

CHAPTER 3: FINDING, READING, AND USING RESEARCH

I. Introduction

- A. Doing good research requires being able to get the information we need, when we need it, and being able to understand and use it.
 - 1. Most readers of this textbook are probably already comfortable working on a computer, getting information off CD-ROMS or through the Internet.
 - 2. In fact, it's not uncommon for readers like you to be much more at home in the age of electronic information than many of your teachers or textbook authors.
 - 3. Your comparatively greater skill in handling information is a result of being the first true generation of the Information Age.
- B. We assume a certain familiarity with various popular sources of information, and focus attention on how the information needed for good research differs from other kinds of information with which you are already familiar, as well as how to find, understand, and use this research-relevant information.

II. Reasons for Reviewing Previous Research

- A. Researchers don't work in a vacuum.
 - 1. Their research is a result of previous work on a topic.
 - 2. Knowing what others have done and found helps to avoid "reinventing the wheel."
 - a. This is true whether one is conducting scholarly research (public knowledge) or proprietary research (research for a private company or organization; see Chapter 1).
- B. Even those who don't conduct research per se often need to know what the findings from relevant research show.
 - 1. Before implementing a total quality management (TQM) program decision makers would want to see what the research shows about the effects of TQM, or other programs like it, on such outcomes as worker satisfaction and productivity.
 - 2. Competent consumers also find that reviewing relevant research proves quite helpful.
- C. Regardless of the communication topic of interest, it's likely that there is some relevant research that has been conducted in the past.
 - 1. Even for brand new topics that have not been studied before, researchers still consult the literature, searching for sources that can help them to understand the new topic.
- D. Reviewing previous research is bound to shape a new study in a number of ways.
 - 1. The purpose of one's study may be affected.
 - 2. Previous research invariably is used to provide support for, or shape, the formal research question or hypothesis posed.
 - 3. As researchers review relevant literature, they also look at how those studies were conducted, gathering ideas for the design of their own study.
 - 4. Prior work, thus, provides the foundation on which researchers build.
 - 5. Anyone interested in studying communication phenomena, whether as a producer or a consumer, should find out what has already been done and learned about the topic(s) of interest.

III. The Search for Research

- A. The search for previous research (see Figure 3.1) begins by understanding the types of research available and where they can be found.
 - 1. Once they have been found, the information contained within them needs to be understood and evaluated.
- B. Finding, reading, and evaluating research usually leads researchers to rethink and revise the original topic they considered worth studying, and this often makes it necessary to find additional, more focused research.
 - 1. This cyclical process of finding, reading, and evaluating research enables researchers to select and review the most appropriate research until they are ready to pose a formal research question or hypothesis.

2. At that point, researchers are ready to write a review of the literature.

IV. Types of Research Reports

A. There are two general types of reports.

1. A **primary research report** is the first reporting of a research study by the person(s) who actually conducted the study.
2. A **secondary research report** is a report of a research study by someone other than the person who conducted the study or a later report by the person who conducted the study that cites or uses the primary report that has already appeared elsewhere.

B. We're starting with secondary reports because what you know about most topics comes from them, and these appear in a variety of forms.

1. Textbooks, like this one, are the main way college students learn about course-relevant research findings.
 - a. The studies you read about in textbooks and any other books that review previously published research are secondary research reports.
2. Most people's exposure to secondary research reports comes from the mass media—the newspapers and magazines they read, the radio programs they listen to on the way to school or work, the television news programs they watch during the dinner, and/or the Internet they surf at night.
3. Secondary research reports are quite adequate most of the time.
4. Scholars, too, frequently find secondary research reports helpful.
 - a. Well-written reviews, such as those in *Communication Yearbooks* 19 and 20, help researchers understand the work done in an area and formulate ideas about what needs to be done and provide them with valuable reference sources to find and read.

C. Scholars and conscientious individuals, however, aren't content to rely on secondary research reports.

1. They know that such reports, and we're talking especially about those presented by the media, too often give only a brief overview of the research study, simplify complex findings into a "sound bite," or worse, report inaccurate findings.
2. Therefore, they read primary research reports—actual studies as reported for the first time by the person(s) who conducted the research.
3. There are three general sources that provide primary research reports: scholarly journals, scholarly texts, and conference papers.

