# Applied Survey Data Analysis (Chapman Hall/CRC Statistics in the Social and Behavioral Sciences)

*Steven G. Heeringa, Brady T. West, Patricia A. Berglund*
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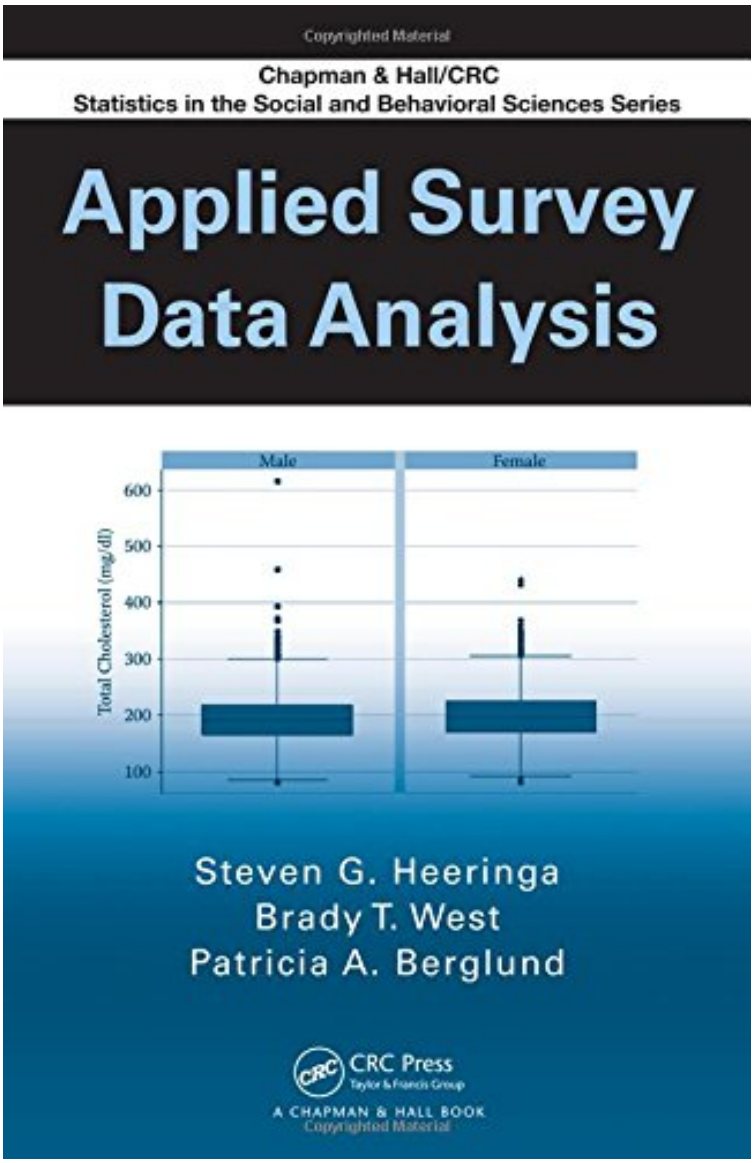




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**Steven G. Heeringa, Brady T. West, Patricia A. Berglund : Applied Survey Data Analysis (Chapman Hall/CRC Statistics in the Social and Behavioral Sciences)** before purchasing it in order to gage whether or not it would be worth my time, and all praised Applied Survey Data Analysis (Chapman Hall/CRC Statistics in the Social and Behavioral Sciences):

8 of 9 people found the following review helpful. Very useful for NHANESBy SophiaI bought this book in preparation for analyzing NHANES data for the first time.To give an idea of my background: My formal biostatistics training is quite limited to what I got through experience on different research projects and through medical school. I use Stata 12 in a very basic way, and this was the first project using a large dataset that I did my own analysis for from start to finish. I've worked with weighted survey data before, but another statistician was doing all the actual coding.I thought this book was pretty balanced between theory and practical issues. A lot of the theory was over my head, but certain parts were extremely illuminating and useful to read through. They do specify at least two semester of graduate level statistics or something like that as a prerequisite, but obviously I don't have that and I still found the book useful. The real value of the book lies in its numerous and detailed examples. The authors actually use NHANES data (and other national datasets) to work through their examples. They walk you through many different types of analyses, include multiple linear regression, multiple logistic regression, etc. Many of these examples are very detailed, and they build the whole model step-by-step and explain the rationale behind each step and decision. The book is extremely well organized, so that by flipping through the table of contents you can immediately find the relevant section for what you want to do with the data, read through the example, and apply the Stata code directly to your own analysis.NHANES does have tutorials about how to work through their data; although I also found those to be useful and essential, I think that this book is superior because it does give more background about why you need to run certain types of analyses and tests rather than others.I can't believe my university library didn't have this book--I think it's a totally worthwhile purchase for anyone preparing to work with large national datasets.8 of 9 people found the following review helpful. Simply a Great BookBy Dennis HansemanApplied Survey Data Analysis (ASDA) is a crystal-clear survey of modern techniques for analyzing complex survey data. Note the word "analyzing". This is not a text on sampling methods per se. Rather, it is a guide to using existing data sets that result from a complex survey design that employs weighting, clustering, and stratification. The authors demonstrate how a correct analysis should be undertaken. In doing so, they review descriptive statistics, categorical methods, regression analysis (linear and logistic), survival analysis, and multiple imputation. Most examples use Stata, but some are in SAS.The level of mathematical sophistication is not high, although "theory boxes" are interspersed to add additional detail. Anyone who is challenged by the mathematical level of this book probably should not be working with survey data in the first place.In sum, this is an important -- and very well written -- contribution to the literature on survey data analysis.1 of 1 people found the following review helpful. THE book to have if analyzing complex surveysBy Eclectic ReaderThis is my "go to" book for survey data analysis. I used it to learn to analyze complex surveys (BRFSS, MCBS, NHANES, HRS), got my lab to buy it and the data analyst also found it quite useful. A good mixture of theory and practical application which I used for both SAS and STATA. I still refer back to it if I have a practical question or if I need to explain the "why" of something related to complex survey analysis to someone else. I have had interactions with one of the authors who was very helpful.Cannot really comment on their R code since I have not used it for that. (I do think conceptually it is much better than Lumley's book on complex survey analysis in R.)

