

Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques

Xiaofeng Steven Liu



Click here if your download doesn"t start automatically

Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques

Xiaofeng Steven Liu

Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques Xiaofeng Steven Liu

This is the first book to demonstrate the application of power analysis to the newer more advanced statistical techniques that are increasingly used in the social and behavioral sciences. Both basic *and* advanced designs are covered. Readers are shown how to apply power analysis to techniques such as hierarchical linear modeling, meta-analysis, and structural equation modeling. Each chapter opens with a review of the statistical procedure and then proceeds to derive the power functions. This is followed by examples that demonstrate how to produce power tables and charts. The book clearly shows how to calculate power by providing open code for every design and procedure in R, SAS, and SPSS. Readers can verify the power computation using the computer programs on the book's website. There is a growing requirement to include power analysis to justify sample sizes in grant proposals. Most chapters are self-standing and can be read in any order without much disruption. This book will help readers do just that. Sample computer code in R, SPSS, and SAS at www.routledge.com/9781848729810 are written to tabulate power values and produce power curves that can be included in a grant proposal.

Organized according to various techniques, chapters 1 - 3 introduce the basics of statistical power and sample size issues including the historical origin, hypothesis testing, and the use of statistical power in *t* tests and confidence intervals. Chapters 4 - 6 cover common statistical procedures -- analysis of variance, linear regression (both simple regression and multiple regression), correlation, analysis of covariance, and multivariate analysis. Chapters 7 - 11 review the new statistical procedures -- multi-level models, meta-analysis, structural equation models, and longitudinal studies. The appendixes contain a tutorial about R and show the statistical theory of power analysis.

Intended as a supplement for graduate courses on quantitative methods, multivariate statistics, hierarchical linear modeling (HLM) and/or multilevel modeling and SEM taught in psychology, education, human development, nursing, and social and life sciences, this is the first text on statistical power for advanced procedures. Researchers and practitioners in these fields also appreciate the book's unique coverage of the use of statistical power analysis to determine sample size in planning a study. A prerequisite of basic through multivariate statistics is assumed.

<u>Download</u> Statistical Power Analysis for the Social and Beha ...pdf

Read Online Statistical Power Analysis for the Social and Be ...pdf

Download and Read Free Online Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques Xiaofeng Steven Liu

From reader reviews:

Kathleen Owens:

Do you considered one of people who can't read pleasurable if the sentence chained within the straightway, hold on guys this kind of aren't like that. This Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques book is readable by you who hate the perfect word style. You will find the info here are arrange for enjoyable reading through experience without leaving perhaps decrease the knowledge that want to offer to you. The writer regarding Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques content conveys the thought easily to understand by many people. The printed and e-book are not different in the content but it just different in the form of it. So , do you nevertheless thinking Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques is not loveable to be your top checklist reading book?

Dana Hanley:

Reading a publication can be one of a lot of task that everyone in the world enjoys. Do you like reading book thus. There are a lot of reasons why people fantastic. First reading a e-book will give you a lot of new details. When you read a guide you will get new information mainly because book is one of various ways to share the information or perhaps their idea. Second, reading a book will make anyone more imaginative. When you studying a book especially fictional book the author will bring you to imagine the story how the people do it anything. Third, it is possible to share your knowledge to other folks. When you read this Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques, you are able to tells your family, friends and also soon about yours book. Your knowledge can inspire the mediocre, make them reading a e-book.

Julie Moore:

Playing with family in a very park, coming to see the ocean world or hanging out with close friends is thing that usually you will have done when you have spare time, and then why you don't try matter that really opposite from that. A single activity that make you not experiencing tired but still relaxing, trilling like on roller coaster you have been ride on and with addition associated with. Even you love Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques, you may enjoy both. It is fine combination right, you still want to miss it? What kind of hang type is it? Oh occur its mind hangout folks. What? Still don't buy it, oh come on its known as reading friends.

Judith Bryant:

Can you one of the book lovers? If yes, do you ever feeling doubt when you are in the book store? Make an effort to pick one book that you never know the inside because don't evaluate book by its deal with may doesn't work is difficult job because you are scared that the inside maybe not as fantastic as in the outside look likes. Maybe you answer is usually Statistical Power Analysis for the Social and Behavioral Sciences:

Basic and Advanced Techniques why because the fantastic cover that make you consider about the content will not disappoint you. The inside or content is fantastic as the outside as well as cover. Your reading sixth sense will directly assist you to pick up this book.

Download and Read Online Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques Xiaofeng Steven Liu #0FV7GIPN4RE

Read Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques by Xiaofeng Steven Liu for online ebook

Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques by Xiaofeng Steven Liu Free PDF d0wnl0ad, audio books, books to read, good books to read, cheap books, good books, online books, books online, book reviews epub, read books online, books to read online, online library, greatbooks to read, PDF best books to read, top books to read Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques by Xiaofeng Steven Liu books to read online.

Online Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques by Xiaofeng Steven Liu ebook PDF download

Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques by Xiaofeng Steven Liu Doc

Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques by Xiaofeng Steven Liu Mobipocket

Statistical Power Analysis for the Social and Behavioral Sciences: Basic and Advanced Techniques by Xiaofeng Steven Liu EPub