D. The most important source for locating primary research report is a **scholarly journal**, a periodical publication (often called *periodicals* and/or kept in that section of libraries) that prints scholarly essays and research studies.

1. Scholarly journals date back to the creation of the *Journal des savans* in January 1665, in France, and shortly thereafter, in March 1666, the *Philosophical Transactions* in England, both regular publications that contained descriptions of research.
2. There are well over 100,000 scholarly journals around the world, publishing more than six million articles each year (Shermer, 1997).
3. Each academic discipline has many journals devoted to topics that interest these scholars.
 - a. The field of Communication is no exception; there are a great many journals that report original communication research studies (see Figure 3.2).
4. Communication researchers also frequently find relevant articles in journals from related fields, such as advertising, anthropology, business and management, etc.
5. The main advantage of scholarly journals is that, unlike some other sources, the importance and accuracy of the reported results have been reviewed by experts in the field before being published.

E. A second source of primary research reports is a **scholarly text**, a text authored or edited by a scholar that is intended primarily for other scholars to read.

1. Some authored scholarly texts report original research.
 - a. A common type of scholarly text that features primary research reports is edited texts.
 - b. Many edited texts contain both primary and secondary research reports.

F. The final source of primary research reports is a **conference paper**, a manuscript presented at a scholarly conference/convention.

1. Conference papers do not have the same prestige, or “stamp of approval” as scholarly journal articles, but they can still be a valuable source of primary research reports.
2. Obtaining copies of conference papers cited in research reports, however, can be difficult.

V. Finding Research Reports

A. Primary and secondary research reports may be found in many places; however, we focus on *two* locations.

1. Libraries, as we all know, are locations set aside specifically to store knowledge in an organized fashion.
 - a. The knowledge stored in libraries can take traditional and electronic forms.
 - b. Libraries have a long and rich tradition.
2. There are many types of libraries that differ in terms of purpose, content, and access.
 - a. **Public libraries** are municipal libraries operated by a city, town, or local government that are accessible to members of the general public.
 - i. Seldom do public libraries stock scholarly journals and texts that report original research studies.
 - b. **Academic libraries** are attached to universities/colleges and support their research and teaching needs.
 - i. These libraries stock both primary and secondary research reports, in addition to some nonfiction texts, popular periodicals, newspapers, and recorded materials.
 - c. **Special-use libraries** contain materials that meet specific needs.
 - i. Many of these special-use libraries are operated by private organizations, such as historical societies, religious societies, and even business corporations.
 - ii. Some special-use libraries are or contain **archives**, where **primary source materials**, original records and documents, housed.
 - iii. *Primary source materials* should not be confused with *primary research reports*; the first term means any original records and documents, whereas the latter term references reports of original research studies.

