

INVESTIGATING COMMUNICATION (2nd Ed.): CHAPTER OUTLINES

CHAPTER 1: INTRODUCTION TO THE RESEARCH CULTURE

I. Introduction

- A. We live in an “information society” with a wealth of information at our fingertips.
- B. Information is no longer a luxury; it is a necessity on which we depend for survival.
 - 1. The economy of the United States, once driven by agriculture and later by service, is now based on information.
- C. Not all information is created equally; some information is better than other information because it has been tested and shown to be valid; the key word here is “tested,” which means that some *research* has been conducted about it.
- D. If we are to distinguish good from bad information, we need to become competent consumers of how information is produced.
 - 1. Chapter goals
 - a. Explore the importance of knowing research methods.
 - b. Examine some common, everyday ways of knowing to distinguish these from the research process.
 - c. Explore some characteristics of the research culture.
 - d. Distinguish good research from pseudoresearch and bad research.

II. The Importance of Knowing Research Methods

- A. We have become a “research-based” culture.
 - 1. Research has become perhaps *the* most important stamp of approval in our society.
 - 2. Research has become part of the ongoing business of doing business.
 - 3. A United States Department of Labor report identifies “ability in information-acquiring and evaluating data” as one of the five competencies necessary for performing most jobs.
 - 4. Statements from people working in the real world (see Figure 1.1) show that the communication research methods course they took in college was one of the most important—if not *the* most important—course they took in terms of being successful in their profession.
 - 5. Policy decisions made by community organizations, educational institutions, and federal, state, and local governments, to name but a few, are now made, in part, on the basis of original research conducted and/or extensive reviews of what the available research shows.
 - 6. Understanding research methods might help one’s personal life; for example, being able to read and understand research reports that compare products, such as those published in the magazine, Consumer Reports, can help people make better choices about the products they buy.

III. Making Claims and Offering Evidence

- A. If there is one thing that researchers, common folk, politicians, educators, top-level corporate executives, snakeoil salespeople have in common, it is that all make **claims**, that is, assertions or conclusions.
 - 1. Most claims are supported with some form of **evidence**, or reason.
 - 2. The validity of a claim obviously is related, to a large degree, to the validity of the evidence in its favor.
 - a. The validity of the evidence offered depends to some extent on the situation.
 - b. The validity of a claim and the evidence offered for it also depends on the validity of the often-unarticulated **warrant**, a statement (another claim) that logically connects the claim and the evidence.
 - i. Some evidence or backing must be given for the warrant as well.
 - ii. The warrant is particularly important, for if it is not valid, the argument advanced by the

claim and evidence usually falls apart.

3. This text is primarily concerned with understanding and evaluating the claims, evidence, and warrants that are made by researchers about what people do, why they do it, what influences them to do it, and what effect it has on them and others.
 - a. Critical thinking skills are taught for evaluating research-based arguments; the specific focus is on research about people's communication.

IV. Everyday Ways of Knowing

- A. The acceptance of information at face value is called **everyday ways of knowing**; when we rely on knowledge that we have not questioned or tested, we are using everyday ways of knowing.
- B. Five common everyday ways of knowing are: (a) personal experience; (b) intuition; (c) authority; (d) appeals to tradition, custom, and faith; and (e) magic, superstition, and mysticism.
 1. **Personal experience**: Experiencing something firsthand.
 - a. Personal experience can be an excellent starting point for the testing of knowledge, but it does not always serve us well.
 - i. We often believe that what's in our minds and social encounters is generally true.
 - ii. Some research indicates that we form inaccurate opinions about everyday events because we are limited in our ability to think about the information available to us; we jump to conclusions on the basis of limited knowledge and although information derived from the study of many people's lives is more trustworthy, it is also remote and pallid, and, therefore, easily ignored.
 2. **Intuition**: Believing something is true or false simply because it "makes sense."
 - a. Intuitive hunches sometimes pay off in useful ideas, but it is often just plain wrong.
 - i. One area where intuition leads people astray is with regard to calculating statistics, especially the probability of the occurrence of events; people typically underestimate the probability of what appears to be highly unlikely circumstances.
 - ii. Common everyday intuitive thinking often results in mistaken perceptions and judgments.
 - (a) *Cognitive conservatism* is a proclivity whereby we hold onto conclusions we reach even when presented with contradictory information.
 - (b) *Pareidolia* is perceiving meaning in the face of meaningless objects or stimuli, such as discernible images in clouds.
 - (c) The *tunnel effect* describes perceptual tricks of the mind that accompany intuitive reasoning through which against our will, our mind enters a tunnel in its reasoning.
 3. **Authority**: Believing something because of our trust in the person who said it.
 - a. Numerous studies of the persuasive effects of source credibility, the characteristics that make a person believable, show that who says something may be even more important than what is said.
 - b. There are certainly many cases in which we must rely on authorities, but respected authorities, make mistakes.
 - c. Some people also claim and/or are assumed to be experts simply because they hold positions of power, like the boss of a company, although we all probably know instances in which the boss simply is wrong.
 - d. In other cases, determining who is and who isn't an authority can be quite problematic.
 4. *Appeals to tradition, custom, and faith*:
 - a. **Tradition** and **custom** involve believing something simply because most people in a society assume it is true or because it has always been done that way.
 - i. Some customary beliefs we now know from research make very good sense, such as cuddling babies and playing word games with them.
 - ii. But custom can also lead to cognitive conservatism that ultimately cuts off the inquiry process and subsequent growth of knowledge, and leads us to cling tenaciously to the beliefs

