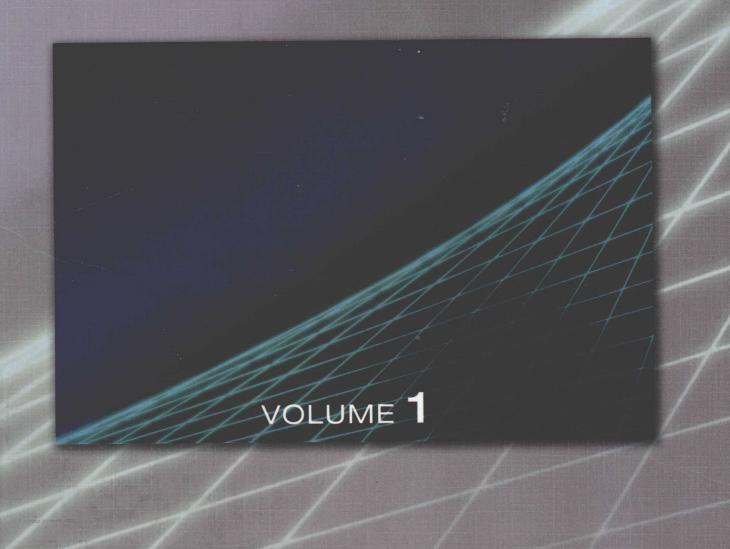
MEASUREMENT AND STATISTICS



EDITED BY
NEIL J. SALKIND

MEASUREMENT STATISTICS

VOLUME 1

NEIL J. SALKIND UNIVERSITY OF KANSAS

MANAGING EDITOR KRISTIN RASMUSSEN UNIVERSITY OF KANSAS

A SAGE Reference Publication



Copyright © 2007 by SAGE Publications, Inc.

All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the publisher.

For information:



SAGE Publications, Inc. 2455 Teller Road Thousand Oaks, California 91320 E-mail: order@sagepub.com

SAGE Publications Ltd. 1 Oliver's Yard 55 City Road London EC1Y 1SP United Kingdom

SAGE Publications India Pvt. Ltd. B-42, Panchsheel Enclave Post Box 4109 New Delhi 110 017 India

Printed in the United States of America.

Library of Congress Cataloging-in-Publication Data

Encyclopedia of measurement and statistics / editor Neil J. Salkind.

p. cm.

A SAGE Reference Publication.

Includes bibliographical references and index.

ISBN 1-4129-1611-9 or 978-1-4129-1611-0 (cloth)

1. Social sciences-Statistical methods-Encyclopedias. 2. Social sciences-Research-Methodology-Encyclopedias.

I. Salkind, Neil J.HA29.S2363 2007

001.403-dc22

2006011888

This book is printed on acid-free paper.

06 07 08 09 10 10 9 8 7 6 5 4 3 2 1

Publisher:

Rolf Janke

Acquisitions Editor:

Lisa Cuevas Shaw Leticia Gutierrez

Reference Systems Coordinator:

Tracy Alpern Bonnie Freeman

Project Editor: Copy Editors:

> Liann Lech Carla Freeman

Typesetter:

C&M Digitals (P) Ltd.

Indexer:

David Luljak

Cover Designer:

Michelle Kenny

Editorial Board

Editor

Neil J. Salkind University of Kansas

Managing Editor

Kristin Rasmussen University of Kansas

Advisory Board

Jeffrey Banfield Department of Mathematical Sciences Montana State University

Bruce Frey
Department of Psychology and Research in Education
University of Kansas

Wenxin Jiang
Department of Statistics
Northwestern University

Galin L. Jones School of Statistics University of Minnesota

Jianan Peng
Department of Mathematics and Statistics
Acadia University

Jerome P. Reiter

Practice of Statistics and Decision Sciences
Institute of Statistics and Decision Sciences

Duke University

List of Entries

Ability Tests
Abstracts

Acceptance Sampling
Achievement Tests
Active Life Expectancy
Adaptive Sampling Design

