieth century really was, as Charles Dickens characterized a part of the eighteenth, the best of times and the worst of times. Wars, weapons, social injustices, environmental destruction, and squalor of unthinkable horror; but also peace, human rights triumphs, *and discovery of the means to turn our planet into a paradise for every living thing, forever*—all in the last hundred years. Wow, what a ride!

Is the world a better place now than it was in 1900? Will it be better or worse in 2100? Although no one knows the answer to these questions, there is no doubt that the extent to which human communication is understood and used will play a vital role in determining the future.

Two things we are quite sure about are these: (1) Communication will continue to be the lifeblood of interpersonal relationships. It will be the means with which we control, and are controlled by, our social environments. Communication will make us happy or sad, fulfilled or lonely. It will remain essential to what it means to be a human being. And, (2) *Information*, knowledge, and how it is created, transmitted, diffused, found, selected, that is, *communicated*, and ultimately, used, has and will be *the* critical factor in determining the answers to these questions. The study of information and how it is processed

and used transcends time and space and topic in its importance. And most fundamentally, that's what this book, and the college course in which it is used, and for that matter, a liberal education itself, are about. It is about creating, finding, transmitting, evaluating, and using information in an efficient and skillful manner. It is about distinguishing between chaff and wheat, the sublime from the ridiculous, the stuff from the nonsense. It is about *information processing*, a phrase, in our view, so closely linked to *communication* that they are almost synonyms.

Since the first edition of this book appeared in 1992, it is estimated that the *total* amount of information in existence has increased expotentially. In 1992 the Internet, the World Wide Web (WWW), and e-mail barely existed. Phrases like "search engines," "Web Pages," and "spam" had not been invented. "Information age?" Ah, in 1992, compared to today, it was more of a cliché than reality. But guess what? Boom. The information explosion has happened. It's here; this time, it's real.

It has become almost a cliché to say that we live in an "information age," a time when information is more valuable than physical things. Bill Gates's name has become so well known, it has essentially entered the English language as a noun. Similarly, Enron will probably enter as a noun meaning "corporate scandal." Bill Gates, at this writing, has more money than anyone has had in history. He doesn't build cars or own buildings or real estate. He owns stock in a company that dominates the ways in which information is processed.

Most students of communication understand the important role that communication plays in our work and personal lives. Communication is fundamental to survival. But what do research and research methods have to do with a communication major? Many students ask in frustration, "Why do I have to learn about surveys and experiments and all the rest? I want to study communication!—to learn about it and to become more effective at it—and let's get on with it. A research methods course seems like a waste of time." Every instructor of a communication research methods course has heard comments similar to these. We think they are fair questions and deserve our best answers.

The sheer quantity and ease of accessibility of information is a double-edged sword. Sure, there's more of it—a lot more. And it's much easier to access. But the fundamental problem that existed in 1992 is a dramatically bigger problem today. Much of this easily available information is wrong, or misleading, or worse—designed to manipulate us to our detriment. The information comes in many forms, it comes from diverse sources, and is based on all sorts of evidence, of varying degrees of validity. How do we know what to believe and what to doubt?

Consider the following examples. A new AIDS drug is reported by the company that discovered it to be extraordinarily effective at slowing, or perhaps even eradicating, this horrific disease. They report the results of an experiment in which none of twenty HIV-positive research participants who were given large doses of the new drug over a period of two years had developed any symptoms of AIDS. Patients in a second group were given modest doses of the drug; and several began to develop symptoms of full blown AIDS. A final group, who received none of the drug, had nearly all of the participants develop AIDS and several died from the disease before the two-year period was over. Hearing of this research, one's reaction is, "Geez, let's get this drug on the market. Why is the FDA so slow to approve important and obviously effective new drugs?"

A serious crime is allegedly committed and the police arrest a suspect. He voluntarily takes a polygraph examination and fails. He is judged by the examiner to be lying. Let's have the trial and lock this guy up as quickly as possible.

A phone survey released by a local congressman shows that his constituents are overwhelmingly against a substantial tax increase on cigarettes because the money, while purporting to be used to combat smoking in young people, is really going to create bigger government and bureaucracy. Thus, his vote to kill the tax was true representation of the voters in his district and thus fully justified.

One of the goals of this book is to help create a healthy degree of skepticism—to contribute to the critical thinking skills—among the reader/students. It can be risky to automatically and uncritically accept information as true, even when it is labeled "scientific," and even when it appears in "reputable" sources such as a prominent newspaper or magazine or in other forms of the news media. Important information such as that in the above examples should be viewed with a certain degree of suspicion until additional information is provided, certain questions answered.

