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Nota di contenuto	Title Page; Copyright Page; Contents; Preface; Chapter 1 Introduction: It Seemed Like the Right Thing To Do at the Time; WHEN GOOD STATISTICS GO BAD: COMMON MISTAKES AND THE IMPACT THEY HAVE; STATISTICS 101: CONCEPTS YOU SHOULD KNOW BEFORE READING THIS BOOK; Probability Theory; Statistics; TIPS, TRICKS, AND TECHNIQUES: A ROAD MAP OF WHAT FOLLOWS; BIBLIOGRAPHY; Chapter 2 The Type A Diet: Sampling Strategies to Eliminate Confounding and Reduce Your Waistline; THE BASICS OF PLANNING A STUDY; MY STATISTICAL ANALYSIS IS BRILLIANT. WHY ARE MY CONCLUSIONS SO WRONG?; Answering the Wrong Question Putting Too Much Confidence in Convenience Data Confusing Association and Causation; REPLICATION, RANDOMIZATION, AND BLOCKING: THE BUILDING BLOCKS A GOOD STUDY; EXPLORATORY RESEARCH: GETTING YOUR STUDIES INTO FOCUS; DESCRIPTIVE AND EXPLANATORY RESEARCH: ANSWERING THE TARGETED QUESTIONS; Controlled Experiments: The Art of Manipulation; Observational Studies: Scientifically Approved Voyeurism; SO MANY STRATEGIES, SO LITTLE TIME; BIBLIOGRAPHY; Chapter 3 Conservatives, Liberals, and Other Political Pawns: How to Gain Power and Influence with Sample Size Calculations STEP 1. KEEP YOUR FINGER ON THE PULSE OF THE POPULACE STEP 2.

AVOID AMBIGUOUS RESULTS AND OTHER POLITICAL POTHOLES; Identify the Data Analysis Technique You Will Be Performing; Know the Difference Between Practical Significance and Statistical Significance; Note Your Practical Limitations; STEP 3. LET SAMPLE-SIZE CALCULATIONS BE YOUR RIGHT-HAND MAN; Population Means and Probabilities: Sample-Size Calculations for a Confidence Interval; Power and Sample-Size Calculations for Hypothesis Tests; STEP 4. KEEP YOUR FRIENDS CLOSE AND YOUR ENEMIES CLOSER; BIBLIOGRAPHY Chapter 4 Bunco, Bricks, and Marked Cards: Chi-Squared Tests and How to Beat a Cheater WHAT HAPPENS IN VEGAS ; HOW STATISTICIANS REMAIN DISCRETE; CONTINGENCY TABLES, CHI-SQUARED TESTS, AND OTHER WINNING STRATEGIES FOR DISCRETE DATA ANALYSIS; Turning Lemons into Gold Bars: How to Convert Qualitative Data into Quantitative Random Variables; Plots and Tables: The Poor Man's Statistical Analysis; Contingency Tables: How to Break Down a Frequency Distribution and Expose Your Variables; The Chi-Squared Test: An All-You-Can-Eat Buffet for Discrete Data Analysis; HOW TO BEAT A CHEATER; BIBLIOGRAPHY Chapter 5 WHY IT PAYS TO BE A STABLE MASTER: SUMO WRESTLERS AND OTHER ROBUST STATISTICS DESCRIPTIVE STATISTICS: A REVIEW FOR THE JONOKUCHI; Three Things You Should Know About the Sample Mean; Three Things You Should Know about the Standard Deviation; THE JAPANESE SUMO INVASION: WHY IT PAYS TO BE ROBUST; Summarizing a Sample with Percentiles; Robust Center Location; Robust and Resistant Variation; Robust Confidence Intervals; WHEN ROBUST DOES IT BETTER; HARVESTING THE AMERICAN DREAM; BIBLIOGRAPHY Chapter 6 Five-Hour Marriages: Continuous Distributions, Tests for Normality, and Juicy Hollywood Scandals

Sommario/riassunto

Features basic statistical concepts as a tool for thinking critically, wading through large quantities of information, and answering practical, everyday questions Written in an engaging and inviting manner, Beyond Basic Statistics: Tips, Tricks, and Techniques Every Data Analyst Should Know presents the more subjective side of statistics-the art of data analytics. Each chapter explores a different question using fun, common sense examples that illustrate the concepts, methods, and applications of statistical techniques. Without going into the specifics of theorems, propositions, or formula