Adjective Checklist

Age Norms

Akaike Information Criterion

Alcohol Use Inventory Alternate Assessment Alternative Hypothesis

American Doctoral Dissertations American Psychological Association

American Psychological Society. See Association for

Psychological Science

American Statistical Association Americans with Disabilities Act Analysis of Covariance (ANCOVA) Analysis of Variance (ANOVA)

Anthropometry Applied Research Aptitude Tests Area Chart Arithmetic Mean

Armed Forces Qualification Test

Armed Services Vocational Aptitude Battery

Artificial Neural Network

Assessment of Interactions in Multiple Regression

Association for Psychological Science

Asymmetry of g

Attenuation, Correction for

Attitude Tests Attributable Risk Attrition Bias Audit Trail
Authenticity
Autocorrelation

Average

Average Deviation

Babbage, Charles

Bar Chart Basal Age

Basic Personality Inventory

Basic Research Bayes Factors

Bayesian Information Criterion

Bayesian Statistics

Bayley Scales of Infant Development

Beck Depression Inventory

Behavior Assessment System for Children

Behrens-Fisher Test

Bender Visual Motor Gestalt Test

Bernoulli, Jakob

Binomial Distribution/Binomial and Sign Tests

Binomial Test Bioinformatics

Biserial Correlation Coefficients

Bivariate Distributions Bonferroni, Carlo Emilio

Bonferroni Test Bowker Procedure

Box Plot (Box and Whisker Plot)
Bracken Basic Concept Scale–Revised

Bruno, James Edward

Buros Institute of Mental Measurements

California Psychological Inventory Career Assessment Inventory Career Development Inventory

Career Maturity Inventory

Carroll Depression Scale

Categorical Variable

Causal Analysis

Censored Data

Centers for Disease Control and Prevention

Central Limit Theorem

Centroid

Chance

Chi-Square Test for Goodness of Fit

Chi-Square Test for Independence

Children's Academic Intrinsic Motivation

Inventory

Class Interval

Classical Test Theory

Classification and Regression Tree

Clinical Assessment of Attention Deficit

Clinical Assessment of Behavior

Clinical Assessment of Depression

Cluster Analysis

Cluster Sampling

Cochran Q Test

Coefficient Alpha

Coefficients of Correlation, Alienation, and

Determination

Cognitive Abilities Test

Cognitive Psychometric Assessment

Cohen's Kappa

Complete Independence Hypothesis

Completion Items

Computational Statistics

Computerized Adaptive Testing

Comrey, Andrew L.

Comrey Personality Scales

Conditional Probability

Confidence Intervals

Construct Validity

Content Validity

Continuous Variable

Contour Plot

Convenience Sampling

Coping Resources Inventory for Stress

Correlation Coefficient

Correspondence Analysis

Covariance

Criterion-Referenced Test

Criterion Validity

Critical Value

Cronbach, Lee J.

Culture Fair Intelligence Test

Cumulative Frequency Distribution

Curriculum-Based Measurement

Curse of Dimensionality

Curvilinear Regression

Darwin, Charles

Data Analysis ToolPak

Data Collection

Data Compression

Data Mining

Decision Boundary

Decision Theory

Delphi Technique

Delta Method

Deming, William Edwards

Dependent Variable

Descriptive Research

Deviation Score

Diagnostic Validity

Difference Score

Differential Aptitude Test

Diggle-Kenward Model for Dropout

Dimension Reduction

Discriminant Analysis

Discriminant Correspondence Analysis

Dissimilarity Coefficient

Distance

DISTATIS

Dixon Test for Outliers

Dunn's Multiple Comparison Test

Ecological Momentary Assessment

Educational Testing Service

Edwards Personal Preference Schedule

Effect Size

Eigendecomposition

Eigenvalues

EM Algorithm

Embedded Figures Test

Equivalence Testing

Essay Items

Estimates of the Population Median

Ethical Issues in Testing

Ethical Principles in the Conduct of Research With

Human Participants
Evidence-Based Practice
Excel Spreadsheet Functions
Exploratory Data Analysis
Exploratory Factor Analysis

