Spss For Beginners

This text is designed to teach beginners how to use SPSS for Windows. The author explains the basics of SPSS, including: the input of data; data manipulation; descriptive analyses; and inferential techniques. T-tests, analysis of variance, and factor analysis are also covered.

SPSS (Statistical Package for the Social Sciences) is a data management and analysis software that allows users to generate solid, decision-making results by performing statistical analysis This book provides just the information needed: installing the software, entering data, setting up calculations, and analyzing data Covers computing cross tabulation, frequencies, descriptive ratios, means, bivariate and partial correlations, linear regression, and much more Explains how to output information into striking charts and graphs For ambitious users, also covers how to program SPSS to take their statistical analysis to the next level

This book offers a quick and basic guide to using SPSS and provides a general approach to solving problems using statistical tests. It is both comprehensive in terms of the tests covered and the applied settings it refers to, and yet is short and easy to understand. Whether you are a beginner or an intermediate level test user, this book will help you to analyse different types of data in applied settings. It will also give you the confidence to use other statistical software and to extend your expertise to more specific scientific settings as required. The author does not use mathematical formulae and leaves out arcane statistical concepts. Instead, he provides a very practical, easy and speedy introduction to data analysis, offering examples from a range of scenarios from applied science, handling both continuous and rough-hewn data sets. Examples are given from agriculture, arboriculture, biology, computer science, ecology, engineering, farming and farm management, hydrology, medicine, ophthalmology, pharmacology, physiotherapy, spectroscopy, sports science, audiology and epidemiology.

Bridging an understanding of Statistics and SPSS. This unique text helps students develop a conceptual understanding of a variety of statistical tests by linking the ideas learned in a statistics class from a traditional statistics textbook with the computational steps and output from SPSS. Each chapter begins with a student-friendly explanation of the concept behind each statistical test and how the test relates to that concept. The authors then walk through the steps to compute the test in SPSS and the output, clearly linking how the SPSS procedure and output connect back to the conceptual underpinnings of the test. By drawing clear connections between the theoretical and computational aspects of statistics, this engaging text aids students' understanding of theoretical concepts by teaching them in a practical context.

A new edition of this best-selling introductory book to cover the latest SPSS versions 8.0 - 10.0 This book is designed to teach beginners how to use SPSS for Windows, the most widely used computer package for analysing quantitative data. Written in a clear, readable and non-technical style the author explains the basics of SPSS including the input of data, data manipulation, descriptive analyses and inferential techniques, including; - creating using and merging data files - creating and printing graphs and charts - parametric tests including t-tests, ANOVA, GLM - correlation, regression and factor analysis - non parametric tests

and chi square reliability - obtaining neat print outs and tables - includes a CD-Rom containing example data files, syntax files, output files and Excel spreadsheets.

"IBM SPSS Statistics 27 Step by Step takes a straightforward, step-by-step approach that makes SPSS software clear to beginners and experienced researchers alike. Extensive use of four-color screen shots, clear writing, and step-by-step boxes guide readers through the program. Output for each procedure is explained and illustrated, and every output term is defined. New to this edition: -Full coverage of the 11 new procedures for power analysis -Effect sizes included throughout Bubble charts in chapter 5 -Bayesian statistics"--

The dynamic, student focused textbook provides step-by-step instruction in the use of R and of statistical language as a general research tool. It is ideal for anyone hoping to: Complete an introductory course in statistics Prepare for more advanced statistical courses Gain the transferable analytical skills needed to interpret research from across the social sciences Learn the technical skills needed to present data visually Acquire a basic competence in the use of R. The book provides readers with the conceptual foundation to use applied statistical methods in everyday research. Each statistical method is developed within the context of practical, real-world examples and is supported by carefully developed pedagogy and jargon-free definitions. Theory is introduced as an accessible and adaptable tool and is always contextualized within the pragmatic context of real research projects and definable research questions. Author Robert Stinerock has also created a wide range of online resources, including: R scripts, complete solutions for all exercises, data files for each chapter, video and screen casts, and interactive multiple-choice quizzes.

