

**Table 1. Comparison of Quantitative and Qualitative Characteristics**

Quantitative Research	Qualitative Research
<b>Assumptions:</b> <ul style="list-style-type: none"> <li>• One objective reality</li> <li>• Inquiry is value free</li> <li>• Quantifiable measurement</li> </ul>	<b>Assumptions</b> <ul style="list-style-type: none"> <li>• Multiple subjective realities</li> <li>• Inquiry is value-bound</li> <li>• Quality interpretation</li> </ul>
<b>Role of Researcher:</b> <ul style="list-style-type: none"> <li>• Objective observer</li> <li>• Objective description</li> </ul>	<b>Role of Researcher:</b> <ul style="list-style-type: none"> <li>• Participant</li> <li>• Empathic understanding</li> </ul>
<b>Goals:</b> <ul style="list-style-type: none"> <li>• Situation-free generalization</li> <li>• Prediction</li> </ul>	<b>Goals:</b> <ul style="list-style-type: none"> <li>• Contextualization</li> <li>• Situational Interpretation</li> </ul>
<b>Approaches:</b> <ul style="list-style-type: none"> <li>• Positivism</li> <li>• Induction and deduction</li> <li>• Objective instrument</li> <li>• Data reduced to numerical indices</li> <li>• Pre-planned design</li> </ul>	<b>Approaches:</b> <ul style="list-style-type: none"> <li>• Constructivism</li> <li>• Induction</li> <li>• Researcher as instrument</li> <li>• Uses non-numerical description</li> <li>• Emergent design</li> </ul>

tion. Usually, the researcher (1) moves from a general idea to a narrower topic, (2) develops a methodology to approach the topic, (3) collects data or begins field work, (4) analyzes data or observations, (5) interprets results and (6) draws conclusions. In this process, the researcher is faced with a series of decisions about how to proceed. Here are the basic steps of research:

1. Identify a research topic
2. Conduct a literature review
3. Select a research design
4. Collect the data
5. Analyze data
6. Draw conclusions
7. Report results
8. Replicate the study

Let's look at each step.

**Identifying a Research Topic** First, you need a research idea to begin with. Simply getting started is a problem for many researchers. Sometimes they don't know whether the research topic is feasible or not. Sometimes they get an idea, but they wonder if it is a valid one or if it has been researched thoroughly already. To start this process, it is always a good idea to pick a topic that you are interested in. Research is a long and demanding process. If you don't have intrinsic in-

18  
terest in the topic, it can be a pain.

Research ideas can come from a variety of sources. They can come from practical problems in the field. For example, you wonder if crawls, or running captions, on the TV screen distract viewers from viewing the main program. You can conduct a study to compare a program with crawls to one without crawls.

Ideas can also come from your own reading. Many instructors, for example, use media violence to demonstrate media effects. One day after reading scores of articles on violence, you may notice that many point out that the effects of violence vary depending on whether it's the villain or the hero who commits the violence. You want to follow up on the idea that if a hero uses force to solve problems, it actually has far more detrimental effects than if the violence is committed by a villain. But then you wonder if such an idea can be applied in a comedy program. You may be thinking that the context has something to do with effects, that in a comical, light-hearted situation, violence is seen more as a technique to induce drama. So you might conduct a study in which you manipulate two variables — the violence perpetrator and the context — to investigate the influence of media violence on children's imitation behaviors.

Research ideas can also come from your own curiosity. By the time you take this course, you are probably in your junior or senior year. You have observed that university professors have vastly different styles of teaching and communicating ideas and concepts. You are curious about which style of communication, a more personal approach versus a more formal approach, is more conducive to learning. You can interview professors to ask why they adopt one style over another and what some of the motivations behind certain styles are.

An effective approach to finding a research idea is to begin with a general topic and then let your background reading lead you to a specific idea. Most people are quite ambitious when they start research. The key is to narrow down your topic so it's manageable. It is good that you want to solve the world's problems. But we need to do it one at a time.

After you develop a research idea, the next step is to do a systematic literature review. Research does not and should not exist in isolation. Each study should build on previous knowledge and try to expand that knowledge. Literature reviews and how to do them are explained in Chapter 6 of this book. In short, the goal in conducting a literature review is to locate relevant studies that define the current state of knowledge in a particular area and to identify a gap in the area that your study can fill.

#### Conducting a Literature Review

The next step is to select a research strategy, or select a method. Choosing a research strategy means to decide on the general approach you will take to study your research question or approach your hypotheses. This is the focus of a research methods course.

There are many methods, or tools, from which to choose, as you will learn from the following chapters of this book. The choice of a method is usually determined by the type of question asked and other feasibility constraints such as time and budget.

#### Selecting a Research Design

If it's a question about causal effects, such as the imitation of violent behav-

## The Nature and Purpose of Research

For you are better served by using the experimental method. If the research is about TV audience members' use of talk shows for political information, you will probably need to conduct a survey. If you are interested in how newsmen make editorial decisions, you can use intensive interviews with editors.

