Mass Media Research

AN INTRODUCTION



Roger D. Wimmer Joseph R. Dominick

MASS MEDIA RESEARCH

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Tenth Edition

MASS MEDIA RESEARCH

An Introduction

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Finally, we thank all the teachers and students who have used Mass Media Research: An Introduction in the past and those who will use it in the future.

Roger Wimmer Joseph Dominick

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PREFACE

Please read this preface. The information is important to help make your experience with this book more rewarding.

Introduction

When we began teaching mass media research in the late 1970s, there were no texts devoted to the topic and we were forced to use research texts from psychology and sociology. As you might expect, it didn't take us very long to realize that journalism and mass media students did not relate well to research examples using rats running in a maze and other such non-media discussions. In the early 1980s, we decided to write the first mass media research text, and over the years we have maintained and expanded that focus as new technologies have reshaped the mass media.

As we have stated in previous editions, things change constantly in all areas of life, and it is sometimes difficult to keep up with all the changes. In every edition of this text, we have faced several new technologies and research approaches that didn't exist in previous editions. It has been interesting to watch the development of such things as satellite television and radio, CDs, the Internet, MP3 players, DVDs, and Blu-ray. But the technological leaps of the past few years have been staggering, particularly smartphones, smart TVs, and computer tablets. Each new technology offers a wealth of new research topics and opportunities, and it has been fun to observe how mass communication has changed.

As mass media teachers and professional researchers, we want to provide you with the

most detailed and most current information possible. Accomplishing that task with a textbook is difficult, however, because changes in mass media research happen frequently. Our best alternative, therefore, is to provide basic information and help you find the most current information about the topics we discuss in this text. As in our previous editions, the text is designed for undergraduate students taking their first course in research and for media professionals who need a basic reference book to guide them in conducting or interpreting research.

Therefore, throughout this text we provide many Internet searches to help you find more information about the topics we discuss in the book; we urge you to use these search suggestions. We use a specific format for the searches we suggest. Enter the search exactly as we suggest, and feel free to go beyond the searches we provide.

The format we use for Internet searches is *italics*. That is, whenever we suggest an Internet search, the search is shown in italics. If you see quotation marks with the search, be sure to include those: they are important in refining the search and eliminating useless information. For example, if we recommend that you search the Internet for more information about this text and suggest "mass media research" Wimmer Dominick, then input your search exactly as written, including the quotation marks.

If you are new to using Internet search engines, please go to our book's website at www.wimmerdominick.com and read the article about using search engines in the "Readings" section.

Approach and Organization

As in the previous editions, our goal is to provide you with the tools you need to use mass media research in the professional world through simplified explanations of goals, procedures, and uses of information in mass media research. We want you to be comfortable with research and to recognize its unlimited value, so we use extensive practical applications to illustrate its use in the world today.

The book is divided into four parts. In Part One, we begin with an overview of mass communication research, including elements, ethics, and sampling. Part Two explores each major approach to research, including qualitative research, content analysis, survey research, longitudinal research, and experimental research. In Part Three, we continue with a section on data analysis, covering statistics and hypothesis testing. Part Four concludes the book with a forward-looking section on research applications—including those for newspapers and magazines, electronic media, advertising, and public relations—that provide additional information and enhance learning and understanding of concepts.

Each chapter opens with a chapter outline and ends with a list of key terms, questions for discussion, suggested Internet exercises and references. A comprehensive glossary is also included.