Eyeball Estimation

Face Validity
Factor Analysis
Factor Scores
Factorial Design

Fagan Test of Infant Intelligence Family Environment Scale File Drawer Problem

Fisher, Ronald Aylmer

Fisher Exact Probability Test

Fisher-Irwin Test. See Fisher Exact Probability Test

Fisher's LSD

Fisher's Z Transformation

Fourier Transform

Fractal

Fractional Randomized Block Design

Frequency Distribution

Friedman Test

Galton, Sir Francis Gambler's Fallacy Gauss, Carl Friedrich

Generalized Additive Model

Generalized Estimating Equations Generalized Method of Moments Generalized Procrustes Analysis Gerontological Apperception Test Gf-Gc Theory of Intelligence

Gf-Gc Theory of Intelligence Goodenough Harris Drawing Test

Goodness-of-Fit Tests

Graduate Record Examinations

Grand Mean

Graphical Statistical Methods

Gresham, Frank M. Grounded Theory Guttman Scaling

Harmonic Mean

Health Insurance Portability and Accountability Act

Hello-Goodbye Effect

Heteroscedasticity and Homoscedasticity

Hierarchical Linear Modeling

High-Stakes Tests

Histogram

Historiometrics

Holden Psychological Screening Inventory

Homogeneity of Variance Hypergeometric Distribution

Hypothesis and Hypothesis Testing

Illinois Test of Psycholinguistic Abilities Immediate and Delayed Memory Tasks

Independent Variable

Individuals with Disabilities Education Act

Inferential Statistics

Information Referenced Testing

Information Systems Interaction Readiness Scales

Informed Consent Instrumental Variables Intelligence Quotient Intelligence Tests

Internal External Locus of Control Scale

Internal Review Board

International Assessment of Educational Progress

Interrater Reliability

Interval Level of Measurement Iowa Tests of Basic Skills

Iowa Tests of Educational Development

Ipsative Measure Item and Test Bias Item Response Theory

Jackson, Douglas N.

Jackson Personality Inventory–Revised Jackson Vocational Interest Survey

Journal of the American Statistical Association Journal of Modern Applied Statistical Methods Journal of Statistics Education

k-Means Cluster Analysis

Kaufman Assessment Battery for Children

Kendall Rank Correlation Kinetic Family Drawing Test

Kingston Standardized Cognitive Assessment Kolmogorov-Smirnov Test for One Sample Kolmogorov-Smirnov Test for Two Samples

KR-20 and KR-21

Kruskal-Wallis One-Way Analysis of Variance

Kuder Occupational Interest Survey

Kurtosis

Laboratory Behavioral Measures of Impulsivity

Latent Class Analysis
Law of Large Numbers
Law School Admissions Test
Least Squares, Method of
Life Values Inventory

Likert Scaling

Likelihood Ratio Test

Lilliefors Test for Normality

Line Chart

Linear Regression

Logistic Regression Analysis

Loglinear Analysis

Longitudinal/Repeated Measures Data Luria Nebraska Neuropsychological Battery

Male Role Norms Inventory

Malthus, Thomas

Mann-Whitney U Test (Wilcoxon Rank-Sum Test)

Markov, Andrei Andreevich

Markov Chain Monte Carlo Methods

Matrix Analogies Test Matrix Operations

Maximum Likelihood Method

McNemar Test for Significance of Changes

Mean

Measurement

Measurement Error

Measures of Central Tendency

Median Test Meta-Analysis

Metric Multidimensional Scaling Millon Behavioral Medicine Diagnostic

Millon Clinical Multiaxial Inventory-III

Minnesota Clerical Test

Minnesota Multiphasic Personality Inventory

Missing Data Method

Mixed Models Mixture Models Mixtures of Experts

Mode

Moderator Variable Monte Carlo Methods

Mosaic Plots Moving Average Multicollinearity

Multidimensional Aptitude Battery

Multiple Affect Adjective Checklist-Revised

Multiple-Choice Items Multiple Comparisons

Multiple Correlation Coefficient Multiple Correspondence Analysis

Multiple Factor Analysis

Multiple Imputation for Missing Data

Multitrait Multimethod Matrix and Construct

Validity

Multivariate Analysis of Variance (MANOVA)