B. Finding research reports in academic libraries.

1. Academic libraries are the primary place where researchers spend their time.
2. To enjoy the resources of such a library—rather than wandering around in confusion or searching futilely down blind alleys—you need to know where to find what you're there to obtain.
3. Libraries organize their holdings using some type of **cataloguing system**.
 - a. Most academic libraries use the *Library of Congress System* (see Figure 3.3).
 - b. Public libraries use the *Dewey Decimal System* which employs 10 numbered categories as general headings, subdivided as many times as necessary to assign a unique call number to each book (see Figure 3.3).
 - i. A card catalogue contained cards for each book in the holdings that were cross-referenced in three ways: by author, title of work, and subject area.
 - ii. Most libraries today have this information filed electronically in a database, information stored in machine-readable form that can be retrieved by a computer located in the library or elsewhere.
4. Electronic library searches as illustrated by Loyola's library information service (LUIS).
 - a. Users are presented with a screen that allows them to search for a book or journal by title, simply by typing the letter "t" followed immediately by an equals sign "=" and the followed immediately by the title of the book.
 - b. One can also search by author (a=name of author), and/or call number (c=call number).
 - c. If more general searches are desired, users can enter a keyword (k=keyword) or a subject (s=subject).
 - d. Locating articles in scholarly journals demands a little more effort.
 - i. At Loyola University Chicago, the best way to access a social science article is through the PsycInfo database, copyrighted by the APA and it can be entered into through the InfoTrac database, an **on-line database**, copyrighted by Information Access Company.
 - ii. Many databases are available on **CD-ROMs**, which stands for "compact disk-read only memory."
 - iii. The best CD-ROM for locating articles in communication journals is CommSearch (2nd ed.), a database copyrighted by the National Communication Association (NCA; previously Speech Communication Association or SCA).
 - iv. The most important printed source for finding communication journal articles is Matlon and Ortiz's (1997) text, *Index to Journals in Communication Through 1995* (published by NCA).
 - v. One final print resource, possibly available electronically through the First Search database at one's academic library, is *Communication Abstracts*; a quarterly publication that prints abstracts (one paragraph summaries) of communication-related articles in various journals and books over the previous 90 days.
 - vi. One of the main advantages, in comparison to print searches, is the ability to engage in free-text searching (or keyword searching), searching for key words regardless of where they appear in a record; the downside though is that such searches often result in numerous *false hits* or *false drops*.
 - vii. One useful set of commands are **Boolean operators**, words that allow one to narrow or broaden a search or to link to related terms; and there are also **positional operators** that can be used to make sure that records are searched with regard to particular word orders.
 - ix. In addition to learning the set of commands for conducting such searches, there is a lack of standardization of commands across databases.
5. Internet Resources, such as the **Internet**, consists of interconnected networks of computers such as BITNET (for universities) and MILNET (for the military).
 - a. The **World Wide Web (WWW or the Web)** is a portion of the Internet that uses hypertext language to combine text, graphics, audio, and video.
 - i. The growth of the Web was nothing short of astounding.

- ii. From a scholar's perspective, the main advantage of the Internet and Web is the ability to locate primary and secondary research reports quickly and efficiently.
 - iii. Although the Internet and Web offer vast resources relevant to research, they also create new challenges for finding reliable, accurate, and specific information; therefore it's important to check the veracity of resources acquired through the Internet and Web whenever possible.
- b. These resources fall into three general categories:
- i. electronic journals (and other such sources);
 - ii. academic and professional associations and public and private organizations whose web pages provide information about accessing their archives, publications, conventions, and other research-related resources;
 - iii. Listserv discussion groups, which promote the exchange of dialogue and information about research by delivering messages to all subscribers, and newsgroups, "bulletin boards" where users go to read messages placed by other users.

VI. Using the Internet and World Wide Web Resources for Research

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A. Most Web resources have clear instructions and simple menus for online help.

1. To access a Web page, simply type the URL (Uniform Resource Locator or Web address) into your web browser, taking care to type it exactly as shown, including capitalization and punctuation marks.
2. Once you enter the correct URL, your browser will link you directly to the resource (usually one depresses the enter key to activate the link).

B. One way to begin your online research is with a Web-based search engine.

1. If one knows how to conduct a simple search, these engines can point you to both primary and secondary resources that may not be available in traditional libraries.
2. Each search engine has its own cataloguing system and search strategies, so it's best to use a combination of several.
 - a. Four of the best-known search engines are: Alta Vista, Infoseek, Lycos, and Yahoo.

C. A variety of online journals (e-journals), magazines, "e-zines," newspapers, and news media appear on the web.

1. Of particular importance to communication researchers are the following e-journals: The American Communication Journal; EJC/REC: Electronic Journal of Communication/La Revue Electronique de Communication; Journal of Computer-Mediated Communication; and M/C.
2. A variety of services exist for finding the many other e-journals now published in virtually every discipline; some are free and some require paid membership: Committee of Institutional Cooperation (CIC) Electronic Journals Collection; Blackwell's Electronic Journal Navigator; Ingenta; and University of Houston Libraries.\

D. Many academic and professional organizations and public and private organizations provide help in locating research studies, have their own archives of specialized research information, or offer other resources useful when conducting research (as well as many other services and products).

1. Several organizations are particularly helpful for the study of communication (see text).

E. Free Internet-based discussion lists offer opportunities to exchange information, debate topical issues, and find other research resources.

