Record Nr. UNINA9910971015203321 Autore Bakeman Roger Titolo Understanding statistics in the behavioral sciences / / by Roger Bakeman, Byron F. Robinson Mahwah, N.J., : Lawrence Erlbaum Associates, 2005 Pubbl/distr/stampa **ISBN** 9786612323805 9781282323803 1282323806 9781410612625 1410612627 Edizione [1st ed.] Descrizione fisica 1 online resource (380 pages) Altri autori (Persone) RobinsonByron F 150/.1/5195 Disciplina Soggetti Psychology - Statistical methods Social sciences - Statistical methods **Psychometrics** Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Description based upon print version of record. Nota di bibliografia Includes bibliographical references (p. 301-302) and indexes. Nota di contenuto Contents; Preface; 1 Preliminaries: How to Use This Book; 2 Getting Started: The Logic of Hypothesis Testing: 3 Inferring From a Sample: The Binomial Distribution; 4 Measuring Variables: Some Basic Vocabulary; 5 Describing a Sample: Basic Descriptive Statistics; 6 Describing a Sample: Graphical Techniques; 7 Inferring From a Sample: The Normal and t Distributions; 8 Accounting for Variance: A Single Predictor; 9 Bivariate Relations: The Regression and Correlation Coefficients; 10 Inferring From a Sample: The F Distribution; 11 Accounting for Variance: Multiple Predictors 12 Single-Factor Between-Subjects Studies 13 Planned Comparisons, Post Hoc Tests, and Adjusted Means; 14 Studies With Multiple Between-Subjects Factors: 15 Single-Factor Within-Subjects Studies: 16 Two-Factor Studies With Repeated Measures; 17 Power, Pitfalls, and Practical Matters; References; Glossary of Symbols and Key Terms; Appendix A: SAS exercises; Appendix B: Answers To Selected Exercises; Appendix C: Statistical Tables; Author Index; Subject Index

Understanding Statistics in the Behavioral Sciences is designed to help

Sommario/riassunto

readers understand research reports, analyze data, and familiarize themselves with the conceptual underpinnings of statistical analyses used in behavioral science literature. The authors review statistics in a way that is intended to reduce anxiety for students who feel intimidated by statistics. Conceptual underpinnings and practical applications are stressed, whereas algebraic derivations and complex formulas are reduced. New ideas are presented in the context of a few recurring examples, which allows readers to focus more on the new statistical concepts than on the details of different studies. The authors's election and organization of topics is slightly different from the ordinary introductory textbook. It is motivated by the needs of a behavioral science student, or someone in clinical practice, rather than by formal, mathematical properties. The book begins with hypothesis testing and then considers how hypothesis testing is used in conjunction with statistical designs and tests to answer research questions. In addition, this book treats analysis of variance as another application of multiple regression. With this integrated, unified approach, students simultaneously learn about multiple regression and how to analyze data associated with basic analysis of variance and covariance designs. Students confront fewer topics but those they do encounter possess considerable more power, generality, and practical importance. This integrated approach helps to simplify topics that often cause confusion. Understanding Statistics in the Behavioral Sciences features: Computer-based exercises, many of which rely on spreadsheets, help the reader perform statistical analyses and compare and verify the results using either SPSS or SAS. These exercises also provide an opportunity to explore definitional formulas by altering raw data or terms within a formula and immediately see the consequences thus providing a deeper understanding of the basic concepts. Key terms and symbols are boxed when first introduced and repeated in a glossary to make them easier to find at review time. Numerous tables and graphs, including spreadsheet printouts and figures, help students visualize the most critical concepts. This book is intended as a text for introductory behavioral science statistics. It will appeal to instructors who want a relatively brief text. The book's active approach to learning, works well both in the classroom and for individual self-study.