Multivariate Normal Distribution Myers-Briggs Type Indicator

National Council on Measurement in Education

National Science Foundation NEO Personality Inventory

Neonatal Behavioral Assessment Scale

Newman-Keuls Test

Nominal Level of Measurement Nomothetic Versus Idiographic Nonparametric Statistics Nonprobability Sampling

Normal Curve

Null Hypothesis Significance Testing

O'Brien Test for Homogeneity of Variance

Observational Studies Ockham's Razor

Ogive

One- and Two-Tailed Tests One-Way Analysis of Variance Ordinal Level of Measurement Orthogonal Predictors in Regression

Page's L Test

Paired Samples t Test (Dependent Samples t Test)

Pairwise Comparisons Parallel Coordinate Plots Parallel Forms Reliability

Parameter

Parameter Invariance

Part and Partial Correlations
Partial Least Square Regression

Pascal, Blaise Path Analysis

Peabody Picture Vocabulary Test

Pearson, Karl

Pearson Product-Moment Correlation Coefficient

Percentile and Percentile Rank

Performance IQ

Performance-Based Assessment

Peritz Procedure

Personal Projects Analysis

Personality Assessment Inventory

Personality Research Form

Personality Tests

Pie Chart

Piers-Harris Children's Self-Concept Scale

Poisson, Siméon Denis Poisson Distribution Portfolio Assessment Post Hoc Comparisons Posterior Distribution Predictive Validity

Preschool Language Assessment Instrument

Principal Component Analysis

Prior Distribution
Probability Sampling
Profile Analysis
Projective Hand Test
Projective Testing
Propensity Scores
Psychological Abstracts

Psychometrics PsycINFO

Q Methodology

Q-Q Plot

Quality of Well-Being Scale Quasi-Experimental Method

Questionnaires Quota Sampling

Random Numbers Random Sampling

Range

Rasch Measurement Model Ratio Level of Measurement

Raven's Progressive Matrices Record Linkage

Regression Analysis

Relative Risk Reliability Theory

Repeated Measures Analysis of Variance

Residuals

Response to Intervention

Reverse Scaling Reynolds, Cecil R.

Roberts Apperception Test for Children

Rorschach Inkblot Test

 R_{ν} and Congruence Coefficients

Sample

Sample Size

Sampling Distribution of a Statistic

Sampling Error

Scaling

Scan Statistic

Scattergram

Scree Plot

Secondary Data Analysis

Section 504 of the Rehabilitation Act of 1973

Self-Report

Semantic Differential Semantic Differential Scale Semi-Interquartile Range

Shapiro-Wilk Test for Normality

Signal Detection Theory Significance Level Simple Main Effect Simpson's Paradox Simpson's Rule

Simulated Annealing Simulation Experiments Single-Subject Designs

Singular and Generalized Singular Value

Decomposition

Six Sigma

Sixteen Personality Factor Questionnaire

Skewness Smoothing

Social Climate Scales

Social Skills Rating System

Society for Research in Child Development

Sociological Abstracts

Spatial Learning Ability Test

Spatial Statistics

Spearman's Rho

Split Half Reliability

Spreadsheet Functions

Spurious Correlation

Standard Deviation

Standard Error of the Mean

Standard Error of Measurement

Standard Scores

Standards for Educational and Psychological

Testing

Stanford Achievement Test

Stanford-Binet Intelligence Scales

Stanine

STATIS

Statistical Significance

Stem-and-Leaf Display

Stratified Random Sampling

Strong Interest Inventory

Stroop Color and Word Test

Structural Equation Modeling

Structured Clinical Interview for DSM-IV

Sunflower Plot

Support Vector Machines

Suppressor Variable

Survey Weights

Survival Analysis

System of Multicultural Pluralistic Assessment

T Scores

t Test for Two Population Means

Test-Retest Reliability

Tests of Mediating Effects

Text Analysis

Thematic Apperception Test

Three-Card Method

Thurstone Scales

Time Series Analysis

Torrance, E. Paul

Torrance Tests of Creative Thinking

Torrance Thinking Creatively in Action and

Movement

Tree Diagram

True/False Items

True Score

Tukey-Kramer Procedure

Type I Error

Type II Error

Unbiased Estimator

Universal Nonverbal Intelligence Test

Validity Coefficient

Validity Theory

Variable

Variable Deletion

Variance

Verbal IQ

Vineland Adaptive Behavior Scales

Vineland Social Maturity Scale

Wechsler Adult Intelligence Scale

Wechsler Individual Achievement Test

Wechsler Preschool and Primary Scale of

Intelligence

West Haven-Yale Multidimensional Pain Inventory

Wilcoxon, Frank

Wilcoxon Mann-Whitney Test. See Mann-Whitney

U Test (Wilcoxon Rank-Sum Test)

