Training the Next Generation of Media Researchers

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The next generation of media researchers should be trained more as data analysts and less as statisticians. Knowledge of the appropriate statistical technique is useful only when researchers can determine relevant research topics and frame meaningful research questions. In addition, the next generation of researchers should (a) appreciate both quantitative and qualitative methods, (b) know how to conduct research using the Internet, and (c) understand meta-analytic techniques.

As we state in our text, research is an attempt to discover something (Wimmer & Dominick, 2003). A researcher is a person who isolates a relevant topic, develops a methodology to collect data, and interprets the results. The mechanics of this simple process, however, have changed significantly since the first edition of our text, Mass Media Research: An Introduction, was published in 1982. For example, the first edition did not have a chapter on qualitative methods. A chapter entitled “Computers and Research” discussed how to use paper punch cards and card readers. Answering machines and caller ID were not yet challenges for telephone surveys; Nielsen “peoplemeters” and Arbitron Personal People Meters were not yet...
invented. In addition, personal computers were rare in 1982, and only the most advanced PCs had 20-MB hard drives. Finally, not surprisingly, there was no mention of the Internet.

We appreciate the opportunity given to us by *Mass Communication and Society* to offer our thoughts about the skills necessary for the next generation of mass media researchers. However, it is important for us to state up front that our more than 20 years in mass media research have taught us that a mass media researcher should operate more as a data analyst (one interested primarily in application) and less as a statistician (one interested primarily in theory). Certainly, there is merit in developing statistical algorithms and understanding the intricacies of these algorithms, but the need in mass media research education has been, and will continue to be, to teach students how to develop relevant questions and hypotheses, how to use statistical methods, and how to interpret the data the methods produce.

Although some researchers might argue this point, we feel that with one exception discussed later, there is little difference in teaching students who plan to enter the world of academic research and students who wish to enter the world of private sector research. With that in mind, we discuss what the next generation of researchers will need to know.

**PERSPECTIVES**

Mass media research can be taught from three different perspectives: (a) theory (statistician), (b) application (data analyst), and (c) a combination of theory and application. Our experience shows that the combination approach is best to prepare students to use the information outside the classroom.

So how are we doing as teachers? From a broad perspective, it appears that we ought to be doing a better job. We checked the most recent *Iowa Guide* for acceptance rates in 13 scholarly journals that publish mass communication research (including such publications as *Newspaper Research Journal, Journal of Communication, Journal of Broadcasting & Electronic Media, Journalism and Mass Communication Quarterly*, etc.). Acceptance rates for these 13 journals ranged from 10% to 40% with an average acceptance of 20% (Dyer, 1998). One way to interpret this number is to conclude that about 80% of the research articles submitted by mass media scholars do not warrant publication.

We recognize that equating publication acceptance with merit is debatable because manuscripts are rejected for a variety of reasons: They are inappropriate to the journal in question, journal resources are finite and only a certain number of articles can be published, and many promotion and tenure committees and perhaps an editor or two believe that acceptance rates are inversely related to a journal’s prestige. However, even considering these factors, it still appears that a great deal of mass media research fails to meet minimum publication standards.
How can we improve this performance? We have been fortunate over the years to serve as journal editors, journal reviewers, and referees for competitive papers. Our experience suggests that the main reason many submitted articles are not published or many papers are not selected for presentation is a lack of a compelling justification for conducting the research in the first place. (This is why we ask students, “So what?” when they propose a topic for a class project, a thesis, or a dissertation.) For example, when the first author was editor of the *Journal of Broadcasting*, one of the first manuscripts he received for review was entitled “The Radio Listening Habits of Iowa Farmers.” The article was well written, the methods were appropriate, and the analysis was fine. What was lacking was a clear rationale (So what?) that explained why anyone should be interested in the radio listening habits of this group of Iowa farmers. (This is not to say that such a research topic lacks merit, but rather that it is up to the author to provide some good reason as to why the subject is important.)