New to This Edition

We have made substantial changes to most of the chapters in this edition. The changes were made based on comments from teachers, students, and media professionals who have used our book, as well as in response to changes in the media industries. The Internet and social media have greatly affected mass media research, and we have tried to document their impact in the appropriate chapters. Specific changes and additions include:

- Chapter 1 (Science and Research) includes a new definition of mass media with a new subcategory of mass media (smart media) and new discussions of the new mass media.
- Chapter 2 (Elements of Research) includes updated examples and updated discussions of various measurement instruments.
- Chapter 3 (Research Ethics) now contains updated information on federal rules concerning the use of human subjects as well as a discussion about the ethics of doing research involving social media such as Facebook and Twitter.
- Chapter 4 (Sampling) includes updates to most of the types of sampling methods and problems that can occur with sampling.
- Chapter 5 (Qualitative Research Methods) includes new sections on the mixed methods technique and on "netnography."
- Chapter 6 (Content Analysis) now includes a section on framing analysis.
- Chapter 7 (Survey Research) includes updates in most discussions of the types of survey research, with expanded sections on Internet (online) research and identifying outliers in all types of research.
- Chapter 9 (Experimental Research) contains a new discussion of how to minimize dropouts in online experiments.
- Chapter 11 (Hypothesis Testing) includes updated examples and discussions.

- Chapter 12 (Basic Statistical Procedures) includes a new definition for *degrees of freedom* that eliminates the usual confusion with the concept.
- Chapter 13 (Newspaper and Magazine Research) looks at current research concerning the impact of tablet computers (such as the iPad) on newspaper and magazine readership.
- Chapter 14 (Research in the Electronic Media) includes new information about Arbitron's Portable People Meter and other new research considerations related to audience ratings, and an expanded discussion on respondent verification for all research methods.
- Chapter 15 (Research in Advertising) includes an expanded and updated discussion about new advertising channels, such as search engines and social media.
- Chapter 16 (Research in Public Relations) now contains a section on social media message analytics, a group of measures becoming more important in public relations research.
- Finally, this tenth edition contains many new or expanded boxed inserts labeled "A Closer Look" that highlight topics in the text. References and examples have also been updated.

In addition to the sixteen chapters in the tenth edition, you will find two chapters on the text's companion website: "Research in Media Effects" and "Writing Reports." The website also now includes the sample ratings book pages from Arbitron and Nielsen that were used in the eighth edition.

Additional Resources

Please make use of the website we constructed as a companion for our text (www.wimmerdominick.com). The website

includes a variety of information, including Supplemental Information, Readings, Chapter Questions & Exercises, Research Ideas, Information Sources, Statistics Sources, Student Resources prepared by Cengage, sampling calculators, and a link to *The Research Doctor Archive* (Roger Wimmer's column on AllAccess.com).

We update the website whenever we find something of interest to mass media researchers, so visit often. If you have any suggestions for additional content on the site, please contact one of us.

In addition, Cengage Learning has a book companion website that offers a variety of information to help in learning about and teaching mass media research. Students can prepare for quizzes and exams with chapter-level tutorial quizzes, an online version of the glossary, flashcards, and Internet exercises. A helpful, password-protected Online Instructor's Manual includes chapter overviews, class-tested activities and exercises, technology resources, test items, and assessment tests. Each chapter includes an overview and a test bank. The website can be found at www.cengagebrain.com (a link is on our text website).

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Finally, we are especially grateful to the following reviewers whose experience with the previous edition and expert feedback helped shape the new edition: James D. Ivory, Virginia Tech; Ann Liao, Buffalo

State College; and Daniel G. McDonald, Ohio State University.

Your Feedback

As we have stated in the previous nine editions: If you find a serious problem in the text or the website, please contact one of us. Each of us will steadfastly blame the other for the problem and will be happy to give you his home telephone number (or

forward any email). Have fun with the book and the website. The mass media research field is still a great place to be!

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CHAPTER 1

SCIENCE AND RESEARCH

CHAPTER OUTLINE

Introduction

What Is Research?

Getting Started

The Development of Mass Media Research

Media Research and the Scientific Method

The Methods of Knowing

Characteristics of the Scientific Method

Research Procedures

Two Sectors of Research: Academic

and Private

Research Procedures

Determining Topic Relevance

Stating a Hypothesis or Research Question

Data Analysis and Interpretation

Internal Validity

External Validity

Presenting Results

Research Suppliers and Field Services

Summary

Key Terms

Using the Internet

Questions and Problems for Further

Investigation

References and Suggested Readings

INTRODUCTION

When hearing the words *mass media* research for the first time, many people ask two questions: (1) What are the mass media? and (2) What types of things do mass media researchers investigate? Let's address these questions before getting to the specifics of research.