Taking a practical approach that draws on the authors extensive teaching, consulting, and research experiences, Applied Survey Data Analysis provides an intermediate-level statistical overview of the analysis of complex sample survey data. It emphasizes methods and worked examples using available software procedures while reinforcing the principles and theory that underlie those methods. After introducing a step-by-step process for approaching a survey analysis problem, the book presents the fundamental features of complex sample designs and shows how to integrate design characteristics into the statistical methods and software for survey estimation and inference. The authors then focus on the methods and models used in analyzing continuous, categorical, and count-dependent variables; event history; and missing data problems. Some of the techniques discussed include univariate descriptive and simple bivariate analyses, the linear regression model, generalized linear regression modeling methods, the Cox proportional hazards model, discrete time models, and the multiple imputation analysis method. The final chapter covers new developments in survey applications of advanced statistical techniques, including model-based analysis approaches. Designed for readers working in a wide array of disciplines who use survey data in their work, this book also provides a useful framework for integrating more in-depth studies of the theory and methods of survey data analysis. A guide to the applied statistical analysis and interpretation of survey data, it contains many examples and practical exercises based on major real-world survey data sets. Although the authors use Stata for most examples in the text, they offer SAS, SPSS, SUDAAN, R, WesVar, IVEware, and Mplus software code for replicating the examples on the books website: http://www.isr.umich.edu/src/smp/asda/

the authors do an admirable job of striking a balance between statistical theory and practical advice and analysis. The authors provide excellent coverage of each aspect of the survey analysis process This book is an excellent general resource and if the reader is left wanting on a topic the authors never fail to provide an ample set of citations and references to a wide variety of notable texts on the topic in question. an excellent and helpful addition to the desk of any analyst, researcher, or student with a general background in statistics who is dealing with the special challenges

and demands of complex survey data.Gregory Holyk, Journal of Official Statistics, Vol. 27, 2011 Overall, the book is clearly written and easy to follow, and well equipped with real data examples and a book website. The program codes used in the example are also available, mostly written in Stata. I like the presentations with real survey examples and, in particular, the unified four-step approach to the regression analysis in different models. Anyone working on survey data analysis would find the book very helpful and instructive. The book website seems to be a good complement, with additional resources on this book.Jae-Kwang Kim, The American Statistician, November 2011 The book is well-written by authors who have over 60 years of combined teaching and consultation experience in survey methodology and research techniques. It is excellent for reference, with 12 structured chapters coherently organised, providing intermediate-level statistical overview of techniques used in analysing complex survey data. It provides analysts with a framework of how to plan and conduct analysis of survey data, familiarise with terminologies used and understand common complex sample design features of clustering, stratification and weighting. it is an excellent reference book for Stata users and the accompanying website provides useful resources and updated information. I feel that the book seamlessly links theory with practical applications of the statistical methods and helps the reader to develop an understanding of the framework of thinking required to effectively analyse complex survey data sets. E.C. Abraham, AQMeNtion Newsletter, April 2011 there is a wealth of instruction here. The writing style is expansive, keeping mathematics in check, and the material is well organized clearly into appropriate sections. I think that the book would serve any budding survey practitioner well: armed with the knowledge and practical skills covered herein, plus some real-life experience of course, one could reasonably claim to be well qualified in the subject.International Statistical (2010), 78, 3About the AuthorSteve G. Heeringa is a research scientist in the Survey Methodology Program, the director of the Statistical and Research Design Group in the Survey Research Center, and the director of the Summer Institute in Survey Research Techniques at the University of Michigans Institute for Social Research. Brady T. West is a doctoral student and research assistant in the Survey Research Center at the University of Michigans Institute for Social Research. He is also a statistical consultant in the Center for Statistical Consultation and Research. Patricia A. Berglund is a senior research associate in the Youth and Social Indicators Program and Survey Methodology Program in the Survey Research Center at the University of Michigans Institute for Social Research.