Research can be justified in a number of ways—theoretical, social, professional, and methodological—and the next generation of researchers must be made more aware of this relevancy obligation. Emphasizing relevancy of research topics will, it is hoped, curtail the tendency to collect data simply because it is easy to do so or because the research topic merely “seems interesting.”

We suggest that mass media research teachers should spend more time on issues of conceptualization—the whole research process, not just defining certain variables used in the study. Research courses too often focus on measurement and statistical tools—the statistician is emphasized rather than the data analyst. Although examining the assumptions behind statistical methodologies is important, it is also important (we might even say more important) to address strategic questions. For example, research courses should (a) explore the meaning, relevance, and value of research topics; (b) determine how best to phrase a research question or hypothesis; and (c) determine the best way to answer the question or test the hypothesis. This foundation will then allow teachers to focus on the best way to collect relevant data and how to interpret the data. Statistical expertise matters little if researchers cannot determine which questions are worth asking and how best to answer them.

Next, we join those who call for a detente between qualitative and quantitative researchers (Page, 2000). We urge teachers to emphasize methodological pluralism and emphasize the strengths and merits of each technique rather than their shortcomings. A research approach should be chosen because it is the most appropriate to answer the question; ideological sniping accomplishes little good. Although each technique starts from seemingly irreconcilable philosophical positions, it is best to consider how each technique functions from a “division of labor” perspective (Sil, 2000). We say this because, in reality, the only real difference between qualitative and quantitative research is how questions are asked: Qualitative research uses a flexible approach; quantitative research uses a more rigid approach.

If nothing else, new researchers should understand the language and concerns of each research technique. It is important to avoid dividing researchers into
separate research camps that cannot communicate with one another even though they have the same interests. Having said this, however, we agree with Reeves’s (1992) contention that researchers ought not try to be Renaissance methodologists and become experts in all research approaches. Not only is that task impossible, but as Reeves (1992) pointed out, “Approaches gain from differences, and the differences are most apparent when the methods have full-time advocates” (p. 238).

Another necessity for future researchers is to understand how to conduct secondary data analysis. The increasing number of databases available on the Internet constitutes a valuable resource for mass media researchers. All too often, valuable research data are collected and only receive cursory evaluation. There are “information goldmines” waiting for talented researchers to explore. Many of these sites have data that cover a number of years and many use national random samples. For example, the General Social Survey (www.icpsr.umich.edu/GSS/) reports data on a host of variables that might be of interest to media researchers. The National Election Studies (www.umich.edu/~nes/) contains data on media use and a number of political variables. To use sources such as these efficiently, future researchers should be able to perform some basic tasks such as working with codebooks, constructing a spreadsheet, downloading data from a Web site to the spreadsheet, and analyzing the data. Although secondary analysis has its shortcomings, it still represents a source of countless research ideas and important contributions to the advancement of our knowledge of the mass media.

Meta-analysis is yet another research technique that will deserve more attention in the future. Simply put, meta-analysis uses statistical procedures that bring together experimental and correlational results across independent studies about a related set of research questions. Meta-analysis procedures can be complicated, but there are several software applications, some available on the Web, that can make the job easier. Meta-analysis offers a powerful tool for synthesizing research and providing the big picture of an area. The field is now at the point where many separate research studies have investigated a similar topic: agenda setting, media violence, and cultivation analysis, to name a few. Meta-analyses of these areas have been helpful, and the technique should be even more helpful in the future.

Next, as is true in almost all research areas, future researchers should be trained to use the Internet as a research device. Obviously, researchers should know how to use the Internet as an information-gathering tool. It is also obvious that the Internet will become one of the most popular data-gathering approaches. Currently, numerous surveys, panels, focus groups, and experiments gather data over the Web. New researchers must be taught the skills necessary to carry out all of these various techniques using the Internet. The Internet has become so pervasive that all mass media research students should know how to do the following:

1. Search for available domain names.
2. Purchase a domain name.
3. Understand the basics of HTML and JavaScript and use software such as Dreamweaver and FrontPage to develop Web pages and questionnaires and to retrieve data.