All three of our examples could result in harmful conclusions. In the first, the pharmaceutical company assigned the least sick HIV-positive participants to the experimental group who received large doses of their new drug, the next healthiest patients received a moderate amount of the drug, while the sickest patients, some of whom already were showing symptoms of AIDS, were put in the group that received none of the new drug. The participants should have been randomly assigned to the various treatment conditions. The method used essentially invalidates the results of the study. Any subsequent actions taken regarding that drug would have been based on a study so flawed as to border on being fraudulent. The FDA was quite correct to go slow and we, as readers of the initial news report, should have been armed with hats of skepticism to protect us from being smothered by the chaff as we search for a bit of wheat.

In the second example, careful scientific study of polygraph exams have shown them to be no more accurate than random chance. That the accused individual flunked the exam means next to nothing. Nearly half of people who are telling the truth fail polygraph exams. In our opinion, the entire polygraph industry and those "professionals" who claim near virtual accuracy are also committing borderline fraud. We will have more to say about this in Chapter 16.

In the third example concerning the congressman and the phone survey, we would like to know, at least: (1) who paid for the survey; was it the same cigarette companies who donated millions of dollars to the campaigns of those who voted to defeat the cigarette tax increase and who spent tens of millions of dollars taking out ads calling the tax increase a "big government tax-and-spend scheme designed to hurt the little guy"; (2) how was the sample selected—was it a true probability sample in which each voter in his district had an equal opportunity of being selected; (3) how were the key questions worded—did they use code phrases like "tax-and-spend" and fail to mention what the additional revenue was to be used for? Very subtle changes in the wording of survey questions has been shown to affect response patterns profoundly.

A thorough understanding of the elements of communication research is essential to being a good communications student. The content of this book and this course will help the reader perform better in upper level communication courses precisely because those

courses report the results of communication research, research that varies in validity. Skeptical hats should be worn when reading the daily paper or watching CNN; they should also be worn to class every day. Do not forget to put them on when reading the course texts as well, including this one. Be an informed critical thinker. Hopefully this text will help you do that.

In addition, a good student of communication research methods should be in a strong position to move into a job in which research skills are helpful to job advancement, if not necessary for job success. Increasingly, communication students move into positions in marketing or sales—positions that require that research, at a minimum, be understood, and perhaps even positions in which the communication student is required to conduct a valid empirical study, one on which important job decisions are based.

FEATURES OF COMMUNICATION RESEARCH, THIRD EDITION

A New Chapter on Applications of Communication Research

We love to teach Research Methods ourselves and were excited to be asked to update and improve this edition. The question we often hear is: "How can I use this stuff?" "How will it help me at work or as a person?" In the first two editions we tried to address these questions often, but perhaps danced around them. We tried to address them more directly in this third edition. We have taken the bull by the horns and devoted an entire chapter to applications of communication research. Ultimately, the goal of this chapter is to give the reader a glimpse of the ways in which communication research can improve our lives in the many roles we play; as workers, consumers, voters, parents, friends—as concerned, constructive, and happy people. The chapter is a collage of the interrelationships between science, the methods and techniques presented, and critical thinking in life's many arenas.

An Expanded Treatment of Ethical Issues

The first edition (1992) was, we believe, the first communication research methods book to devote an entire chapter to ethics. We continued this emphasis in the second (1999) edition and have expanded this treatment still further here to include not only the issue of the ethical treatment of human participants in research, but also issues such as plagiarism and ghost writing. We revisit ethics again and again throughout the book. For example, in our new applications, Chapter 16, we raise the issues of scientific chicanery and the influence of money on science, even touch on scientific fraud, a seemingly near-taboo topic. In this context, we discuss how much of a society can be duped in the name of science.

Minimal Jargon

We continue to try to cover fundamental issues with minimal jargon and yet explain ideas in a way that acknowledges and explains the complexity of issues in a clear and readable way, providing an abundance of communication examples. We do our best to be conversational and readable without oversimplification. We are well aware that we are writing for smart people on a subject that at first glance might appear dull. It may seem occasionally dull, but

we are taking you to interesting places if you will share with us our enthusiasm for discovering new things.