1. Both good "netiquette" and the expectations of other members dictate that questions and comments reflect basic background research and an understanding of list norms.
2. The following are of particular interest for conducting communication research: CRTNET News (Communication and Theory NETWORK); Comserve Hotlines; and METHODS.
3. There are literally thousands of newsgroups and Internet discussion lists; three sites in particular are useful for finding and accessing online discussions that focus on specific topics: Deja News; Onelist; and Tile.Net.
4. The Communication Ring—<http://www.nonce.com/commring/>—is a ring that organizes a group

of Web sites, and this ring is dedicated to the study and teaching of communication.

VII. How Research Is Presented: Reading Scholarly Journal Articles

A. Scholarly journals present the most current research in the field, research that has passed the test of review.

1. Scholarly journal articles report the results obtained from the methodology employed in a particular study.
2. There are articles about experiments performed, surveys taken, texts analyzed, and research conducted in natural settings.
 - a. Experimenters, surveyors, and sometimes textual analysts collect **quantitative data**, numerical data.
 - b. Other textual analysts and naturalistic researchers collect **qualitative data**, data using symbols other than numbers.
3. Journal articles that analyze qualitative data are so varied that it is difficult to discuss a single model for how these results are written (see Chapter 10).
4. One particular format is well established for presenting the results obtained from analyzing quantitative data.

B. A typical quantitative scholarly journal article contains a number of important subheadings (see Figure 3.4).

1. Understanding the accepted format will help you to know where to look in an article for the information you need to avoid wasting valuable time (see Frey, Botan, Friedman, & Kreps, 1992).
 - a. The preceding text examines actual scholarly journal articles that employ various methodologies.
2. The eight subheadings contained in a typical quantitative scholarly article follow.
 - a. **Title:** The most straightforward title presents the topic, and specifically, the variables studied by the researcher.
 - i. The title has two parts with the first part specifying the general topic and the second part the specific variables studied.
 - b. **Abstract:** Most journal articles start (either in the article itself or in the table of contents for that issue of a journal) with a summary of the important points in that article; usually one-paragraph long.
 - i. An abstract can be a researcher's best friend because it encapsulates the most important information contained in an article, such as the purpose of the study, methods used, key findings from the study, and/or contribution the study makes (see Figure 3.5).
 - c. **Introduction:** The introduction begins the actual body of a journal article.
 - i. This section, frequently no longer than a page or two, orients the reader to the topic and why it is important that it be studied.
 - d. **Review of the Relevant Literature:** The literature review is one of the most crucial sections of a journal article.
 - i. A researcher identifies the previous work done by scholars that is relevant to the topic.
 - ii. Each literature review reflects many factors, including the author's personal style.
 - iii. If the research blazes a new path in the discipline, probably little research will be cited.
 - iv. If the research builds on topics that have received considerable attention, the literature review is targeted specifically to the research that addresses that topic directly.
 - v. At the end of the literature review, either as part of that section or in a separately titled section, the author poses a formal research question or hypothesis (see Chapter 2), with the author explaining how the literature review informed the hypothesis or research question.
 - e. **Methodology:** The methodology section is where the author explains exactly how the research was conducted and this section usually contains three formal subheadings.
 - i. The *methodology section* typically starts by describing the **research participants** (or **subjects**, designated Ss), the people who participated in the study, and/or **texts**, the recorded or visual messages studied.
 - ii. The *procedures section* explains the specific procedures used to conduct the research by

providing a straightforward account of what was done with the research participants/texts.

- (a) The author explains exactly how the independent and dependent variables were operationalized (put into observable terms) and measured (see Chapter 4), and if relevant, manipulated (see Chapter 7).
- iii. The data treatment section is sometimes included, as a final part, to the methodology section and it explains the ways in which quantitative data were analyzed.
- f. Results: The results section of a journal article explains what was found.
 - i. This section is typically a short, straightforward account of the findings without attempting to interpret or discuss them.
- g. Discussion: In this section, the author interprets the results reported in the preceding section.
 - i. This is where the author explains the significance of the results and what they mean addressing three items.
 - (a) The meaning and importance of the findings are examined;
 - (b) The problems and limitations of the study are identified on the basis of hindsight;
 - (c) The findings are used to suggest new topics worth studying, new questions worth asking, and new procedures worth trying.
- h. **References:** Because scholarly research is cumulative (see Chapter 1), readers have a right to know two things: who should get credit for each idea presented and what is the track record of each idea.
 - i. This disclosure of indebtedness takes the form of *references*, a complete and accurate list of all sources cited in the text.