we hold.

- iii. Custom may also lead people to cling to racist or sexual stereotypes, such as “Women are less capable than men of being top managers”; when pressed about why they hold this belief, prejudiced people might respond, “Because it’s always been that way.”
 - b. **Appeals to faith** involve a belief that does not rest on logical proof or material evidence.
 - i. Asking someone to accept something because of the person whom says it or because it has always been done that way in the past are two types of appeal to faith.
5. **Magic, superstition, and mysticism:** As when we use the word *mystery* to explain an otherwise unexplainable event.
- a. Many of these so-called mysteries are actually easily explained.
 - b. The mystical/superstitious belief that appears to have caught hold the most in the general public is *astrology*, the “study” (and we use that term loosely) of the positions and aspects of heavenly bodies in the belief that they have an influence on the course of human affairs; there is absolutely no scientific basis or evidence for astrology.

V. The Research Process

- A. **Research** is what we call the form of disciplined inquiry that involves studying something in a planned manner and reporting it so that other inquirers can potentially replicate the process if they choose.
1. Two types of research:
 - a. **Proprietary research** is conducted for a specific audience and is not necessarily shared beyond that audience.
 - b. **Scholarly research** is conducted to promote public access to knowledge, as when researchers conduct and publish studies about the effectiveness of various means of persuasion or new vaccines for treating diseases.
- B. Characteristics of (scholarly) research
1. Research is based on curiosity and asking questions.
 - a. Research starts with a person’s sense of curiosity, a desire to find an answer to a puzzling question posed.
 - b. **Research methods** may be viewed as the strategies researchers use to solve puzzling mysteries about the world; they are the means used to collect evidence necessary for building or testing explanations about that which is being studied.
 2. Research is a systematic process.
 - a. Research proceeds in a careful step-by-step manner, employing an ordered system of inquiry.
 - b. The communication research process can be viewed as an ongoing cycle of five interrelated phases of research activities:
 - i. **Conceptualization:** Involves forming an idea about what needs to be studied, which includes identifying a topic worth studying, reviewing the relevant literature to learn what is already known about the topic, and phrasing the topic as a formal research question or hypothesis (prediction).
 - ii. Planning and designing research: Researchers need a systematic plan for conducting their research.
 - (a) Moving from the conceptualization phrase to planning and designing research demands that researchers transform abstract concepts into operational, or measurement, terms; **operationalization** is the process of determining the observable characteristics associated with a concept or variable.
 - iii. Methodologies for conducting research: Conducting careful research demands understanding and adhering to the specific assumptions and requirements of the methodology chosen: experiments, surveys, textual analysis (rhetorical criticism, content analysis, interaction analysis, and performance studies), and naturalistic research.

- iv. Analyzing and interpreting data
 - v. **Reconceptualization:** The part of the research process in which researchers formally connect their studies with previous studies on a specific topic and set the stage for future research.
3. Research is potentially replicable.
 - a. Because research follows a systematic plan, other scholars can potentially replicate, or reproduce, the entire inquiry process.
 - b. The words “potentially replicable” are used because scholars who wish to replicate another’s research study need to have the appropriate resources to do so.
 4. Research is reflexive and self-critical.
 - a. Research is reflexive in that researchers explicitly examine their methods to discover and report flaws or threats to the validity of any findings from a study
 5. Research is cumulative and self-correcting.
 - a. The accumulation of information from research allows for knowledge to evolve and grow.
 - b. Research, thus, leads to more research
 6. Research is cyclical.
 - a. Research proceeds in stages and ends up back where it started; new questions emerge from answers to previous questions.