4. Use Web site upload software such as CuteFTP.

5. Use Internet access servers such as NTT/Verio to accomplish even the most complicated research tasks.

THE LANGUAGE OF RESEARCH

There is a continuing need for mass media research teachers to eliminate the mystique of research—the mystique that creates fear in the minds of students who are new to research. This is not difficult to accomplish because most of the mystique relates to the language of research, concepts and terms that sound strange to the novice—terms like standard deviation, analysis of variance (ANOVA), beta weights, and multiple regression.

We contend that a major problem with understanding research is learning the language of the field. When the language is clear, research becomes a much easier topic to discuss. For example, a concept like standard deviation can create problems for many students, but it can become easier if explained in a slightly different way. Students who have difficulty with standard deviation seem to understand the concept more quickly if they are told something like, “Standard deviation is an important concept that will come into play in many areas of research. The concept of standard deviation may be easier to understand if we use two different words—average difference. Standard deviation is simply the average difference each score or element is from the mean of the data set.

Most mass media research teachers know all the research language and can create fear in the minds of their students by saying things like, “The number 1 appears often in research. For example, it is important in matrix algebra and in identifying an identity matrix. It shows up again with eigenvalues in factor analysis with Kaiser’s Normal Varimax rotation and also in the interpretation of significant canonical correlation roots.”

What? Confusing students with the language of research is easy to do. What isn’t so easy is to explain these complicated sounding terms in easy-to-understand ways. That, we feel, is one of the goals of teaching the next generation of mass media research students.

Research students must understand the concept of simplicity (Occam’s Razor—“The simplest approach is usually the best”). Mass media research teachers can provide this necessary information by using their classrooms as a model. Teachers need to demystify research and demonstrate how to discover something worth discovering without creating a lot of confusion.
THE PRIVATE SECTOR

Although research hardware and software have changed in private sector research at the same pace as in the academic sector, the needs for researchers in the private sector have not changed much in the past 20 years, and there is no indication that these needs will change in the future.

What are these needs? In reality, conducting research and presenting results in the private sector encompass the same skills taught to first-year research students. The vast majority of decision makers in private sector research understand very little about research procedures, the tenets of scientific research, or anything in statistics beyond a mean.

The major difference between academic sector and private sector research is how data are summarized and presented. Academic research reports and studies require such things as a justification for conducting the research, a detailed literature review to establish the current study’s relevancy to previous work, and often a long discussion about the protection of respondents’ (participants’) welfare and rights.

These items are rarely discussed in private sector research. A researcher’s key to success in private sector research is the ability to explain research terms and concepts in simple terms. (Academic researchers could also profit from this skill.) There is no insinuation here that private sector clients are ignorant. That is far from the truth. However, what is true is that most private sector clients do not have an exposure to research terms and concepts, and it is important to simplify explanations. When these basic explanations are provided, clients quickly learn how to analyze and interpret the results on their own.

CONCLUSION

During our 20-plus years of teaching and writing about research and working in the academic and private sectors, one problem has consistently emerged for research students at all levels: Many students do not know how to use the research methods and approaches they were taught in school. They know terms, concepts, and statistical procedures, but they do not know how to use this information in practical applications.

For example, our experience shows that although most students who take mass media research courses understand some basic statistical methods, many have difficulty framing a question or problem and figuring out what to do. Is this a “good” topic? What’s the “best” research design to investigate this question? Should I use focus groups? A telephone study? How should I analyze the data? A t test? Analysis of variance? Factor analysis?
For the most part, they are stumped. They are not stumped in their knowledge of research. They are stumped in the area of application. They are stumped in proceeding as data analysts. And that is where the future of mass media research education leads—to the training of new researchers to ask worthwhile questions, to use research methods appropriately, and to report the results in simple terms.

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REFERENCES


