

# Contents

<i>Preface to the Second Edition</i>	xi
<i>Preface to the Revised Edition</i>	xvii
<i>Preface to the Original Edition</i>	xix
Chapter 1. The Concepts of Power Analysis	
1.1. General Introduction	1
1.2. Significance Criterion	4
1.3. Reliability of Sample Results and Sample Size	6
1.4. The Effect Size	8
1.5. Types of Power Analysis	14
1.6. Significance Testing	17
1.7. Plan of Chapters 2–9	17
Chapter 2. The $t$ Test for Means	
2.1. Introduction and Use	19
2.2. The Effect Size Index: $d$	20
2.3. Power Tables	27
2.4. Sample Size Tables	52
2.5. The Use of the Tables for Significance Testing	66
Chapter 3. The Significance of a Product Moment $r_s$	
3.1. Introduction and Use	75
3.2. The Effect Size: $r$	77
3.3. Power Tables	83

3.4. Sample Size Tables	99
3.5. The Use of the Tables for Significance Testing of $r$	105

## Chapter 4. Differences between Correlation Coefficients

4.1. Introduction and Use	109
4.2. The Effect Size Index: $q$	110
4.3. Power Tables	116
4.4. Sample Size Tables	133
4.5. The Use of the Tables for Significance Testing	139

## Chapter 5. The Test that a Proportion is .50 and the Sign Test

5.1. Introduction and Use	145
5.2. The Effect Size Index: $g$	147
5.3. Power Tables	150
5.4. Sample Size Tables	166
5.5. The Use of the Tables for Significance Testing	175

## Chapter 6. Differences between Proportions

6.1. Introduction and Use	179
6.2. The Arcsine Transformation and the Effect Size Index: $h$	180
6.3. Power Tables	185
6.4. Sample Size Tables	204
6.5. The Use of the Tables for Significance Testing	209

## Chapter 7. Chi-Square Tests for Goodness of Fit and Contingency Tables

7.1. Introduction and Use	215
7.2. The Effect Size Index: $w$	216
7.3. Power Tables	227
7.4. Sample Size Tables	252

## Chapter 8. The Analysis of Variance and Covariance

8.1. Introduction and Use	273
8.2. The Effect Size Index: $f$	274
8.3. Power Tables	288
8.4. Sample Size Tables	380
8.5. The Use of the Tables for Significance Testing	403

## Chapter 9. Multiple Regression and Correlation Analysis

9.1. Introduction and Use	407
9.2. The Effect Size Index: $f^2$	410
9.3. Power Tables	414

**Chapter 10. Set Correlation and Multivariate Methods**

10.1. Introduction and Use	467
10.2. The Effect Size Index: $f^2$	473
10.3. Determining the Power	481
10.4. Determining Sample Size	514

**Chapter 11. Some Issues in Power Analysis**

11.1. Introduction	531
11.2. Effect Size	531
11.3. Reliability	535
11.4. "Qualifying" Dependent Variables	537

**Chapter 12. Computational Procedures**

12.1. Introduction	543
12.2. $t$ Test for Means	544
12.3. The Significance of a Product Moment $r$	545
12.4. Differences between Correlation Coefficient	546
12.5. The Test that a Proportion is .50 and the Sign Test	547
12.6. Differences between Proportions	548
12.7. Chi-Square Tests for Goodness of Fit and Contingency Tables	549
12.8. $F$ Test on Means and the Analysis of Variance and Covariance	550
12.9. $F$ Test of Variance Proportions in Multiple Regression/Correlation Analysis	551

*References* 553

*Index* 559