What are the mass media? In order to answer this question, we must first back up and define mass communication, which is any form of communication transmitted through a medium (channel) that simultaneously reaches a large number of people. Mass media are the channels that carry mass communication. However, categorizing what a mass medium is has become complicated during the past several years. Our previous definition of the mass media has been any communication channel used to simultaneously reach a large number of people, including radio, TV, newspapers, magazines, billboards, films, recordings, books, and the Internet.

Our traditional definition of mass media is no longer applicable to the new high-tech communication channels, and we now add a new category to the list. We call the new category smart mass media, which include smartphones, smart TVs, and tablets—three media that are essentially computers. As stand-alone devices, each of these media can function as an individual mass medium. For example, using these smart media, one person or one organization can now communicate simultaneously with hundreds of thousands or even millions of people via tweets, text messages, social media posts, and email. However, smart media can access the Internet and additionally serve the function of all other mass media. For example, a person can watch TV and movies; listen to radio and recordings; or read a magazine, book, or newspaper, all using a smart media device. In short, smart media represent yet another form of mass communication,

and our revised definition of mass media is therefore any communication channel used to simultaneously reach a large number of people, including radio, TV, newspapers, magazines, billboards, films, recordings, books, the Internet, and smart media.

What types of things do mass media researchers investigate? Here are a few examples:

- Which format should a radio station adopt?
- Which songs should a radio station play?
- What type of hosts do listeners want on a radio station's morning show?
- How do viewers evaluate a pilot for a new TV show?
- What do viewers like most and like least about their favorite local TV news program?
- How effective is advertising on TV, radio, the Internet, and in all types of print?
- Which ads do readers see most often in their local newspaper?
- How many people regularly read newspapers?
- How are cell phones affecting people's use of the other mass media?
- Who should be the spokesperson for a new consumer product?
- Who should be the host of a new TV game show?
- Are there more violent acts on TV now than five years ago?
- What are the characteristics of successful websites?
- Is there a way to predict the success of a smartphone app before it is released?
- How many employees read their company's internal newspaper or newsletter?
- What kinds of people watch TV online?
- Why do some people prefer Internet radio stations to broadcast radio stations?

The types of questions investigated in mass media research are virtually unlimited. However, even this short list demonstrates why it's necessary to understand mass media research—because literally every area of the mass media uses research, and anyone who works in the media (or plans to) will be exposed to or will be involved in research.

Our goal in this book is to introduce you to mass media research and dispel many of the negative thoughts people may have about research, especially a fear of having to use math and statistics. You will find that you do not have to be a math or statistics wizard. The only thing you need is an inquiring mind.

WHAT IS RESEARCH?

Regardless of how the word *research* is used, it essentially means one thing: *an attempt to discover something*. We all do this every day. This book discusses many of the different approaches used to discover something in the mass media.

Research can be very informal, with only a few (or no) specific plans or steps, or it can be formal, where a researcher follows highly defined and exacting procedures. The lack of exacting procedures in informal research does not mean the approach is incorrect, and the use of exacting procedures does not guarantee that formal research is correct. Both procedures can be good or bad—it depends on how the research is conducted. The important thing for all researchers to understand is the correct methods to follow to ensure the best results.

Most people who conduct research are not paid for their efforts. Although the research industry is an excellent field to enter, our approach in this book is to assume that most readers will not become (or are not now) paid professional researchers. We assume that most of you will work for, or are already working for, companies and businesses that use research, or that you are simply interested in finding out more about the field. With these ideas in mind, our approach is to explain what research is all about—to show you how to use it to discover something. We also hope our discussions will make your life easier when a research report is put on your desk for you to read or when you face a question that needs to be answered.