Wilcoxon Signed Ranks Test

Woodcock Johnson Psychoeducational Battery

Woodcock Reading Mastery Tests Revised

z Scores

Reader's Guide

The purpose of the Reader's Guide is to provide you with a tool you can use to locate specific entries in the encyclopedia, as well as to find out what other related entries might be of interest to you. For example, if you are interested in the visual display of information and want to learn how to create a bar chart (under the general heading of Charts, Graphs, and Visual Displays in the Reader's Guide), you can also find reference to such entries as Histogram, Line Chart, and Mosaic Plots, all related to the same general topic.

The Reader's Guide is also a very direct and simple way to get an overview of which items are contained in the encyclopedia. Although each of the categories lists items in alphabetic order (as the encyclopedia is organized), you can glance through the main headings of the guide and then focus more on a particular area of interest. Then, just turn to any particular entry you want to locate. These are easily found because they appear in alphabetical order.

Biographies

Babbage, Charles

Bernoulli, Jakob

Bonferroni, Carlo Emilio

Bruno, James Edward

Comrey, Andrew L.

Cronbach, Lee J.

Darwin, Charles

Deming, William Edwards

Fisher, Ronald Aylmer

Galton, Sir Francis

Gauss, Carl Friedrich

Gresham, Frank M.

Jackson, Douglas N.

Malthus, Thomas

Markov, Andrei Andreevich

Pascal, Blaise

Pearson, Karl

Poisson, Siméon Denis

Reynolds, Cecil R.

Torrance, E. Paul

Wilcoxon, Frank

Charts, Graphs, and Visual Displays

Area Chart

Bar Chart

Box Plot (Box and Whisker Plot)

Contour Plot

Eyeball Estimation

Frequency Distribution

Histogram

Line Chart

Mosaic Plots

Ogive

Parallel Coordinate Plots

Pie Chart

Q-Q Plot

Scattergram

Scree Plot

Smoothing

Stem-and-Leaf Display

Sunflower Plot Tree Diagram

Computer Topics and Tools

Babbage, Charles

Computational Statistics

Computerized Adaptive Testing

Curvilinear Regression Data Analysis ToolPak Data Compression

DISTATIS

Excel Spreadsheet Functions

Linear Regression

Residuals

Spatial Statistics Spreadsheet Functions

STATIS

Concepts and Issues in Measurement

Ability Tests

Achievement Tests

Alternate Assessment

Americans with Disabilities Act

Anthropometry Aptitude Tests

Artificial Neural Network

Asymmetry of *g*Attitude Tests
Basal Age

Categorical Variable Classical Test Theory Coefficient Alpha Completion Items

Computerized Adaptive Testing

Construct Validity Content Validity

Criterion-Referenced Test

Criterion Validity Cronbach, Lee J.

Curriculum-Based Measurement

Diagnostic Validity

Educational Testing Service

Equivalence Testing

Essay Items

Ethical Issues in Testing

Face Validity

Gf-Gc Theory of Intelligence

Guttman Scaling

Health Insurance Portability and Accountability Act

High-Stakes Tests

Immediate and Delayed Memory Tasks Individuals with Disabilities Education Act

Information Referenced Testing

Informed Consent
Intelligence Quotient
Intelligence Tests
Internal Review Board
Interrater Reliability

Interval Level of Measurement

Ipsative Measure
Item and Test Bias
Item Response Theory
KR-20 and KR-21
Likert Scaling
Measurement