VI. Research as Culture

- A. Like any culture, research has its own language, rules, and social customs.
- B. Research Cultures: Researchers do not necessarily share the same worldview or the same assumptions about how people and communication should be studied.
 1. At the most general level, there are three such cultures: The physical sciences, humanities, and the social (human) sciences.
 - a. **Physical sciences:** Scholars study the physical and natural world.
 - b. **Humanities:** Scholars produce creative products and study the achievements of creative people.
 - c. **Social sciences:** Scholars apply scientific methods to the study of human behavior.
 2. Communication overlaps, in part, each of these three research cultures.
 3. Positivist versus Naturalistic research: Two major **paradigms**, or worldviews, characterize social-scientific research.
 - a. The **positivist paradigm** is essentially concerned with how to apply some of the methods used in the physical sciences to the study of human behavior.
 - b. The **naturalistic paradigm** is essentially concerned with the development of methods that capture the socially constructed and situated nature of human behavior.
 4. Key differences between the positivist and naturalistic paradigms in terms of five basic assumptions that have important implications for the research process (see Figure 1.4).
 - a. *Ontological assumption:* Proponents of the positivist paradigm see reality as *singular* and *objective*; proponents of the naturalistic paradigm contend that there are *multiple realities* that are constructed between and among people (intersubjective).
 - b. *Epistemological assumption:* Proponents of the positivist paradigm see this relationship as *independent*, in the sense that what is to be known is independent of any researcher per se; proponents of the naturalistic paradigm believe that the researcher is *interdependent* with that which is being studied in that what can be known depends on who’s doing the knowing.
 - c. *Axiological assumption:* Proponents of the positivist paradigm believe that research can be *value-free* and *unbiased*; proponents of the naturalistic paradigm argue that research is inherently *value-laden* and *biased*.
 - d. Methodological assumption
 - i. Research conducted from the positivist paradigm generally tends to use *deduction*, moving

from the general to the specific; searches for *cause and effect* relationships between variables; typically uses a *static design* in which the specific research procedures are all worked out ahead of time and the researcher sticks to that plan carefully and conscientiously; most often conducted within a *researcher-controlled setting*, a setting created and controlled by a researcher; typically uses *quantitative methods*, research methods that focus on the collection of data in the form of meaningful numbers; yields *context-free generalizations*, conclusions that can be generalized to people, situations, and time periods other than the ones studied; and allow researchers to *explain, predict, and control* phenomena.

- ii. Research conducted from the naturalistic paradigm tends to use *induction*, moving from the specific (the evidence) to the general (tentative explanations); goal is to gain a *wholistic understanding* of the patterns and behaviors that characterize human beings; uses an *emergent design*, planning out the research, but then taking advantage of opportunities that present themselves during the research process; conduct research in the natural setting, rely primarily on *qualitative methods*, research methods that focus on the acquisition of data that take the form of symbols other than meaningful numbers; yield *context-bound findings*, findings that apply to the particular people, situation or time period studied; and provide a rich *understanding* of that social context and, in some cases, serve the purpose of promoting social change.
- e. *Rhetorical assumption*: Positivist research reports tend to have a *formal structure* and are written in an *impersonal (third-person)* voice in line with the view of research as an *objective* endeavor; naturalistic research reports tend to have an *informal structure* and include the *personal (first-person)* voice of the researcher.

VII. Research as Conversation

A. Research can be thought of as a form of conversation.

1. There are conversations that take place between researchers and the people (or texts) they study; the nature of that conversation is shaped, in part, by the paradigm that researchers adopt and the specific methods they employ.
2. There are conversations that take place between researchers and a variety of other audiences: colleagues in the field, grant application, gatekeepers of publication outlets, general public, research participants, conversations among research participants, and conversations at the public level.

VIII. The Importance of Distinguishing Research from Pseudoresearch

- A. If we are to become competent consumers of research, we must be able to distinguish research from pseudoresearch and just plain bad research because we are being exposed every day to more and more research findings, and it is getting hard to separate the valid information from that which is not.
1. To the extent that we are ignorant of the way research is produced, and the many potential problems that can jeopardize the validity of research findings, we have no basis for accepting or rejecting research-based claims and evidence.
- B. The inability to differentiate valid from invalid research-based information is having some terrible effects at the societal level.
1. **Pseudo-research** or **junk science** looks, smells, and tastes like real science, but it isn't.
 - a. Federal rules of evidence essentially opened the door for anyone with some minimum qualifications, such as a college degree, to be an expert.
 - b. So-called junk scientists, whose theories, methods, and procedures sound valid to the naive listener but are not considered so by scientists in the field can now be hired to testify (some of even said "hired to lie") as expert witnesses.
 - c. Stopping the spread of false information is not just the responsibility of individual scientists, the

media, the government, and the courts—it is everybody’s business.

IX. Conclusion

- A. If we are to be knowledgeable and critical consumers of research, we must understand the processes used to conduct it.
- B. To do that, we have to learn about the research culture—its assumptions about how the world works, the various methods employed, and the rules of conduct to be followed.
- C. Once we know the code of research conversations, we have a better chance of distinguishing valid from invalid information.