Now, back to the idea that all of us are researchers and conduct research every day, remember that we define research as an attempt to discover something. Every day we all conduct numerous "research projects." We're not being facetious here. Just consider the number of things you must analyze, test, or evaluate, to perform daily tasks:

- 1. Set the water temperature in the shower so you do not freeze or burn.
- Decide which clothes to put on that are appropriate for the day's activities.
- Select something to eat for breakfast that will stay with you until lunchtime.
- 4. Decide when to leave the house to reach your destination on time.
- 5. Figure out the easiest way to accomplish a task.
- Decide when to move to the side of the road if you hear an emergency siren.
- 7. Determine how loudly to talk to someone.
- 8. Estimate how fast you need to walk to get across the street so you won't be hit.
- 9. Evaluate the best way to tell a friend about a problem you have.
- 10. Determine when it's time to go home.

The list may seem mundane and boring, but the fact is that when we make any of these decisions, we have to conduct a countless number of tests or rely on information from previous tests. We all make many attempts to discover things to reach a decision about any event. In essence, we are all researchers from a very young age.

The simplicity of research begs the question: Why read this book? The reason is that there are good ways to attempt to discover something and there are not-so-good ways to attempt to discover something. This book discusses both the good and the bad so that you will be able to distinguish between the two. Even if you do not plan to become a professional researcher, it is important to learn the best way to collect information and analyze it because research results are so widely used in all areas of life.

The underlying theme presented in this book highlights the Three-Step Philosophy of Success followed by the senior author of this book for the past 35+ years as a paid professional researcher. There are three basic steps to success in business and, for that matter, almost every facet of life:

- 1. Find out what the target audience wants (one or more customers, friends, family, colleagues, etc.).
- 2. Give it to them.
- 3. Tell them that you gave it to them.

Failure is virtually impossible if you follow this three-step philosophy. How can you fail when you give people what they ask for? The way to find out what people want is through research, and that is what this book is all about.

GETTING STARTED

Keep in mind that the focus of this book is to discuss attempts to discover something in the mass media. Although it would be valuable to address other fields of endeavor, this chapter contains discussions of the development of mass media research during the past several decades and the methods used to collect and analyze information. It also includes a discussion of the scientific method of research. The purpose of this chapter is to provide a foundation for the topics discussed in detail in later chapters.

Two basic questions a beginning researcher must learn to answer are (1) how to use research methods and statistical procedures and (2) when to use research methods and statistical procedures. Although developing methods and procedures is a valuable task, the focus for most researchers should be on applications.

This book supports the tasks and responsibilities of the applied data analyst (researcher), not the statistician; it does not concentrate on the role of the statistician because the "real world" of mass media research usually does not require an extensive knowledge of statistics. Instead, the real world requires an understanding of what the statistics produce, how to interpret results, and how to use the results in decision making. After conducting thousands of mass media research studies for many years, we have concluded that those who wish to become mass media researchers should spend time learning what to do with the research methods, not *how* they work.

Both statisticians and researchers are involved in producing research results, but their functions are quite different, even though one person may sometimes serve in both capacities. What do statisticians do? Among other complex activities, they generate statistical procedures, or formulas, called algorithms. Researchers use these algorithms to investigate research questions and hypotheses. The results of this cooperative effort are used to advance our understanding of the mass media.

For example, users of radio and television ratings, produced by Arbitron and A. C.

A CLOSER LOOK

Searching the Internet

Throughout this book, we suggest a variety of Internet searches to help you find more information about specific topics. The searches we suggest often include quote marks, such as "mass media research" examples. When you conduct

your search, type the search exactly as shown, including the quote marks, because the search looks for those words in that specific order. For more information about Internet searching, go to www.wimmerdominick.com.