Hands-On Projects

At the request of some of the many adopters of the first edition, we integrated a series of student projects into almost every chapter of the second edition. In this new edition, we have taken this further: we suggest more projects, most of which we have used ourselves or heard about from other teachers. Increasingly, we have come to believe that learning is accomplished in direct proportion to the level of hands-on involvement in conducting research. These projects are feasible and often exciting. We do not believe there is one project in the text that cannot be successfully tackled by an individual or group. At a minimum, we recommend that the reader think through or discuss in class the steps that would be involved in many of these projects.

Flexible Design and Broad Coverage

The book maintains its broad coverage, including many different methods and wide ranging examples of communication substance in various contexts. Examples are drawn from interpersonal communication, mass communication, public relations, intercultural communication, and organizational communication. Regardless of the name and emphasis of the communication department in which the book is used, we have attempted to be inclusive of communication in all its forms and contexts.

We also discuss the entire research process from the research question to method selection, design, operationalization, data collection and analyses, and writing the final report.

This book is designed to be an introduction to research methods in any communication field: speech communication, mass communication, public relations, marketing, organizational communication, as well as other social sciences. Knowledge and methodology do not exist in the discrete categories reflected in academic departments, which exist primarily for political reasons.

Even though the book is geared toward undergraduates, it also may provide a nice review for the graduate student who wants to get up to speed for advanced courses or for those who need a background refresher.

A Balance Between Science and Rhetoric

There is an undeniable dialectical tension in the communication discipline between science and rhetoric. We do not side step this tension but discuss it head on. Our book includes some philosophy of science, and we take stances on issues that result from this tension. For example, we explicitly acknowledge the importance of rhetoric in informing and complementing empiricism. We discuss the questions that can be answered by each "method" and identify the importance of each one. We do our best to show the value of historical, humanistic, and historical research. Ultimately, we emphasize these research traditions as complementary to social science methods and try to demonstrate the utility of each methodology. However, let us make clear that we have written a text that emphasizes social science research.

The Ultimate Goal: Critical Thinking and Independent Student Thought

We believe that critical thinking and independent thought are the ultimate goals of this book and of a liberal education; there's no absolute truth here, only ideas for the reader to consider and embrace, or not. We make a clear distinction between information processing and information storage, and argue that processing, that is, finding, evaluating, synthesizing, creating and using information to guide our behaviors, is what science and education are about. Education is no longer just memorizing facts. It is being able to find, create, evaluate, and use these facts that counts. Most books or classes in which the student writes down ten pages of notes every day and then spits back this information on an exam probably belong in the 1950s or 1960s or 1970s. Critically analyzing information and creatively using information turn the key to success in this new era.

ACKNOWLEDGMENTS

We were excited to be asked to write a third edition of *Communication Research*. We have worked to write a significantly better book than the second edition that appeared in 1999. For starters, we added Steve McDermott as an author. Steve has contributed since the inception of this project in the mid 1980s, with individual chapters. This edition sparkles with Steve's lively writing, fresh examples, and conversational prose. John Hocking assumed overall responsibility for the new book, and Don Stacks graciously asked Dr. Hocking to become senior author. We will probably switch back for the fourth edition. The core of the book that has proven so popular and been changed minimally may be safely attributed to Dr. Stacks. We are delighted to have the rare opportunity to have a third try at "getting it right." There are no perfect research studies or textbooks. But it is a privilege to have this third chance. We want to especially thank Karon Bowers of Allyn & Bacon and Martha Tenney of Modern Graphics for their superb guidance, patience, and most of all, for giving us this opportunity. They want the best from their authors, and we hope we have not disappointed.

Book are not written in a vacuum. They are in a very real sense collaborative efforts in which the influence and support of many people blend in a transactional, dynamic process to produce pages of good advice and occasionally even wisdom.

As we note early on in the text, research is a rigorous process. The process of writing and updating this book has been no exception. We wish to acknowledge a number of people who reviewed earlier editions, as well as those who reviewed the manuscript of this edition, and made us work harder to hone our own understanding of the research process. We gratefully appreciate the insight and stimulating questions provided by the following reviewers: Ferald J. Bryan, Northern Illinois University; Julie A. Burke, Bowling Green State University; Kenneth D. Frandsen, University of New Mexico; Kay F. Israel, Rhode Island College; David Myers, Loyola University; Kartik Pashupati, University of West Florida; Judi Sanders, California State Polytechnic University; Ronald M. Sandwina, Indiana University/Purdue University; Xuejian Yu, Stonehill College; and Christopher J. Zahn, Miami University.

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John E. Hocking
Athens, GA

Don W. Stacks
Coral Gables, FL

Steven T. McDermott
Los Osos, CA

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