Multivariable Modeling and Multivariate Analysis for the Behavioral Sciences (Chapman Hall/CRC Statistics in the Social and Behavioral Sciences)

Brian S. Everitt
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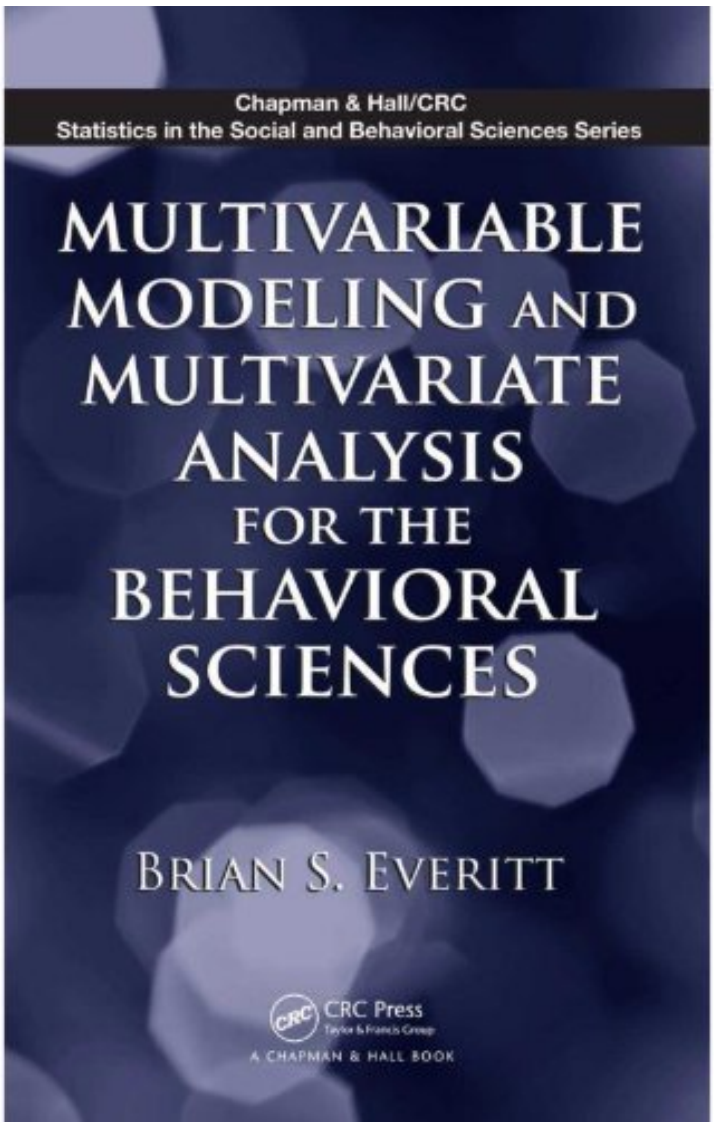

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Brian S. Everitt : Multivariable Modeling and Multivariate Analysis for the Behavioral Sciences (Chapman Hall/CRC Statistics in the Social and Behavioral Sciences) before purchasing it in order to gage whether or not it would be worth my time, and all praised Multivariable Modeling and Multivariate Analysis for the Behavioral Sciences (Chapman Hall/CRC Statistics in the Social and Behavioral Sciences):