Nielsen, continually analyze the instability of ratings information. The audience information (ratings and shares) for radio and television stations in a given market sometimes vary dramatically from one survey period to the next without any logical explanation (see Chapter 14). Users of media ratings frequently ask statisticians and the ratings companies to help determine why this problem occurs and to offer suggestions for making syndicated media audience information more reliable, a demonstration of how statisticians and researchers can work together.

During the early part of the twentieth century, there was no interest in the size of a media audience or in the types of people who make up the audience. Since then, mass media operators have come to rely on research results for nearly every major decision they make. The increased demand for information has created a need for more researchers, both public and private. In addition, within the research field are many specializations. Research directors plan and supervise studies and act as liaisons to management, methodological specialists provide statistical support, research analysts design and interpret studies, and computer specialists provide hardware and software support in data analysis.

Research in mass media is used to verify or refute opinions or intuitions for decision makers. Although common sense is sometimes accurate, media decision makers need additional objective information to evaluate problems, especially when they make decisions that involve large sums of money. The past 50 years have witnessed the evolution of a decision-making approach that combines research and intuition to produce a higher probability of success.

Research is not limited only to decision-making situations. It is also widely used in theoretical areas to attempt to describe the media, to analyze media effects on consumers, to understand audience behavior, and so on. Every day there are references in the media to audience surveys, public opinion polls, growth projections, status reports of one medium or another, or advertising or public relations campaigns. As philosopher Suzanne Langer (1967) said, "Most new discoveries are suddenly-seen things that were always there." Mass media researchers have a great deal to see, and virtually everyone is exposed to this information every day.

Finally, there are two additional points before we get into media research. First, media research and the need for qualified researchers will continue to grow, but it is difficult to find qualified researchers who can work in the public and private sectors. Second, we urge you to search the Internet for additional information on every topic discussed in this book. We have identified some areas for further investigation, but do not limit your searching to only our suggestions. Internet searches are not good for primary

research, but they are useful as a starting point for information gathering.

THE DEVELOPMENT OF MASS MEDIA RESEARCH

Mass media research has evolved in definable steps, and similar patterns have been followed in each medium's needs for research (see Figure 1.1). As you read the following paragraphs about the development of mass media research, consider the smart media (the newest mass media) as examples. In Phase 1 of the research, there is an interest in the medium itself. What is it? How does it work? What technology does it involve? How is it similar to or different from what is already available? What functions or services does it provide? Who will have access to the new medium? How much will it cost?

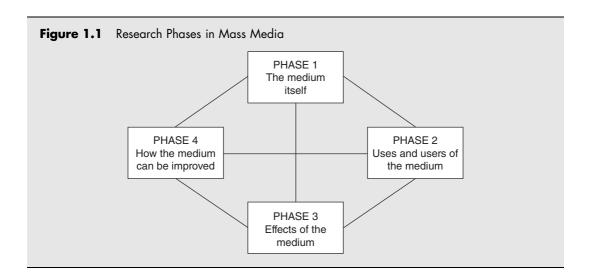
Phase 2 research begins once the medium is developed. In this phase, specific information is accumulated about the uses and the users of the medium. How do people use the medium in real life? Do they use it for information only, to save time, for entertainment, or for some other reason? Do children use it? Do adults use it? Why? What gratifications

does the new medium provide? What other types of information and entertainment does the new medium replace? Were original projections about the use of the medium correct? What uses are evident other than those that were predicted from initial research?

Phase 3 includes investigations of the social, psychological, and physical effects of the medium. How much time do people spend with the medium? Does it change people's perspectives about anything? What do the users of the medium want and expect to hear or see? Are there any harmful effects related to using the medium? In what way, if any, does the medium help people? Can the medium be combined with other media or technology to make it even more useful?

In Phase 4, research is conducted to determine how the medium can be improved, either in its use or through technological developments. Can the medium provide information or entertainment to more types of people? How can new technology be used to perfect or enhance the sight and/or sound of the medium? Is there a way to change the content to be more valuable or entertaining?