Quantitative Methods for Second Language Research introduces approaches to and techniques for quantitative data analysis in second language research, with a primary focus on second language learning and assessment research. It takes a conceptual, problem-solving approach by emphasizing the understanding of statistical theory and its application to research problems while paying less attention to the mathematical side of statistical analysis. The text discusses a range of common statistical analysis techniques, presented and illustrated through applications of the IBM Statistical Package for Social Sciences (SPSS) program. These include tools for descriptive analysis (e.g., means and percentages) as well as inferential analysis (e.g., correlational analysis, t-tests, and analysis of variance [ANOVA]). The text provides conceptual explanations of quantitative methods through the use of examples, cases, and published studies in the field. In addition, a companion website to the book hosts slides, review exercises, and answer keys for each chapter as well as SPSS files. Practical and lucid, this book is the ideal resource for data analysis for graduate students and researchers in applied linguistics.

The SPSS Survival Manual throws a lifeline to students and researchers grappling with this powerful data analysis software. In her bestselling guide, Julie Pallant takes you through the entire research process, helping you choose the right data analysis technique for your project. This edition has been updated to include up to SPSS version 26. From the formulation of research questions, to the design of the study and analysis of data, to reporting the results, Julie discusses basic and advanced statistical techniques. She outlines each technique clearly, with step-by-step procedures for performing the analysis, a detailed guide to interpreting data output and an example of how to present the results in a report. For both beginners and experienced users in Psychology, Sociology, Health Sciences, Medicine, Education, Business and related disciplines, the SPSS Survival Manual is an essential text. It is illustrated throughout with screen grabs, examples of output and tips, and is

also further supported by a website with sample data and guidelines on report writing. This seventh edition is fully revised and updated to accommodate changes to IBM SPSS procedures.

IBM SPSS Statistics 26 Step by Step: A Simple Guide and Reference, sixteenth edition, takes a straightforward, step-by-step approach that makes SPSS software clear to beginners and experienced researchers alike. Extensive use of four-color screen shots, clear writing, and step-by-step boxes guide readers through the program. Output for each procedure is explained and illustrated, and every output term is defined. Exercises at the end of each chapter support students by providing additional opportunities to practice using SPSS. This book covers the basics of statistical analysis and addresses more advanced topics such as multi-dimensional scaling, factor analysis, discriminant analysis, measures of internal consistency, MANOVA (between- and within-subjects), cluster analysis, Log-linear models, logistic regression and a chapter describing residuals. Back matter includes a description of data files used in exercises, an exhaustive glossary, suggestions for further reading and a comprehensive index. IMB SPSS Statistics 26 Step by Step is distributed in 85 countries, has been an academic best seller through most of the earlier editions, and has proved invaluable aid to thousands of researchers and students. New to this edition: Screenshots, explanations, and step-by-step boxes have been fully updated to reflect SPSS 26 How to handle missing data has been revised and expanded and now includes a detailed explanation of how to create regression equations to replace missing data More explicit coverage of how to report APA style statistics; this primarily shows up in the Output sections of Chapters 6 through 16, though changes have been made throughout the text.

R is a powerful and free software system for data analysis and graphics, with over 5,000 add-on packages available. This book introduces R using SAS and SPSS terms with which you are already familiar. It demonstrates which of the add-on packages are most like SAS and SPSS and compares them to R's built-in functions. It steps through over 30 programs written in all three packages, comparing and contrasting the packages' differing approaches. The programs and practice datasets are available for download. The glossary defines over 50 R terms using SAS/SPSS jargon and again using R jargon. The table of contents and the index allow you to find equivalent R functions by looking up both SAS statements and SPSS commands. When finished, you will be able to import data, manage and transform it, create publication quality graphics, and perform basic statistical analyses. This new edition has updated programming, an expanded index, and even more statistical methods covered in over 25 new sections.

IBM SPSS Statistics 23 Step by Step: A Simple Guide and Reference, 14e, takes a straightforward, step-by-step approach that makes SPSS software clear to beginners and experienced researchers alike. Extensive use of vivid, four-color screen shots, clear writing, and step-by-step boxes guide readers through the program. Exercises at the end of each chapter support students by providing additional opportunities to practice using SPSS. All datasets used in the book are available for download at: https://www.routledge.com/products/ 9780134320250

This supplementary book for the social, behavioral, and health sciences helps readers with no prior knowledge of IBM® SPSS® Statistics, statistics, or mathematics learn the basics of SPSS. Designed to reduce fear and build confidence, Basic SPSS Tutorial by Manfred te Grotenhuis and Anneke Matthijssen guides readers through point-and-click sequences using clear examples from real scientific research and invites them to replicate the findings. Relevant outcomes are provided for reference, and exercises at the end of Chapters 2 – 5 provide additional practice. After reading the book and using the program, readers will come away with a basic knowledge of the most commonly used procedures in statistics.

