

CONTENTS

Preface to the Second Edition iii

Preface to the First Edition v

- PART 1 FOUNDATIONS OF MULTIPLE REGRESSION ANALYSIS 1**
- 1 Overview 3
 - 2 Simple Linear Regression and Correlation 12
 - 3 Elements of Multiple Regression Analysis:
Two Independent Variables 45
 - 4 General Method of Multiple Regression Analysis: Matrix
Operations and Computer Programs 68
 - 5 Statistical Control: Partial and Semipartial Correlation 97
 - 6 Prediction 135
 - 7 Explanation: Variance Partitioning 174
 - 8 Explanation: The Analysis of Effects 221
- PART 2 REGRESSION ANALYSIS WITH CATEGORICAL
AND CONTINUOUS VARIABLES 269**
- 9 Dummy, Effect, and Orthogonal Coding of Categorical
Variables 271
 - 10 Multiple Categorical Variables and Factorial Designs 334
 - 11 Trend Analysis: Linear and Curvilinear Regression 396
 - 12 Continuous and Categorical Independent Variables;
Aptitude-Treatment Interaction; Comparisons of Regression
Equations 436
 - 13 Analysis of Covariance; The Unit of Analysis 493
 - 14 Repeated-Measures Designs 551
- PART 3 CAUSAL ANALYSIS 575**
- 15 Path Analysis 577
 - 16 Introduction to Linear Structural Relations (LISREL) 636
- PART 4 MULTIVARIATE ANALYSIS 683**
- 17 Multiple Regression, Discriminant Analysis, and
Multivariate Analysis of Variance 683

**18 Canonical and Discriminant Analysis, and Multivariate
Analysis of Variance 720**

**APPENDIX A:
MATRIX ALGEBRA: AN INTRODUCTION 773**

APPENDIX B: TABLES 787

References 794

Index of Names 812

Index of Subjects 816