The design of Figure 1.1 is not intended to suggest that the research phases are



linear—that when a phase is over, it is never considered again. In reality, once a medium is developed and established, research may be conducted simultaneously in all four phases. For example, although television has been around for decades, researchers continue to investigate the medium itself (satellite or online-delivered digital audio and video), the uses of TV (pay-per-view programming, TV on computers and handheld devices), effects (violent programming), and improvements (3DTV).

Research is a never-ending process. In most instances, a research project designed to answer one series of questions produces a new set of questions no one thought of before. This failure to reach closure may be troublesome to some people, but it is the essential nature of research.

Figure 1.1 depicts four phases of research. However, in some instances, as in private sector research, an additional element permeates every phase: How can the medium make money? The largest percentage of research conducted in the private sector relates in some way to money—how to save it, make more of it, or take it away from others. This may not "sit well" with people who view the media as products of artistic endeavor, but this is how the real world operates.

At least four major events or social forces encouraged the growth of mass media research. The first was World War I, which prompted a need to understand the nature of propaganda. Researchers working from a *stimulus–response* point of view attempted to uncover the effects of the media on people (Lasswell, 1927). The media at that time were thought to exert a powerful influence over their audiences, and several assumptions were made about what the media could and could not do. One theory of mass media, later named the **hypodermic needle** model of communication, suggested that mass communicators need only "shoot"

messages at an audience and those messages would produce preplanned and almost universal effects. The belief then was that all people behave in similar ways when they encounter media messages. We know now that individual differences among people rule out this overly simplistic view. As DeFleur and Ball-Rokeach (1989) note:

These assumptions may not have been explicitly formulated at the time, but they were drawn from fairly elaborate theories of human nature, as well as the nature of the social order.... It was these theories that guided the thinking of those who saw the media as powerful.

A second contributor to the development of mass media research was the realization by advertisers in the 1950s and 1960s that research data are useful in developing ways to persuade potential customers to buy products and services. Consequently, advertisers encouraged studies of message effectiveness, audience demographics and size, placement of advertising to achieve the highest level of exposure (efficiency), frequency of advertising necessary to persuade potential customers, and selection of the medium that offered the best chance of reaching the target audience.

A third contributing social force was the increasing interest of citizens in the effects of the media on the public, especially on children. The direct result was an interest in research related to violence and sexual content in television programs and in commercials aired during children's programs. Researchers have expanded their focus to include the positive (prosocial) as well as the negative (antisocial) effects of television. Investigating violence on television is still an important endeavor, and new research is published every year.

Increased competition among the media for advertising dollars was a fourth contributor to the growth of research. Most media managers are now sophisticated and use long-range plans, management by objectives, and an increasing dependency on data to support the decisions they make. Even program producers seek relevant research data, a task usually assigned to the creative side of program development. In addition, the mass media now focus on audience fragmentation, which means that the mass of people is divided into small groups, or niches (technically referred to as the "demassification" of the mass media). Researchers need information about these smaller groups of people.

The competition among the media for audiences and advertising dollars continues to reach new levels of complexity. The media "survival kit" today includes information about consumers' changing values and tastes, shifts in demographic patterns, and developing trends in lifestyles. Audience fragmentation increases the need for trend studies (fads, new behavior patterns), image studies (people's perceptions of the media and their environment), and segmentation studies (explanations of behavior by types or groups of people). Large research organizations, consultants, and media owners and operators conduct research that was previously considered the sole property of the marketing, psychology, and sociology disciplines. With the advent of increased competition and audience fragmentation, media managers more frequently use marketing strategies in an attempt to discover their position in the marketplace. When this position is identified, the medium is packaged as an image rather than a product. Similarly, the producers of consumer goods such as soap and toothpaste try to sell the image of these products because the products themselves are similar, if not the same, from company to company.