A Handbook of Statistical Analyses Using SPSS clearly describes how to conduct a range of univariate and multivariate statistical analyses

using the latest version of the Statistical Package for the Social Sciences, SPSS 11. Each chapter addresses a different type of analytical procedure applied to one or more data sets, primarily from the social and behavioral sciences areas. Each chapter also contains exercises relating to the data sets introduced, providing readers with a means to develop both their SPSS and statistical skills. Model answers to the exercises are also provided. Readers can download all of the data sets from a companion Web site furnished by the authors.

Written in an easy-to-read, straightforward manner, Next Steps with SPSS introduces readers to intermediate and advanced SPSS skills. These skills are introduced and illustrated with sample programs designed to apply powerful techniques in data handling and analysis, with the output from these programs presented and interpreted. Throughout the book, Einspruch provides pedagogical aids for the reader, such as: - Detailed examples provide step-by-step illustrations of each step in a procedure - End-of-chapter exercises (with solutions provided in the Appendix) - Boldface text indicates operations or choices that the reader will need to make when running SPSS - Opening chapter `alerts' give readers a quick synopsis of what they will learn as well as the recommended SPSS skill level - Chapter glossaries provide readers with a list and definition of command words covered in the chapter

SPSS for BeginnersA Step-by-Step Guide to Learn about Statistical Data, Research Methods and Data Analysis Using the SPSS ProgramCharles Jesuseyitan Adebola

With an exciting new look, math diagnostic tool, and a research roadmap to navigate projects, this new edition of Andy Field's award-winning text offers a unique combination of humor and step-by-step instruction to make learning statistics compelling and accessible to even the most anxious of students. The Fifth Edition takes students from initial theory to regression, factor analysis, and multilevel modeling, fully incorporating IBM SPSS Statistics© version 25 and fascinating examples throughout. SAGE edge offers a robust online environment featuring an impressive array of free tools and resources for review, study, and further exploration, keeping both instructors and students on the cutting edge of teaching and learning. Course cartridges available for Blackboard and Moodle. Learn more at edge.sagepub.com/field5e Stay Connected Connect with us on Facebook and share your experiences with Andy's texts, check out news, access free stuff, see photos, watch videos, learn about competitions, and much more. Video Links Go behind the scenes and learn more about the man behind the book at Andy's YouTube channel Andy Field is the award winning author of An Adventure in Statistics: The Reality Enigma and is the recipient of the UK National Teaching Fellowship (2010), British Psychological Society book award (2006), and has been recognized with local and national teaching awards (University of Sussex, 2015, 2016).

This new edition of one of the most widely read textbooks in its field introduces the reader to data analysis with the most powerful and versatile statistical package on the market: IBM SPSS Statistics 19. Each new release of SPSS Statistics features new options and other improvements. There remains a core of fundamental operating principles and techniques which have continued to apply to all releases issued in recent years and have been proved to be worth communicating in a small volume. This practical and informal book combines simplicity and clarity of presentation with a comprehensive treatment of the use of IBM SPSS Statistics 19 for the description, exploration and confirmation of data. As in earlier editions, coverage has been extended to address the issues raised by readers since the previous edition. In this edition, there is an introduction to the Analysis of Covariance (ANCOVA). Each statistical technique is presented in a realistic research context and is fully illustrated with annotated screen shots of SPSS dialog boxes and output. The first chapter sets the scene with a survey of typical research situations, key terms and clear signposts to the location of each technique in the book. It also offers guidance on the choice of statistical techniques, and advice (based on the American Psychological Association’s guidelines) on how to report the results of a statistical

analysis. The next chapters introduce the reader to the use of SPSS, beginning with the entry, description and exploration of data. There is also a full description of the capabilities of the versatile Chart Builder. Each of the remaining chapters concentrates on one particular kind of research situation and the statistical techniques that are appropriate. In summary, IBM SPSS Statistics 19 Made Simple Gets you started with SPSS. Shows you how to describe and explore a data set with the help of SPSS's extensive graphics and data-handling menus. Helps you to choose appropriate statistical techniques. Warns you of pitfalls arising from the misuse of statistics. Shows you how to report the results of a statistical analysis. Shows you how to use Syntax to implement some useful procedures and operations. Introduces the reader to the analysis of covariance (ANCOVA) Has a comprehensive glossary. Is now presented in an attractive two-colour format. The book's accompanying website contains datasets for the chapters of the book, as well as a large body of exercises (with data sets), and notes on statistical terms. Instructor resources include a PowerPoint lecture course and Multiple-Choice Question tests, which are also available free of charge to lecturers adopting the book and their students. Please visit http://www.psypress.com/spss-made-simple for more details.