Measurement Error

Metric Multidimensional Scaling

Multiple-Choice Items

Multitrait Multimethod Matrix and Construct

Validity

Nomothetic Versus Idiographic Ordinal Level of Measurement Parallel Forms Reliability

Performance IQ

Performance-Based Assessment

Personality Tests
Portfolio Assessment
Predictive Validity
Projective Testing
Q Methodology
Questionnaires

Ratio Level of Measurement

Reliability Theory

Response to Intervention

Reverse Scaling

Scaling

Section 504 of the Rehabilitation Act of 1973

Self-Report

Semantic Differential

Semantic Differential Scale

Six Sigma

Spearman's Rho

Split Half Reliability

Standard Error of Measurement

Standard Scores

Standards for Educational and Psychological Testing

T Scores

Test-Retest Reliability

Thurstone Scaling

Torrance, E. Paul

True/False Items

Validity Coefficient

Validity Theory

Verbal IQ

z Scores

Concepts and Issues in Statistics

Artificial Neural Network

Attenuation, Correction for

Autocorrelation

Bayesian Statistics

Bioinformatics

Central Limit Theorem

Decision Theory

Diggle-Kenward Model for Dropout

DISTATIS

Exploratory Factor Analysis

Factorial Design

Fourier Transform

Generalized Additive Model

Generalized Method of Moments

Generalized Procrustes Analysis

Graphical Statistical Methods

Hierarchical Linear Modeling

Historiometrics

Logistic Regression Analysis

Loglinear Analysis

Markov Chain Monte Carlo Methods

Matrix Operations

Mean

Measurement Error

Mixtures of Experts

Nonparametric Statistics

Propensity Scores

Rasch Measurement Model

Regression Analysis

Sampling Distribution of a Statistic

Signal Detection Theory

Simpson's Paradox

Spurious Correlation

Standard Error of the Mean

Standard Scores

Support Vector Machines

Survival Analysis

Type I Error

Type II Error

Data and Data Reduction Techniques

Censored Data

Data Compression

Data Mining

Discriminant Analysis

Eigenvalues

Exploratory Data Analysis

Factor Analysis

Factor Scores

Missing Data Method

Multiple Factor Analysis

Record Linkage

Secondary Analysis of Data

Descriptive Statistics

Arithmetic Mean

Attenuation, Correction for

Autocorrelation

Average

Average Deviation

Bayley Scales of Infant Development

Biserial Correlation Coefficient

Class Interval

Coefficients of Correlation, Alienation, and

Determination

Cognitive Psychometric Assessment

Cohen's Kappa

Correlation Coefficient

Cumulative Frequency Distribution

Deviation Score

Difference Score

Estimates of the Population Median

Fisher's Z Transformation Frequency Distribution

Galton, Sir Francis

Grand Mean

Harmonic Mean

Histogram

Kendall Rank Correlation

Mean

Measures of Central Tendency

Median

Mode

Moving Average

Parameter

Parameter Invariance

Part and Partial Correlations

Pearson, Karl

Pearson Product-Moment Correlation Coefficient

Percentile and Percentile Rank R_V and Congruence Coefficients

Scattergram

Semi-Interquartile Range Spurious Correlation

Standard Deviation Survey Weights

Text Analysis

Evaluation

Achievement Tests

Evidence-Based Practices

Health Insurance Portability and Accountability Act

High-Stakes Tests Questionnaires

Experimental Methods

Alternative Hypothesis

American Statistical Association

Americans with Disabilities Act

Association for Psychological Science

Basic Research

Bioinformatics

Complete Independence Hypothesis

Continuous Variable

Critical Value

Data Collection

Data Mining

Delphi Technique

Dependent Variable

Descriptive Research

Ethical Issues in Testing

Ethical Principles in the Conduct of Research With

Human Participants

Fractional Randomized Block Design

Hello-Goodbye Effect

Hypothesis and Hypothesis Testing

Independent Variable Informed Consent

Instrumental Variables

Internal Review Board

Longitudinal/Repeated Measures Data

Meta-Analysis

Missing Data Method

Mixed Models

Mixture Models

Moderator Variable

Monte Carlo Methods

Null Hypothesis Significance Testing

Ockham's Razor

Pairwise Comparisons

Post Hoc Comparisons

Projective Testing

Quasi-Experimental Method

Sample Size

Section 504 of the Rehabilitation Act of 1973

Significance Level

Simple Main Effect

Simulation Experiments

Single-Subject Designs

Standards for Educational and Psychological Testing

Statistical Significance

Suppressor Variable

Variable

Variable Deletion

Variance

Inferential Statistics

Akaike Information Criterion

Analysis of Covariance (ANCOVA)

