#### **Brief contents**

- 1 Getting started
- 2 Entering data
- 3 Preparing data for analysis
- 4 Working with commands, do-files, and results
- 5 Descriptive statistics and graphs for one variable
- 6 Statistics and graphs for two categorical variables
- 7 Tests for one or two means
- 8 Bivariate correlation and regression
- 9 Analysis of variance
- 10 Multiple regression
- 11 Logistic regression
- 12 Measurement, reliability, and validity
- 13 Working with missing values—multiple imputation
- A What's next?

#### What's new in this edition

- Additions to the ANOVA chapter
- \* Performing mean comparisons with the pwmeans command
- \* Constructing graphs showing interaction effects with the marginsplot command
- Updated screenshots of menus, dialogs, and interface
- Updated for Stata 12

#### A Gentle Introduction to Stata, Revised Third Edition



By Alan C. Acock

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#### About the author

Alan Acock is a sociologist and a University Distinguished Professor in the School of Social and Behavioral Health Sciences at Oregon State University. He also holds the Knudson Chair for Family Research. Alan was recognized as an Alumni Distinguished Professor based on his work with students. He has published more than 130 articles in leading journals across the social and behavioral sciences, including Structural Equation Modeling, Psychological Bulletin, Multivariate Bebavioral Research, Journal of Gerontology, Journal of Adolescence, American Journal of Public Health, American Sociological Review, Journal of Marriage and Family, Social Forces, Drug and Alcohol Dependence, Educational and Psychological Measurement, Journal of Politics, Prevention Science, American Journal of Preventive Medicine, and many others. With this broad experience, Acock brings examples from a variety of disciplines.

#### About the book

A Gentle Introduction to Stata, Revised Third Edition is for people who need to learn Stata but who may not have a strong background in statistics or prior experience with statistical software packages. After working through this book, you will be able to enter, build, and manage a dataset, and perform fundamental statistical analyses. This book is organized like the unfolding of a research project. You begin by learning how to enter and manage data and how to do basic descriptive statistics and graphical analysis. Then you learn how to perform standard statistical procedures from t tests, nonparametric tests, and measures of association through ANOVA, multiple regression, and logistic regression. Readers who have experience with another statistical package may benefit more by reading chapters selectively and referring to this book as needed.

### Comment from the Stata technical group

Alan C. Acock's *A Gentle Introduction to Stata, Revised Third Edition* is aimed at new Stata users who want to become proficient in Stata. After reading this introductory text, new users not only will be able to use Stata well but also will learn new aspects of Stata easily.

Acock assumes that the user is not familiar with any statistical software. This assumption of a blank slate is central to the structure and contents of the book. Acock starts with the basics; for example, the portion of the book that deals with data management begins with a careful and detailed example of turning survey data on paper into a Stata-ready dataset on the computer. When explaining how to go about basic exploratory statistical procedures, Acock includes notes that will help the reader develop good work habits. This mixture of explaining good Stata habits and good statistical habits continues throughout the book.

Acock is quite careful to teach the reader all aspects of using Stata. He covers data management, good work habits (including the use of basic do-files), basic exploratory statistics (including graphical displays), and analyses using the standard array of basic statistical tools (correlation, linear and logistic regression, and parametric and nonparametric tests of location and dispersion). Acock teaches Stata commands by using the menus and dialog boxes while still stressing the value of do-files. In this way, he ensures that all types of users can build good work habits. Each chapter has exercises that the motivated reader can use to reinforce the material.

The tone of the book is friendly and conversational without ever being glib or condescending. Important asides and notes about terminology are set off in boxes, which makes the text easy to read without any convoluted twists or forward-referencing. Rather than splitting topics by their Stata implementation, Acock arranges the topics as they would appear in a basic statistics textbook; graphics and postestimation are woven into the material in a natural fashion. Real datasets, such as the General Social Surveys from 2002 and 2006, are used throughout the book.



The focus of the book is especially helpful for those in psychology and the social sciences, because the presentation of basic statistical modeling is supplemented with discussions of effect sizes and standardized coefficients. Various selection criteria, such as semipartial correlations, are discussed for model selection.

The revised third edition of the book has been updated to reflect the new features available in Stata 12 and Stata 11. The ANOVA chapter has been revised to incorporate the pwmeans command, to do mean comparisons, and the marginsplot command, which simplifies the construction of graphs showing interaction effects. Menus and screenshots have also been updated. As in the third edition, an entire chapter is devoted to the analysis of missing data and the use of multiple-imputation methods. Factor-variable notation is introduced as an alternative to the manual creation of interaction terms. The new Variables Manager and revamped Data Editor are featured in the discussion of data management.