0 of 0 people found the following review helpful. A Tasting Menu for Multivariate AnalysisBy Romann M. WeberI seem to have fallen into the habit of collecting books on multivariate analysis and modeling, many of which, I have to admit, get only a perfunctory leafing through before I move on to something else. Everitt's work, on the other hand, got a thorough cover-to-cover going over, thanks in large part for his gift for exposition. In short, it is one of the more readable and engaging books on the subject that I've come across.This is not to say that the book is perfect for all levels of readership (which, to be fair, it does not claim to be). There are a few errors to be found in my printing, mostly typographical, although a careful reading should make them easy to move past. The coverage is admirably broad, but the choice to keep the book short and easily digestible means that significant depth had to be sacrificed. Everitt is careful to include pointers to the relevant literature to fill in the gaps, but those hoping for a completely self-contained volume may not welcome the hunt for details elsewhere. Even so, the level of coverage seems about right for the audience suggested by the book's title, so this minor complaint should be taken with a grain of salt.In all, I would say the plan of this book provides roughly three-star coverage of MVA material given the price point, but the quality of Everitt's exposition warrants an extra star. For those intending to be serious practitioners, it should not be the only book on the subject that you own, but it could serve you well as one of the first you pick up.1 of 1 people found the following review helpful. A clear exposition of multivariable modellingBy Dr. Chuck ChakrapaniMultivariable Modeling and Multivariate Analysis for the Behavioral Sciences by Brian Everitt is a second-level applied statistics book aimed at those who need to build simple models in behavioural sciences. The book provides varied sets of real-world data so the reader can gain insights as to how these models are relevant to solving real life problems.The book starts with a chapter on data, measurement and models. While most books treat the first chapter as a warm-up to what is to come, Everitt reminds us here of some very important but often neglected principles such as the limitations of significance tests, the importance of highlighting the aspects of the data that are relevant to the substantive arguments, the significance of experiments and the relevance of power in choosing the sample size. The exercises reinforce the principles discussed with the help of real-world problems.The second chapter is a preliminary look at the data using graphic methods. Here the author illustrates the use of less widely used graphics such as dot plots, leaf and box plots, probability plots, and various scatter plots, followed by a brief discussion of how graphs can be used to mislead the reader. While these techniques have been widely known, the graphic capabilities of R make them much more accessible. The graphic techniques are discussed in the context of making sense of the data under consideration.The next three chapters describe locally weighted linear regression, simple linear regression and its equivalence to ANOVA. This is followed by logistic regression, survival analysis, and linear mix models for longitudinal analysis.The four chapters that follow deal with the structure of multivariate data using interdependent models such a principal components analysis, factor analysis, and cluster analysis. The final chapter presents methods to analyze multivariate data drawn from several different populations.In his exposition, Everitt separates the technical aspects from the practical aspects of models. Because technical aspects are presented in self-contained sections, non-technical self-study readers can follow the material without getting bogged down in formulas. Widely available statistical packages such as SAS, SPSS and Systat make it possible for nontechnical readers to implement the models described. For those who don't have access to such packages Everitt provides codes in R language, which of course is free. For those who want actual data so they practice what they learnt, several data sets are made available in a companion website. Solutions to selected problems appear at the end, which includes R codes to implement many of the techniques described in the book.Clarity and conciseness have always been the hallmarks of Everitt's writing. This book is no exception. Anyone looking for a clearly written text on the subject that is also practitioner-oriented needs to look no further.

Multivariable Modeling and Multivariate Analysis for the Behavioral Sciences shows students how to apply statistical methods to behavioral science data in a sensible manner. Assuming some familiarity with introductory statistics, the book analyzes a host of real-world data to provide useful answers to real-life issues.The author begins by exploring the types and design of behavioral studies. He also explains how models are used in the analysis of data. After describing graphical methods, such as scatterplot matrices, the text covers simple linear regression, locally weighted regression, multiple linear regression, regression diagnostics, the equivalence of regression and ANOVA, the generalized linear model, and logistic regression. The author then discusses aspects of survival analysis, linear mixed effects models for longitudinal data, and the analysis of multivariate data. He also shows how to carry out principal components, factor, and cluster analyses. The final chapter presents approaches to analyzing multivariate observations from several different populations.Through real-life applications of statistical methodology, this book elucidates the implications of behavioral science studies for statistical analysis. It equips behavioral science students with enough statistical tools to help them succeed later on in their careers. Solutions to the problems as well as all R code and data sets for the examples are available at www.crcpress.com

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Chakrapani, Journal of the Royal Statistical Society, Series A, 2012 hellip; a clear, well-orchestrated guide to multivariate statistics for the post-graduate and professional behavioural scientist who possesses basic statistical knowledge. hellip; Everitt successfully crafts a well-integrated introductory text that obviates potential difficulties by including real problems and their data sets. hellip; the bookrsquo;s applied orientation introduces the behavioural scientist to both the use and rudimentary understanding of multivariate techniques. hellip; The book would also serve well as a training guide for the practitioner less experienced in multivariate techniques. hellip;?Psychometrika, June 2010 hellip; The first two chapters give a magnificent introduction before approaching the modeling issues. Especially the second chapter, which shows how to look at data, is among the best I have ever seen in books on multivariate methods. hellip; He also goes well beyond the typical graphs showing how to explore real insights of the data. hellip; the book is extremely easy to browse and read. hellip; Putting the R code in an appendix and on the website is an excellent choice. hellip; the huge experience of the author hellip; makes the presentation so clear and understandable. Irsquo;ll be happy to recommend this book to students and researchers.?International Statistical , 2010About the AuthorBrian S. Everitt is Professor Emeritus at Kingrsquo;s College, London, UK.