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Computing Z-Scores for All Students for the Madupistan Verbal Test; Computing Raw Scores from Z-Scores; Comparing Your GPA of 3.10 from SolidState University with Pat's GPA of 1.95 from Advanced Technical University; Each Z-Score for Any Variable Corresponds to a Particular Raw Score; Converting Z-Scores to Raw Scores (The Dorm Resident Example); A Real Research Example; Summary; Key Terms; chapter 4 Correlation; Correlations Are Summaries; Representing a Correlation Graphically; Representing a Correlation Mathematically; Return to Madupistan; Correlation Does Not Imply Causation; A Real Research Example; Summary; Key Terms; chapter 5 Statistical Prediction and Regression; Standardized Regression; Predicting Scores on Y with Different Amounts of Information; Beta Weight; Unstandardized Regression Equation; The Regression Line; Quantitatively Estimating the Predictive Power of Your Regression Model; Interpreting r^2 ; A Real Research Example; Conclusion; Key Terms; chapter 6 The Basic Elements of Hypothesis Testing; The Basic Elements of Inferential Statistics; The Normal Distribution; A Real Research Example; Summary; Key Terms; chapter 7 Introduction to Hypothesis Testing; The Basic Rationale of Hypothesis Testing; Understanding the Broader Population of Interest; Population versus Sample Parameters; The Five Basic Steps of Hypothesis Testing; A Real Research Example; Summary; Key Terms; chapter 8 Hypothesis Testing if $N > 1$; The Distribution of Means; Steps in Hypothesis Testing if $N > 1$; Confidence Intervals; Real Research Example; Summary; Key Terms; chapter 9 Statistical Power; What Is Statistical Power?; An Example of Statistical Power; Factors that Affect Statistical Power; A Real Research Example; Summary; Key Terms; chapter 10 t-tests (One-Sample and Within-Groups)

Sommario/riassunto

Straightforward Statistics: Understanding the Tools of Research is a clear and direct introduction to statistics for the social, behavioral, and life sciences. Based on the author's extensive experience teaching undergraduate statistics, this book provides a narrative presentation of the core principles that provide the foundation for modern-day statistics. With step-by-step guidance on the nuts and bolts of computing these statistics, the book includes detailed tutorials how to use state-of-the-art software, SPSS, to compute the basic statistics employed in modern academic and applied research