This practical book can be used as a supplementary text or as a self-help guide through which the reader can learn to use SPSS on their own, and at their own pace. The book uses statistics to teach the use of SPSS, by interacting with the software and learning by inquiry and discovery. Each chapter includes an introduction and list of objectives indicating what the reader will be able to do by the end of the chapter. Bulleted phrases provide step-by-step guidance as readers work through the exercises.

The fun and friendly guide to mastering IBM's Statistical Package for the Social Sciences Written by an author team with a combined 55 years of experience using SPSS, this updated guide takes the guesswork out of the subject and helps you get the most out of using the leader in predictive analysis. Covering the latest release and updates to SPSS 27.0, and including more than 150 pages of basic statistical theory, it helps you understand the mechanics behind the calculations, perform predictive analysis, produce informative graphs, and more. You'll even dabble in programming as you expand SPSS functionality to suit your specific needs. Master the fundamental mechanics of SPSS Learn how to get data into and out of the program Graph and analyze your data more accurately and efficiently Program SPSS with Command Syntax Get ready to start handling data like a pro—with step-by-step instruction and expert advice!

Do you want to get better, become efficient, and find new opportunities with this SPSS statistical tool? If your answer is yes, then this book will answer your questions about the SPSS program. This Statistical Analytic Tool is widely used in several fields, such as competitor analysis, surveys, market research, doctoral or Ph.D. research, business administration, and more. It is a flexible and all-inclusive data management and analysis tool that will help you access better and more detailed knowledge from your data. SPSS is one of the best statistical packages you will find around that performs very intricate data analysis and manipulation without stress. This guide will give you the basics needed for proficiency on any SPSS version. This book will help researchers and students to process and analyze data gotten from opinion polls, questionnaires, feasibility studies and other survey data. In this book, you will learn all you need to know about how to operate and navigate the SPSS statistics software. Scroll up and Click on the BUY NOW WITH 1-CLICK button to get this book.

Statistical data analysis package for the social sciences. Includes basic and advanced statistical routines, data management, plots, graphs, conjoint, correspondence, and stime series analysis routines and presentation tables. Includes online tutorial.

This book provides readers with a greater understanding of a variety of statistical techniques along with the procedure to use the most popular statistical software package SPSS. It strengthens the intuitive understanding of the material, thereby increasing the

ability to successfully analyze data in the future. The book provides more control in the analysis of data so that readers can apply the techniques to a broader spectrum of research problems. This book focuses on providing readers with the knowledge and skills needed to carry out research in management, humanities, social and behavioural sciences by using SPSS.

"Our goal is to give readers the knowledge and skill to use statistics effectively in their professional lives and feel comfortable doing so."--From the Preface This new textbook, by two renowned authors with many years of teaching experience, provides: A sound overview of statistical procedures and introduction to the basics of statistical analyses An informal perspective that enables students to read, interpret, and use statistics directly related to their chosen careers in the kinesiology field (e.g., exercise physiology, physical therapy, medicine, personal training, nurse practitioner, physician's assistant, and more) Relevant examples, review questions, practice problems, and SPSS activities, which help to make the material understandable and interesting A student website with videos, interactive concept reviews, image bank, and PowerPoint slides offers students the tools they need to understand the statistical concepts and learn at their own pace

SPSS syntax is the command language used by SPSS to carry out all of its commands and functions. In this book, Jacqueline Collier introduces the use of syntax to those who have not used it before, or who are taking their first steps in using syntax. Without requiring any knowledge of programming, the text outlines: - how to become familiar with the syntax commands; - how to create and manage the SPSS journal and syntax files; - and how to use them throughout the data entry, management and analysis process. Collier covers all aspects of data management from data entry through to data analysis, including managing the errors and the error messages created by SPSS. Syntax commands are clearly explained and the value of syntax is demonstrated through examples. This book also supports the use of SPSS syntax alongside the usual button and menu-driven graphical interface (GIF) using the two methods together, in a complementary way. The book is written in such a way as to enable you to pick and choose how much you rely on one method over the other, encouraging you to use them side-by-side, with a gradual increase in use of syntax as your knowledge, skills and confidence develop. This book is ideal for all those carrying out quantitative research in the health and social sciences who can benefit from SPSS syntax's capacity to save time, reduce errors and allow a data audit trail.