The packaging strategy involves determining what the members of the audience

think, how they use language, how they spend their spare time, and so on. Information on these ideas and behaviors is then used in the merchandising effort to make the medium seem to be part of the audience. Positioning thus involves taking information from the audience and interpreting the data to use in marketing the medium. For more information about positioning companies and products in the business and consumer worlds, search the Internet for *corporate imaging*, *corporate positioning*, and *product branding*.

Much of the media research before the early 1960s originated in psychology and sociology departments at colleges and universities. Researchers with backgrounds in the media were rare because the mass media were young, but this situation changed. Media departments in colleges and universities grew rapidly in the 1960s and 1970s, and media researchers entered the scene. Today mass media researchers dominate the mass media research field, and now the trend is to encourage cross-disciplinary studies in which media researchers invite participation from researchers in sociology, psychology, political science, and others. Because of the pervasiveness of the mass media, researchers from all areas of science are now actively involved in attempting to answer media-related questions.

Modern mass media research includes a variety of psychological and sociological investigations, such as physiological and emotional responses to television programs, commercials, or music played on radio stations. In addition, computer modeling and other sophisticated computer analyses are now commonplace in media research to determine such things as the potential success of television programs (local, network, or syndicated). Once considered eccentric by some, mass media research is now a legitimate and esteemed field.

MEDIA RESEARCH AND THE SCIENTIFIC METHOD

Scientific research is an organized, objective, controlled, qualitative or quantitative empirical analysis of one or more variables. The terms that define the scientific research method describe a procedure that has been accepted for centuries. In the sixteenth century, for example, Tycho Brahe (pronounced TEE-koh BRAH-hee) conducted years of organized and controlled observation to refute many of Aristotle's theories of the solar system and the universe.

As mentioned earlier, we all conduct research every day. We do this whenever we test a question about anything. Children conduct "research studies" to determine which items are hot and which are cold, how to ride a bicycle or a skateboard, and which persuasive methods work best with parents. Teenagers "test" ideas about driving, dating, and working; adults "test" ideas about family, finance, and survival.

All research, whether formal or informal, begins with a basic question or proposition about a specific phenomenon. For example, why do viewers select one television program over another? Which sections of the newspaper do people read most often? Which types of magazine covers attract the most readers? What type of radio format will attract the largest number of listeners? Which websites attract the most visitors? Which types of advertising are most effective in communicating messages to consumers? These questions can be answered to some degree with well-designed research studies. However, the task is to determine which data collection method can most appropriately provide answers to specific questions.

THE METHODS OF KNOWING

There are several possible approaches to answering research questions. Kerlinger and Lee (2000), using definitions provided nearly a century ago by C. S. Peirce, discuss four approaches to finding answers, or **methods of knowing**: tenacity, intuition, authority, and science. To this list, we add self-discovery.

A user of the *method of tenacity* follows the logic that something is true because it has always been true. An example is the storeowner who says, "I don't advertise because my parents did not believe in advertising." The idea is that nothing changes—what was good, bad, or successful before will continue to be so in the future.

In the *method of intuition*, or the a priori approach, a person assumes that something is true because it is "self-evident" or "stands to reason." Some creative people in advertising agencies resist efforts to test their advertising methods because they believe they know what will attract customers. To these people, scientific research is a waste of time, and their advertising effectiveness usually suffers as a consequence.

The method of authority promotes a belief in something because a trusted source, such as a parent, a news correspondent, or a teacher, says it is true. The emphasis is on the source, not on the methods the source may have used to gain the information. For example, the claim that "consumers will spend money to receive news updates via fax machine because producers of the information say so" is based on the method of authority. During the late 1990s, this was shown not to be true. Only a handful of consumers signed up to receive the new product, and research was conducted to find out what failed. The research indicated that very few people had fax machines at home, and they were not interested in the material being sent to their workplace—a simple answer that wasn't perceived by the product's producers.

The *self-discovery* method refers to things we learn and know without intervention from an outside source. While we may use information gathered from other sources to