
Contents

Preface
Distributors

1 A Brief Introduction to SPSS

- 1.1 Introduction
- 1.2 Getting Help
- 1.3 Data Entry
 - 1.3.1 The Data View Spreadsheet
 - 1.3.2 The Variable View Spreadsheet
- 1.4 Storing and Retrieving Data Files
- 1.5 The Statistics Menus
 - 1.5.1 Data File Handling
 - 1.5.2 Generating New Variables
 - 1.5.3 Running Statistical Procedures
 - 1.5.4 Constructing Graphical Displays
- 1.6 The Output Viewer
- 1.7 The Chart Editor
- 1.8 Programming in SPSS

2 Data Description and Simple Inference for Continuous Data: The Lifespans of Rats and Ages at Marriage in the U.S.

- 2.1 Description of Data
- 2.2 Methods of Analysis
- 2.3 Analysis Using SPSS
 - 2.3.1 Lifespans of Rats
 - 2.3.2 Husbands and Wives
- 2.4 Exercises
 - 2.4.1 Guessing the Width of a Lecture Hall
 - 2.4.2 More on Lifespans of Rats: Significance Tests for Model Assumptions
 - 2.4.3 Motor Vehicle Theft in the U.S.
 - 2.4.4 Anorexia Nervosa Therapy
 - 2.4.5 More on Husbands and Wives: Exact Nonparametric Tests

3 Simple Inference for Categorical Data: From Belief in the Afterlife to the Death Penalty and Race

- 3.1 Description of Data
- 3.2 Methods of Analysis
- 3.3 Analysis Using SPSS
 - 3.3.1 Husbands and Wives Revisited.
 - 3.3.2 Lifespans of Rats Revisited
 - 3.3.3 Belief in the Afterlife
 - 3.3.4 Incidence of Suicidal Feelings
 - 3.3.5 Oral Contraceptive Use and Blood Clots
 - 3.3.6 Alcohol and Infant Malformation
 - 3.3.7 Death Penalty Verdicts
- 3.4 Exercises
 - 3.4.1 Depersonalization and Recovery from Depression
 - 3.4.2 Drug Treatment of Psychiatric Patients: Exact Tests for Two-Way Classifications
 - 3.4.3 Tics and Gender
 - 3.4.4 Hair Color and Eye Color

4 Multiple Linear Regression: Temperatures in America and Cleaning Cars

- 4.1 Description of Data
- 4.2 Multiple Linear Regression
- 4.3 Analysis Using SPSS
 - 4.3.1 Cleaning Cars
 - 4.3.2 Temperatures in America
- 4.4 Exercises.
 - 4.4.1 Air Pollution in the U.S.
 - 4.4.2 Body Fat
 - 4.4.3 More on Cleaning Cars: Influence Diagnostics

5 Analysis of Variance I: One-Way Designs; Fecundity of Fruit Flies, Finger Tapping, and Female Social Skills.

- 5.1 Description of Data
- 5.2 Analysis of Variance.
- 5.3 Analysis Using SPSS
 - 5.3.1 Fecundity of Fruit Flies .
 - 5.3.2 Finger Tapping and Caffeine Consumption.
 - 5.3.3 Social Skills of Females
- 5.4 Exercises.
 - 5.4.1 Cortisol Levels in Psychotics: Kruskal-Wallis Test
 - 5.4.2 Cycling and Knee-Joint Angles
 - 5.4.3 More on Female Social Skills: Informal Assessment of MANOVA Assumptions

6 Analysis of Variance II: Factorial Designs; Does Marijuana Slow You Down? and Do Slimming Clinics Work?

- 6.1 Description of Data
- 6.2 Analysis of Variance
- 6.3 Analysis Using SPSS
 - 6.3.1 Effects of Marijuana Use
 - 6.3.2 Slimming Clinics
- 6.4 Exercises
 - 6.4.1 Headache Treatments
 - 6.4.2 Biofeedback and Hypertension
 - 6.4.3 Cleaning Cars Revisited: Analysis of Covariance
 - 6.4.4 More on Slimming Clinics

7 Analysis of Repeated Measures I: Analysis of Variance Type Models; Field Dependence and a Reverse Stroop Task

- 7.1 Description of Data
- 7.2 Repeated Measures Analysis of Variance
- 7.3 Analysis Using SPSS
- 7.4 Exercises
 - 7.4.1 More on the Reverse Stroop Task
 - 7.4.2 Visual Acuity Data.
 - 7.4.3 Blood Glucose Levels

8 Analysis of Repeated Measures II: Linear Mixed Effects Models; Computer Delivery of Cognitive Behavioral Therapy

- 8.1 Description of Data
- 8.2 Linear Mixed Effects Models
- 8.3 Analysis Using SPSS
- 8.4 Exercises
 - 8.4.1 Salsolinol Levels and Alcohol Dependency
 - 8.4.2 Estrogen Treatment for Post-Natal Depression
 - 8.4.3 More on “Beating the Blues”: Checking the Model for the Correlation Structure

9 Logistic Regression: Who Survived the Sinking of the Titanic?

- 9.1 Description of Data
- 9.2 Logistic Regression
- 9.3 Analysis Using SPSS
- 9.4 Exercises
 - 9.4.1 More on the Titanic Survivor Data
 - 9.4.2 GHQ Scores and Psychiatric Diagnosis
 - 9.4.3 Death Penalty Verdicts Revisited

10 Survival Analysis: Sexual Milestones in Women and Field Dependency of Children.

- 10.1 Description of Data
- 10.2 Survival Analysis and Cox's Regression
- 10.3 Analysis Using SPSS
 - 10.3.1 Sexual Milestone Times
 - 10.3.2 WISC Task Completion Times
- 10.4 Exercises
 - 10.4.1 Gastric Cancer
 - 10.4.2 Heroin Addicts
 - 10.4.3 More on Sexual Milestones of Females

11 Principal Component Analysis and Factor Analysis: Crime in the U.S. and AIDS Patients' Evaluations of Their Clinicians

- 11.1 Description of Data
- 11.2 Principal Component and Factor Analysis
 - 11.2.1 Principal Component Analysis
 - 11.2.2 Factor Analysis
 - 11.2.3 Factor Analysis and Principal Components Compared
- 11.3 Analysis Using SPSS
 - 11.3.1 Crime in the U.S.
 - 11.3.2 AIDS Patients' Evaluations of Their Clinicians
- 11.4 Exercises
 - 11.4.1 Air Pollution in the U.S.
 - 11.4.2 More on AIDS Patients' Evaluations of Their Clinicians: Maximum Likelihood Factor Analysis

12 Classification: Cluster Analysis and Discriminant Function Analysis; Tibetan Skulls

- 12.1 Description of Data
- 12.2 Classification: Discrimination and Clustering
- 12.3 Analysis Using SPSS
 - 12.3.1 Tibetan Skulls: Deriving a Classification Rule.
 - 12.3.2 Tibetan Skulls: Uncovering Groups.
- 12.4 Exercises
 - 12.4.1 Sudden Infant Death Syndrome (SIDS)
 - 12.4.2 Nutrients in Food Data
 - 12.4.3 More on Tibetan Skulls

References