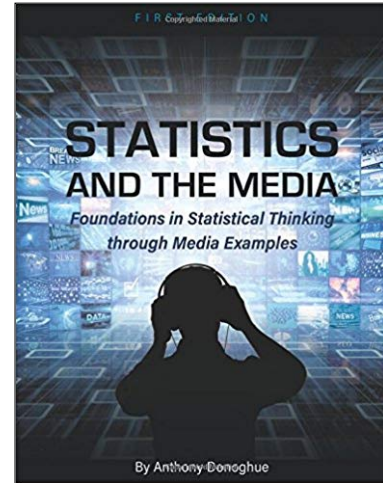


Anthony Donoghue, **Statistics and the Media: Foundations in Statistical Thinking through Media Examples**, 2017, San Diego, CA: Cognella Academic Publishing, 230 pp., \$61.95 (paperback).

Reviewed by
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Statistics and the Media: Foundations in Statistical Thinking through Media Examples was primarily written with three purposes. First, it presents the fundamental concepts of statistical thinking and reasoning to a broader audience, in a concise and engaging narrative, assuming minimal background and sophistication in mathematics. The author made the content statistically challenging and rigorous but in language such that the potential reader could easily grasp the material. In other words, readers can relate to the use of statistical methods and reasoning in the media in a most practical manner. Additionally, the author implemented a step-by-step approach into the problem-solving process both deductively (from effect to cause) and inductively (from cause to effect) through various real-world and relevant examples to make the content interesting while remaining intellectually stimulating and challenging in all aspects. Second, this book helps media professionals to become “intelligent consumers of scientific literature,” and to make them think analytically. To the best of my knowledge, it is one of very few books that successfully fulfill such an impossible task by the author’s careful construction of so-called *evidence-based statistics* approach. Given the current concern about the state of research in the field of journalism and the media, this book does an admirable job of fostering an understanding of statistical methods and reasoning. The author contends (rightly) that this will be “mind expanding” for researchers, practitioners, and students, and quite suitable for the social sciences as a whole. And third, this helps researchers and practitioners gain scientific literacy and multiperspective way of interpreting the results. In my opinion, this is the essence of evidence-based statistics. The author did an excellent job on this particular mission.



Statistics and the Media is the best applied statistics book that I have come across in 30 years in this field. The material is presented with style and depth, and is written in a clear, explanatory way. The author provides the first truly excellent text in the area of study. The book covers the philosophical and logical foundations of statistical reasoning, scientific literacy, research methods, statistical methods, and core statistical concepts by providing a simplified schema for classifying statistical/research designs. Demonstrating systematic calculation approach of commonly used statistical tests certainly makes readers feel less apprehensive and anxious toward the subject matter.

The book covers an overview of the nature of statistical thinking and reasoning behind the methods, and discusses the reasons for statistical/scientific inquiry. The relevance of problem-solving skills (especially the chapter on probability) to actual practice is stressed. Additionally, the author presents the basics and challenge of originating a research question; the key steps in planning and designing a research study in the area of the social sciences (such as polling and surveys), from identifying a topic to recording

measurements (central tendency, consistency, and dispersions); the application of descriptive statistics to data; the fundamentals of probability theory; and inferential statistics. Throughout the book, the author provides a perfect integration of research methods with statistical reasoning by illustrating the various kinds of relevant examples from actual studies. Pedagogically speaking, I found it one of the strongest features of the book, and one that distinguishes this book from other competitors. Additionally, the price of this paperback book is reasonable, and the book design is visually captivating.

Several features make this book accessible and reader friendly. Specifically, 1) the book begins with teaching students how to go above and beyond the news headlines to the source of research—the journal articles—and use their critical and statistical skills to determine the quality of research for themselves; 2) the book maintains the highest degree of accuracy and academic (media) integrity to interpret the results in an accurate manner; and (3) the author's writing clearly explains the underlying logic and rationales behind the statistical formulas and interpretation of the results. The writing skill shown in the book is clear, concise, and well delivered to a great variety of audiences.

I would certainly recommend, without any reservations, the use of this book in an undergraduate or graduate course on research and statistical methods in the social sciences. It would also be an excellent text for researchers (including mathematically inclined scholars), practitioners, and those who are interested in the practical use of statistical methods and reasoning in the media (novices, amateurs, and professionals), those who are considering embarking on a research project, or those who are evaluating research findings relevant to their practice in the media. The book, in my view, may become not only one of the most widely used academic texts but may also prove to be the Bible of social sciences methodology.