

1. Record Nr.	UNINA9910452609403321
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Titolo	Quantitative and statistical research methods [[electronic resource]] : from hypothesis to results / / William E. Martin, Krista D. Bridgmon
Pubbl/distr/stampa	San Francisco, : Jossey-Bass, 2012
ISBN	1-118-23457-X 1-280-99839-3 9786613770004 1-118-22075-7
Edizione	[1st ed.]
Descrizione fisica	1 online resource (498 p.)
Collana	Research methods for the social sciences ; ; 42
Altri autori (Persone)	BridgmonKrista D. <1979->
Disciplina	150.72/7
Soggetti	Psychology - Methodology Social sciences - Methodology Electronic books.
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 and index.
Nota di contenuto	Quantitative and Statistical Research Methods: From Hypothesis to Results; Contents; Tables and Figures; Preface; Acknowledgments; The Authors; Chapter 1: Introduction and Overview; Review of Foundational Research Concepts; Independent, Dependent, and Extraneous Variables; Scales of Measurement of Variables; Review of Foundational Statistical Information; Measures of Central Tendency; Measures of Variability (Dispersion) of Scores; Variance of the Sample (s ²); Standard Deviation of the Sample (s); Coefficient of Variation (C); Visual Representations of a Data Set; The Normal Distribution Characteristics of the Normal Distribution Descriptive Statistical Applications of the Normal Distribution; Inferential Statistical Applications of the Normal Distribution; Summary; Problem Assignment; Key Terms; Chapter 2: Logical Steps of Conducting Quantitative Research: Hypothesis-Testing Process; Hypothesis-Testing Process; Summary; Problem Assignment; Key Terms; Chapter 3: Maximizing Hypothesis Decisions Using Power Analysis; Balance Between Avoiding Type I and Type II Errors; Illustration of Avoiding Making a Type I (Alpha) Error; Illustration of Avoiding Making a Type II

(Alpha) Error

A Priori Power Analysis Summary; Problem Assignment; Key Terms; Chapter 4: Research and Statistical Designs; Formulating Experimental Conditions; Reducing the Imprecision in Measurement; Sampling Error; Error of Measurement; Controlling Extraneous Experimental Influences; Methods of Controlling Extraneous Variables; Internal Validity and Experimental Designs; Internal Validity; Experimental Designs; Randomized Multiple Treatments and Control with Post test-Only Design; Randomized Multiple Treatments and Control with Pretest and Post test Design; Quasi-Experimental Designs
Repeated-Treatment Design with One Group Nonequivalent No-Treatment Control Group Time-Series Design; Correlational Research Methods; Choosing a Statistic to Use for an Analysis; Summary; Problem Assignment; Key Terms; Chapter 5: Introduction to IBM SPSS 20; The IBM SPSS 20 Data View Screen; Naming and Defining Variables in Variable View; Entering Variables; Entering Data; Examples of Basic Analyses; Examples of Modifying Data Procedures; Summary; Problem Assignment; Key Terms; Chapter 6: Diagnosing Study Data for Inaccuracies and Assumptions; Research Example; Detecting Erroneous Data Entries
Identifying and Dealing with Missing Data Identifying and Assessing Univariate Outliers; Identifying and Assessing Univariate Outliers; Screening and Making Decisions about Univariate Assumptions; Skewness and Kurtosis; Histograms; Skewness Screening; Kurtosis Screening; Shapiro-Wilk Statistic; Assessing Normal Q-Q Plots for Normality; Summary of Our Screening Results for the Underlying Assumption of Normality; Screening for Homogeneity of Variance; Levene's Test; One-Way Analysis of Variance Results; Nontransformed One-Way ANOVA Results; Transformed Screening and One-Way ANOVA Results
Summary

Sommario/riassunto

"Quantitative and Statistical Research Methods offers a guide for psychology, counseling, and education students in the use of statistics and research designs, combined with guidance on using SPSS in the course of their research. Each chapter covers a research problem, taking the student through identifying research questions and hypotheses; identifying, classifying, and operationally defining the study variables; choosing appropriate research designs; conducting power analysis; choosing an appropriate statistic for the problem; using a data set; conducting data screening and analyses (SPSS); interpreting the statistics; and writing the results related to the problem. Designed so students will know how to plan research and conduct statistical analyses using several different procedures"--
