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Collana	Wiley series in probability and statistics
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Altri autori (Persone)	LevinBruce A PaikMyunghee Cho
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Soggetti	Analysis of variance Sampling (Statistics) Biometry
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Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Statistical Methods for Rates and Proportions THIRD EDITION; Contents; Preface; Preface to the Second Edition; Preface to the First Edition; 1. An Introduction to Applied Probability; 1.1. Notation and Definitions; 1.2. The Rule of Total Probability; 1.3. The Evaluation of a Screening Test; 1.4. Biases Resulting from the Study of Selected Samples; Problems; References; 2. Statistical Inference for a Single Proportion; 2.1. Exact Inference for a Single Proportion: Hypothesis Tests; 2.2. Exact Inference

for a Single Proportion: Interval Estimation

2.2.1. Definition of an Exact Confidence Interval 2.2.2. A Fundamental Property of Confidence Intervals; 2.3. Using the F Distribution; 2.4. Approximate Inference for a Single Proportion; 2.4.1. Hypothesis Tests; 2.4.2. Confidence Intervals; 2.5. Sample Size for a One-Sample Study; 2.5.1. Sample Size for Hypothesis Tests; 2.5.2. Sample Size for Confidence Intervals; 2.6.\* Standard Errors by the Delta Method; 2.7.\* Alternative Definitions of Two-Sided P-Values and Confidence Intervals; 2.7.1. The Point Probability Method; 2.7.2. The Tail Probability Method; 2.7.3. The Likelihood Ratio Method 2.7.4. Some Concluding Remarks Problems; References; 3. Assessing Significance in a Fourfold Table; 3.1. Methods for Generating a Fourfold Table; 3.2. "Exact" Analysis of a Fourfold Table; 3.3. Yates' Correction for Continuity; 3.4. One-Tailed versus Two-Tailed Tests; 3.5. A Simple Confidence Interval for the Difference between Two Independent Proportions; 3.6. An Alternative Critical Ratio Test; Problems; References; 4. Determining Sample Sizes Needed to Detect a Difference between Two Proportions; 4.1. Specifying a Difference Worth Detecting 4.2. The Mathematics of Sample Size Determination 4.3. Using the Sample Size Tables; 4.4. Unequal Sample Sizes; 4.5. Some Additional Uses of the Tables; 4.6. Some Additional Comments; Problems; References; 5. How to Randomize; 5.1. Selecting a Simple Random Sample; 5.2. Randomization in a Clinical Trial; 5.3. Variations on Simple Randomization; References; 6. Comparative Studies: Cross-sectional, Naturalistic, or Multinomial Sampling; 6.1. Some Hypothetical Data; 6.2. Measures of Association Derived from  $X(2)$ ; 6.3. The Odds Ratio and Its Logarithm 6.4. Exact Inference for an Odds Ratio: Hypothesis Tests 6.5. Exact Inference for an Odds Ratio: Confidence Intervals; 6.6. Approximate Inference for an Odds Ratio; 6.6.1. Hypothesis Tests; 6.6.2. Confidence Intervals; 6.6.3.\* A Confidence Interval Method to Be Avoided; 6.7. Criticisms of the Odds Ratio; 6.8. Attributable Risk; 6.9.\* Standard Errors for Measures of Association; Problems; References; 7. Comparative Studies: Prospective and Retrospective Sampling; 7.1. Prospective Studies; 7.2. Retrospective Studies; 7.3. Estimating Attributable Risk from Retrospective Studies 7.4. The Retrospective Approach versus the Prospective Approach

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## Sommario/riassunto

"This book is to be recommended as a standard shelf reference . . . and as a 'must' to be read by all who wish to better use and understand data involving dichotomous or dichotomizable measurements." - American Journal of Psychiatry In the two decades since the second edition of Statistical Methods for Rates and Proportions was published, evolving technologies and new methodologies have significantly changed the way today's statistics are viewed and handled. The explosive development of personal computing and statistical software has facilitated the sophisticated analysis o

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