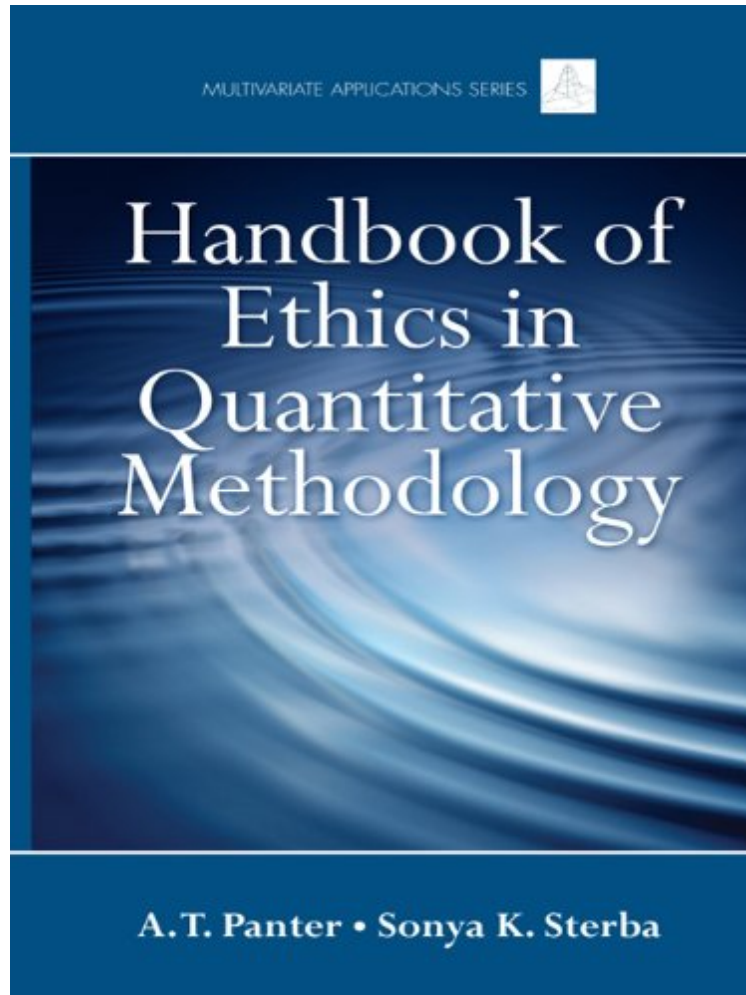


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Handbook of Ethics in Quantitative Methodology (Multivariate Applications Series)

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From Routledge : Handbook of Ethics in Quantitative Methodology (Multivariate Applications Series) before purchasing it in order to gauge whether or not it would be worth my time, and all praised Handbook of Ethics in Quantitative Methodology (Multivariate Applications Series):

2 of 5 people found the following review helpful. Review of Chapter 4 By Paul R. Yarnold, Ph.D. Review of Chapter 4, A Statistical Guide for the Ethically Perplexed, by Hubert and Wainer. Periodically I check for citations to my book, Optimal Data Analysis (APA Books, 2004), so that I can prepare an update including recent citations. I came across this chapter and I have brief comments. First, Simpson's Paradox represents perhaps the most significant challenge to all empirical research, and deserves thorough coverage. Instead, treatment of this crucial topic in this chapter is incomplete and obsolete, ignoring recent theoretical (e.g., Yarnold, P.R., Characterizing and circumventing Simpson's

paradox for ordered bivariate data, *Educational and Psychological Measurement*, 56, 1996, 430-442) and empirical (e.g., Soltysik, R.C., Yarnold, P.R., The use of unconfounded climatic data improves atmospheric prediction, *Optimal Data Analysis*, 1, 2010, 67-100) work which solves the problem. Second, the Chapter concludes by complaining about the name of a new statistical paradigm, called Optimal Data Analysis, the only statistical methodology which identifies statistical models--for any data configuration--which explicitly maximize accuracy (i.e., the number of correct classifications). For all models derived using this paradigm, exact Type I error is computed, as is jackknife validity (among a host of validity indices). The name "optimal" derives from the roots of this paradigm--the field of operations research. In operations research, when the best (most accurate) possible model is identified, the result is called the optimal solution. This is a tradition of the field. These authors complain that the word optimal implies that other methods are less than optimal. Any model which explicitly finds the maximum solution IS optimal, and any other model IS suboptimal, by definition. This is made obvious in the book which they criticize. To conclude their chapter by warning-off others, in the absence of knowledge or understanding of the subject matter is an unethical act. Alternatively, if the authors were aware of their lack of standing, then to end the chapter with such discussion is an unethical act. In my mind this calls into question the thoroughness and validity of prior work by these authors, as well as the professionalism of the reviewers of this chapter. Of course, it is the editor who must in the end be held culpable. Paul R. Yarnold, Ph.D. CEO, Optimal Data Analysis