We live in a world where information takes on a life of its own and spreads rapidly. Faster than ever before. For some people, their lives depend on obtaining a steady stream of information as it affects their lives in the most telling ways. The daily news is the simplest example of this phenomenon. It is truly the lifeblood of society and helps us evolve into better informed individuals with every passing day.As one can tell, information on the whole comes at us from every direction. Its influence on business, politics, and government, banking, the STEM fields, and even the social sciences cannot be understated. But its journey begins with raw data being compiled by means of an experiment or study.In saying that, this book should serve as a reference guide for those who wish to go beyond the basics into territory that requires a solid understanding of advanced statistical concepts. Still, as a beginner, it will be wise to move forward with care so that you solidify your understanding before you begin to use these advanced methods.

Finally, even if the subject matter is a bit deep, don't be so serious that you forget to have fun with both the SPSS tool and the study of statistics on the whole.Having said that, let's get to crunching numbers without any further delay!

How to Use SPSS® is designed with the novice computer user in mind and for people who have no previous experience of using SPSS. Each chapter is divided into short sections that describe the statistic being used, important underlying assumptions, and how to interpret the results and express them in a research report. The book begins with the basics, such as starting SPSS, defining variables, and entering and saving data. It covers all major statistical techniques typically taught in beginning statistics classes, such as descriptive statistics, graphing data, prediction and association, parametric inferential statistics, nonparametric inferential statistics and statistics for test construction. More than 250 screenshots (including sample output) throughout the book show students exactly what to expect as they follow along using SPSS. The book includes a glossary of statistical terms and practice exercises. A complete set of online resources including video tutorials and output files for students, and PowerPoint slides and test bank questions for instructors, make How to Use SPSS® the definitive, field-tested resource for learning SPSS. New to this edition: Fully updated to SPSS 24 and IBM SPSS Statistics Cloud New chapter on ANOVA New material on inter-rater reliability New material on syntax Additional coverage of data entry and management

SPSS for Windows is the most widely used computer package for analyzing quantitative data. In a clear, readable, non-technical style, this book teaches beginners how to use the program, input and manipulate data, use descriptive analyses and inferential techniques, including: " t"-tests, analysis of variance, correlation and regression, nonparametric techniques, and reliability analysis and factor analysis. The author provides an overview of statistical analysis, and then shows in a simple step-by-step method how to set up an SPSS file in order to run an analysis as well as how to graph and display data. He explains how to use SPSS for all the main statistical approaches you would expect to find in an introductory statistics course. The book is written for users of Versions 6 and 6.1, but will be equally valuable to users of later versions.

The second edition features: a CD with all of the book's Amos, EQS, and LISREL programs and data sets; new chapters on importing data issues related to data editing and on how to report research; an updated introduction to matrix notation and programs that illustrate how to compute these calculations; many more computer program examples and chapter exercises; and increased coverage of factors that affect correlation, the 4-step approach to SEM and hypothesis testing, significance, power, and sample size issues. The new edition's expanded use of applications make this book ideal for advanced students and researchers in psychology, education, business, health care, political science, sociology, and biology. A basic understanding of correlation is assumed and an understanding of the matrices used in SEM models is encouraged.

Rather than focusing on SPSS menus and the graphic user interface, How to Use SPSS Syntax, by Manfred te Grotenhuis and Chris Visscher, focuses on the syntax rules in SPSS, a more encompassing approach that allows

readers to replicate statistical analyses by storing them in a file for future use. Practical, accessible, and highly focused, the book is brief, while still helping readers develop an in-depth understanding of the common syntax rules and commands. In every chapter, the authors clearly explain the syntax, show the main results, and include social science research examples and downloadable files that allow readers to follow along. Checks throughout the book help readers determine whether the syntax is used correctly.

Andy Field draws on his experience of teaching advanced statistics to extend existing SPSS windows texts to a higher level. He covers ANOVA, MANOVA, logistic regression, comparing means tests and factor analysis.