The choices for methods are also limited by ethical and practical constraints. Some researchers, for example, would love to be able to test if long-time exposure to television is indeed causing today's children to have a short attention span. To test the idea, you might want to subject some children to long hours of television while subjecting others to limited exposure so you can measure their attention span. But it wouldn't be ethical to ask children to watch three hours of TV a day.

**Collecting Data** Now that you have a design or a strategy, the next logical step is to conduct the study. At this point you should have decided on whom or what to study and what concepts and instruments to use, and how they are defined. If so, you are ready to make observations, or to collect data. Different methods have different observation techniques, and you should choose appropriate ones.

Regardless of the method, you will probably accumulate volumes of observations, which may not be immediately interpretable. You might spend six months in a CBS newsroom observing decision-making, and you may have dozens of field notes. A historical study may require months of collecting sources. In an experiment using physiological data to study people's reaction to media, you will have hours of data measuring viewers' skin conductance and heart rates. You may have conducted dozens of intensive interviews with community journalists to assess their ethics, and so forth. What you need at this point is to process the data and transform it for qualitative or quantitative analysis.

**Analyzing Data and Drawing Conclusions** When the collected data are in a form suitable for interpretation, you are ready to analyze the data for the purpose of drawing conclusions about your research questions or hypotheses. There are many options available to analyze data, depending again on the method you use. Sometimes analysis may take just a few minutes. At other times it may take a few months if the study design is really complicated and the data requires massive transformation. Some results may not make sense. If so, it is prudent to step back and examine if there are peculiarities to the data. At this time, it is also a good idea to examine further whether your results are pertinent to the questions you are studying (internal validity) and whether they can be generalized to a larger setting (external validity).

As you attempt to draw conclusions from your analysis, you need to be judicious. Your creative juices should be flowing, but your conclusions must always be reasonable within the context of the data you have gathered and analyzed.

**Reporting Results** When we discussed the characteristics of systematic research, we said that it is public, which means the results of your study should be written and shared with the scholarly community and/or the general public. This is usually accomplished in a research report or paper describing what has been studied, how it is studied and what is found, and how the findings are interpreted. Re-

search results are reported so that they become part of the literature on that particular topic expanding knowledge and enabling others to build on them to answer future questions and pose new research ideas.

In addition to contributing knowledge, reporting your study also enables others to replicate or refute your study by following your procedures. We can't stress enough that one study does not prove anything. It merely provides evidence to support a claim. Only when results consistently repeat themselves can we be more certain that we are arriving at some sort of truth. Replication therefore is the last, but not the least important step in a research phase. So the circle will continue, making the accumulation of knowledge possible.

Replicating the Study

TO LEARN MORE

Bauer, H. H. (1992). *Scientific literacy and the myth of the scientific method*. Champaign, IL: University of Illinois Press.

Becker, H. S. (1996). *The epistemology of qualitative research*. Chicago: The University of Chicago Press.

Hendricks, V. (2006). *Mainstream and formal epistemology*. New York: Cambridge University Press.

Holiday, A. R. (2007). *Doing and writing qualitative research*. London: Sage Publications.

Hughes, J. (1990). *The philosophy of social research*. White Plains, NY: Longman.

Lemos, N. (2007). *An introduction to the theory of knowledge*. New York: Cambridge University Press.

Peat, F. D. (2002). *From certainty to uncertainty: The story of science and ideas in the twentieth century*. Washington D.C.: National Academies Press.

REFERENCES

Galinsky, A. D., Stone, J., & Cooper, J. (2000). The reinstatement of dissonance and psychological discomfort following failed affirmation. *European Journal of Social Psychology*, 30 (1), 123-147.

Gettner, G., Gross, L., Morgan, M., Signorielli, N., and Jackson-Beeck, M. (1979). The demonstration of power: Violence profile No. 10. *Journal of Communication*, 29, 177-196.

Hatton, J. & Plouffe, P. B. (1996). *Science and its ways of knowing*. NJ: Benjamin Cummings.

Kuhn, T. (1977). *The essential tension: Selective studies in scientific tradition and change*. Chicago: University of Chicago Press.

Lombard, M. & Ditton, T. (1997). At the heart of it all: The concept of presence. *Journal of Computer-Mediated Communication*, 3(2).

Reichert, T. (2013). *The erotic history of advertising*. Amherst, NY: Prometheus Books.

This cha  
came to  
1990 but  
were de  
Then  
pirical n  
from ap  
method  
be subje  
that can  
Thes  
They pr  
commu  
be balat  
method  
Emp  
plines.  
)  
adapted  
fore con  
of the r  
while s  
naires. C  
especial  
agenda.  
have be  
educati  
without  
applied

By Dennis K. Davis  
Pennsylvania State U