VIII. Writing A Literature Review

- A. Once researchers have located and synthesized relevant research, they use that information to revise the topic they are studying.
 - 1. This process of finding, reading, evaluating, and revising may be necessary several times until researchers are ready to pose a formal research question or hypothesis.
 - 2. There are five things involved in preparing a research prospectus.
 - a. Title: Construct a clear title for the paper that captures the essence of your intended research study.
 - 1. Most projects examine differences between groups or the relationship between variables.
 - b. Introduction: This is a relatively short part of the paper that establishes the purpose and significance of the study.
 - i. Start with an introduction to the general area of research under which the specific topic you are examining falls, followed by a paragraph that explains the specific purpose of your research.
 - ii. This section concludes by pointing out the potential significance/importance of your research study for communication scholars, practitioners, and/or the general public.
 - c. Literature Review: This literature review section varies a great deal depending on how much specific information there is on the topic you are studying.
 - i. To write a good review of the literature, you must first understand the two purposes this section should serve with one purpose being to summarize what is known about your topic, and the other being to use previous evidence for the argument you are going to make by posing a research question or hypothesis.
 - ii. Establish the organizational scheme for this section, so the reader knows how the review is being organized.
 - iii. Not everything written on the topic can be covered so your job is to pick out the research that is most relevant to the topic (variables) you are studying and the research question/hypothesis you will pose, and then to pull out of each piece the ideas that are most useful.
 - iv. You must cover research relevant to all the variables being studied, with the best possible research to review being the studies that link the specific variables that interest you.

- v. Keep your eyes open for any *meta-analytic studies* about the topic being investigated noting that **meta-analysis** is a procedure used to identify patterns in findings across multiple studies that examine the same research topic or question.
 - (a) Meta-analyses can be affected by the **file drawer problem**, a potential problem affecting meta-analyses and literature reviews that occurs because studies that yield non-significant results are often not published, so the significant effects found may seem to happen more often than they actually do (see Figure 3.6).
- vi. If you review a specific study in detail, make sure to explain the purpose of the study, the methods, findings, and the significance/implication of those findings, in that order.
- vii. When reviewing studies, write in the past tense, except when discussing their significance/implications, which should be written in the present tense.
- viii. Use some organizational scheme to review the selected research studies and this order could take one of several forms: topical; chronological; problem-cause-solution; general-to-specific; known-to-unknown; comparison-and-contrast; and/or specific-to-general.
- d. Research Question/Hypothesis: Five suggestions follow.
 - i. Start by summarizing what the reviewed literature showed in terms of what has been done, what has not been done, and what needs to be done.
 - ii. It is preferable to advance a hypothesis as opposed to a research question, because statistical procedures, in a sense, make it easier to find support for a hypothesis (see Chapter 12).
 - iii. Phrase research questions or hypotheses with regard to description, significant differences between groups, and/or relationships between variables.
 - iv. If there is more than one independent variable being studied, one option is to put them together in one research question or hypothesis.
 - v. Indent a formal research question or hypothesis to the start of a new paragraph (six spaces from the left margin).
- e. **References:** On a separate page, with a centered-upper-and lowercase heading (i.e., References), list all sources cited in the literature review in alphabetical order by the first author's last name only including those sources actually cited in the text itself.
 - i. Quantitative research reports typically use the style sheet recommended by the American Psychological Association (APA) (see Figure 3.7).
 - ii. You can also purchase and download the APA-Style Helper at <http://www.apa.org/apa-style/>
 - iii. You may also use an interactive web site, developed by Lyle J. Flint, that builds your citations at <http://www.stylewizard.com/apa/apawiz/html>

IX. Conclusion

- A. The research process may seem daunting as it involves what may be new steps to you and a myriad of potential sources.
- B. Good researchers and consumers, however, work diligently to cull the best information possible from extant literature and then advance research questions and/or hypotheses.
- C. Only in this manner can informed decisions be made about the merits of particular explanations and theories.