This comprehensive Handbook is the first to provide a practical, interdisciplinary review of ethical issues as they relate to quantitative methodology including how to present evidence for reliability and validity, what comprises an adequate tested population, and what constitutes scientific knowledge for eliminating biases. The book uses an ethical framework that emphasizes the human cost of quantitative decision making to help researchers understand the specific implications of their choices. The order of the Handbook chapters parallels the chronology of the research process: determining the research design and data collection; data analysis; and communicating findings. Each chapter: Explores the ethics of a particular topic; Identifies prevailing methodological issues; Reviews strategies and approaches for handling such issues and their ethical implications; Provides one or more case examples; Outlines plausible approaches to the issue including best-practice solutions. Part 1 presents ethical frameworks that cross-cut design, analysis, and modeling in the behavioral sciences. Part 2 focuses on ideas for disseminating ethical training in statistics courses. Part 3 considers the ethical aspects of selecting measurement instruments and sample size planning and explores issues related to high stakes testing, the defensibility of experimental vs. quasi-experimental research designs, and ethics in program evaluation. Decision points that shape a researcher's approach to data analysis are examined in Part 4; when and why analysts need to account for how the sample was selected, how to evaluate tradeoffs of hypothesis-testing vs. estimation, and how to handle missing data. Ethical issues that arise when using techniques such as factor analysis or multilevel modeling and when making causal inferences are also explored. The book concludes with ethical aspects of reporting meta-analyses, of cross-disciplinary statistical reform, and of the publication process. This Handbook appeals to researchers and practitioners in psychology, human development, family studies, health, education, sociology, social work, political science, and business/marketing. This book is also a valuable supplement for quantitative methods courses required of all graduate students in these fields.

"A timely book that fills a notable void; highlighting ethical issues that arise in applying quantitative techniques. Leading researchers have written engaging chapters that probe matters often given less-than-adequate emphasis. A must read for graduate students and professionals alike." - Keith F. Widaman, University of California at Davis, USA "The editors have assembled an impressive panel of contributors. This timely treatment of an important topic is sure to have a prominent place on the shelf of anyone who mentors graduate students or serves as a statistical consultant." - Linda M. Collins, The Pennsylvania State University, USA "This remarkable volume brings together experts who write about best-practice use of quantitative methods that will promote competence and therefore ethical use of these methods. I consider this Handbook to be essential reading for researchers who aim to demonstrate their integrity in the post-modernist era of science." - Patrick E. Shrout, New York University, USA "An original and informative volume that is filled with good advice to help make better choices about research design, data analysis, and the communication of research findings." - Debbie S. Moskowitz, McGill University, Canada "This book could be one of the most exciting to emerge in our field for many years, and could set the stage for a whole movement of attention toward treatment of ethical issues in Quantitative Psychology." - Joe Rodgers, University of Oklahoma, USA "The faulty identification or failure to identify risk factors, treatments, and adverse events is consequential for the people we treat. If the fault is the result of outmoded methods that could be avoided, there is an ethical issue. ... This book will be one of a kind. ... I will require this book in my intro graduate statistics class." - William F. Chaplin, St. John's University, USA "There is need to draw on an ethical framework to motivate the accelerated use of the newer or most appropriate methods. In fact, this may be a key ingredient in [preventing] social scientists from being dismissive of the need to understand issues in their methods classes. ... As a resource for journal editors and other quantitatively oriented researchers, this book would be of general interest." - Scott M. Hofer,

University of Victoria, Canada nbsp; About the Author A.T. Panter is the Bowman and Gordon Gray Distinguished Professor of Psychology at the L. L. Thurstone Psychometric Laboratory at University of North Carolina, Chapel Hill. She develops instruments, research designs, and data-analytic strategies for applied research questions in health and education. Her publications are in survey methodology, measurement and testing, advanced quantitative methods, program evaluation, and individual differences. She has received numerous teaching awards including APA's Jacob Cohen Award for Distinguished Contributions to Teaching and Mentoring. She has significant national service in disability assessment, testing in higher education, women in science, and the advancement of quantitative psychology. Sonya K. Sterba is an Assistant Professor in the Quantitative Psychology Program at Vanderbilt University. She received her Ph.D. in Quantitative Psychology and her M.A. in Child Clinical Psychology from the University of North Carolina at Chapel Hill. Her research evaluates how traditional structural equation and multilevel models can be adapted to handle methodological issues that arise in developmental psychopathology research. nbsp; nbsp;