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Autore	Schumacker Randall
Titolo	Understanding Statistics Using R // by Randall Schumacker, Sara Tomek
Pubbl/distr/stampa	New York, NY : , : Springer New York : , : Imprint : Springer, , 2013
ISBN	1-4614-6227-4
Edizione	[1st ed. 2013.]
Descrizione fisica	1 online resource (296 p.)
Disciplina	519.502855133
Soggetti	Statistics R (Computer program language) Statistics and Computing/Statistics Programs Statistics for Social Sciences, Humanities, Law Statistics, general
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Includes index.
Nota di contenuto	R Fundamentals -- Probability -- Statistical Theory -- Frequency Distributions -- Central Tendency and Dispersion -- Statistical Distributions -- Hypothesis Testing -- Chi-Square Test -- z-test -- t-test -- F-test -- Correlation -- Linear Regression -- Replication of Results -- Synthesis of Findings -- Glossary -- Appendix -- Author Index -- Subject Index.
Sommario/riassunto	This book was written to provide resource materials for teachers to use in their introductory or intermediate statistics class. The chapter content is ordered along the lines of many popular statistics books so it should be easy to supplement the content and exercises with class lecture materials. The book contains R script programs to demonstrate important topics and concepts covered in a statistics course, including probability, random sampling, population distribution types, role of the Central Limit Theorem, creation of sampling distributions for statistics, and more. The chapters contain T/F quizzes to test basic knowledge of the topics covered. In addition, the book chapters contain numerous exercises with answers or solutions to the exercises provided. The chapter exercises reinforce an understanding of the statistical concepts presented in the chapters. An instructor can select any of the

supplemental materials to enhance lectures and/or provide additional coverage of concepts and topics in their statistics book. This book uses the R statistical package which contains an extensive library of functions. The R software is free and easily downloaded and installed. The R programs are run in the R Studio software which is a graphical user interface for Windows. The R Studio software makes accessing R programs, viewing output from the exercises, and graphical displays easier to manage. The first chapter of the book covers the fundamentals of the R statistical package. This includes installation of R and R Studio, accessing R packages and libraries of functions. The chapter also covers how to access manuals and technical documentation, as well as, basic R commands used in the R script programs in the chapters. This chapter is important for the instructor to master so that the software can be installed and the R script programs run. The R software is free so students can also install the software and run the R script programs in the chapters. Teachers and students can run the R software on university computers, at home, or on laptop computers making it more available than many commercial software packages. "As a professor who teaches research methods and advises master and doctoral students, I am often seeking practical resource materials that students can use in their research. This book provides easy to run R examples that allow students to pick and choose content that is relevant to their research. When students learn that the cost for running R is free, they are especially happy!" - Kim Nimon, University of North Texas "The authors have done a great job of providing resource materials an instructor can use when teaching a statistics course. Strengths of the book are the inclusion of R code, the addition of more than 60 script programs, and the online exercise materials for students. This book reflects the growing use of the mobile R software program for students who may not always have access to other statistical software packages housed on computers in a campus-based lab." - David Walker, Northern Illinois University .

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