Do you need to conduct data analysis with SPSS but are unfamiliar with the software? This book will help you become a proficient SPSS (Version 7.5 for Windows 95) user by teaching you the fundamentals. The book covers the following critical basic skills: how to create data sets by defining and coding data, using a codebook and entering data; how to run SPSS and work with different SPSS files; how to manipulate data by recoding values, computing values, and selecting subsets of cases to include in an analysis; how to manage data files by reading data that have been entered using other software; how to append and merge files; how to analyze data using SPSS pull-down menus; and how to analyze data using programs written in SPSS syntax.

Comprehensively teaches the basics of testing statistical assumptions in research and the importance in doing so This book facilitates researchers in checking the assumptions of statistical tests used in their research by focusing on the importance of checking assumptions in using statistical methods, showing them how to check assumptions, and explaining what to do if assumptions are not met. Testing Statistical Assumptions in Research discusses the concepts of hypothesis testing and statistical errors in detail, as well as the concepts of power, sample size, and effect size. It introduces SPSS functionality and shows how to segregate data, draw random samples, file split, and create variables automatically. It then goes on to cover different assumptions required in survey studies, and the importance of designing surveys in reporting the efficient findings. The book provides various parametric tests and the related assumptions and shows the procedures for testing these assumptions using SPSS software. To motivate readers to use assumptions, it includes many situations where violation of assumptions affects the findings. Assumptions required for different non-parametric tests such as Chi-square, Mann-Whitney, Kruskal Wallis, and Wilcoxon signed-rank test are also discussed. Finally, it looks at assumptions in non-parametric correlations, such as bi-serial correlation, tetrachoric correlation, and phi coefficient. An excellent reference for graduate students and research scholars of any discipline in testing assumptions of statistical tests before using them in their research study Shows readers the adverse effect of violating the assumptions on findings by means of various illustrations Describes different assumptions associated with different

statistical tests commonly used by research scholars Contains examples using SPSS, which helps facilitate readers to understand the procedure involved in testing assumptions Looks at commonly used assumptions in statistical tests, such as z, t and F tests, ANOVA, correlation, and regression analysis Testing Statistical Assumptions in Research is a valuable resource for graduate students of any discipline who write thesis or dissertation for empirical studies in their course works, as well as for data analysts.

A concise introduction to data analysis for beginners and intermediate students using IBM - Statistical Package for Social Sciences (SPSS) The present book elaborates on the basic understanding and application of statistical tests and data analysis using hypothetical datasets and SPSS version 22.0. It enhances self-learning and develops thorough understanding of the concepts through step-by-step processes for quick comprehension, and screen images, dialog boxes and exhibits for better interaction with the software. Spanning across 17 chapters, Data Analysis Using SPSS begins from the stages of data entry and goes on till editing and data visualization. It takes the readers through descriptive statistics, frequency, univariate, bivariate and regression analysis, cross-tabulation, linear models, and non-parametric test procedures. This textbook will act as a helpful companion to students of management, humanities and social sciences, agriculture and life sciences, as well as young research scholars. Key Features: - Main and sub-dialog boxes of SPSS containing commands of specific test techniques incorporated in the text for effective interaction with the software - Exercises and practice questions to enhance analytical understanding - Addition chapters on Means Analysis, One-way ANOVA, and Probability and Sampling Distribution provided as web supplement for advance reading

IBM SPSS Statistics 25 Step by Step: A Simple Guide and Reference, fifteenth edition, takes a straightforward, step-by-step approach that makes SPSS software clear to beginners and experienced researchers alike. Extensive use of four-color screen shots, clear writing, and step-by-step boxes guide readers through the program. Exercises at the end of each chapter support students by providing additional opportunities to practice using SPSS. This book covers both the basics of descriptive statistical analysis using SPSS through to more advanced topics such as multiple regression, multidimensional scaling and MANOVA, including instructions for Windows and Mac. This makes it ideal for both undergraduate statistics courses and for postgraduates looking to further develop their statistics and SPSS knowledge. New to this edition: Updated throughout to SPSS 25 Updated / restructured material on: Chart Builder; Univariate ANOVA; moderation on two- and three-way ANOVA; and Factor Analytic Techniques (formerly Factor Analysis structure) New material on computing z and T scores, and on computing z scores within descriptive statistics Clearer in-chapter links between the type of data and type of research question that the procedure can answer Updated / additional datasets, exercises, and expanded Companion Website material, including Powerpoint slides for instructors