Analysis of Variance (ANOVA)

Bayes Factors

Bayesian Information Criterion

Binomial Test

Bonferroni, Carlo Emilio

Complete Independence Hypothesis

Data Analysis ToolPak

Exploratory Factor Analysis

Factorial Design

Fisher, Ronald Aylmer

Hierarchical Linear Modeling

Hypothesis and Hypothesis Testing

Inferential Statistics

Logistic Regression Analysis

Markov, Andrei Andreevich

Null Hypothesis Significance Testing

Pairwise Comparisons

Part and Partial Correlations

Repeated Measures Analysis of Variance

Type I Error

Type II Error

Wilcoxon, Frank

Organizations and Publications

Abstracts

American Doctoral Dissertations

American Psychological Association

American Statistical Association

Association for Psychological Science

Buros Institute of Mental Measurements

Centers for Disease Control and Prevention

Educational Testing Service

Journal of the American Statistical Association

Journal of Modern Applied Statistical Methods

Journal of Statistics Education

National Science Foundation

Psychological Abstracts

Psychometrics

PsycINFO

Society for Research in Child Development

Sociological Abstracts

Prediction and Estimation

Attributable Risk

Bernoulli, Jakob

Chance

Conditional Probability

Confidence Intervals

Continuous Variable

Curse of Dimensionality

Decision Boundary

Decision Theory

File Drawer Problem

Gambler's Fallacy

Generalized Estimating Equations

Law of Large Numbers

Maximum Likelihood Method

Nonprobability Sampling

Pascal, Blaise

Probability Sampling

Random Numbers

Relative Risk

Signal Detection Theory

Significance Level

Three-Card Method

Probability

Alternate Assessment

Audit Trail

Authenticity

Categorical Variable

Essay Items

Grounded Theory

Observational Studies

Portfolio Assessment

Self-Report

Text Analysis

Qualitative Methods

Active Life Expectancy

Assessment of Interactions in Multiple Regression

Eyeball Estimation

Orthogonal Predictors in Regression

Regression Analysis

Survival Analysis

Samples, Sampling, and Distributions

Acceptance Sampling

Adaptive Sampling Design

Age Norms

Attrition Bias

Career Maturity Inventory

Central Limit Theorem

Class Interval Cluster Sampling

Confidence Intervals Convenience Sampling

Cumulative Frequency Distribution

Data Collection

Diggle-Kenward Model for Dropout

Gauss, Carl Friedrich

Heteroscedasticity and Homoscedasticity

Homogeneity of Variance Hypergeometric Distribution

Kurtosis

Malthus, Thomas Multicollinearity

Multivariate Normal Distribution

Nonprobability Sampling

Normal Curve

Ogive Parameter

Percentile and Percentile Rank

Poisson, Siméon Denis Poisson Distribution Posterior Distribution Prior Distribution Probability Sampling

Quota Sampling Random Sampling

Sample Size

Semi-Interquartile Range

Simpson's Rule Skewness Smoothing

Stanine

Stratified Random Sampling

Unbiased Estimator

Statistical Techniques

Binomial Distribution/Binomial and Sign Tests

Bivariate Distributions

Bonferroni Test Bowker Procedure Causal Analysis Centroid Chance

Chi-Square Test for Goodness of Fit Chi-Square Test for Independence Classification and Regression Tree

Cochran *Q* Test Cohen's Kappa Delta Method

Dimension Reduction Discriminant Analysis Dissimilarity Coefficient Dixon Test for Outliers

Dunn's Multiple Comparison Test

Eigendecomposition

Eigenvalues EM Algorithm

Exploratory Data Analysis

Factor Analysis
Factor Scores

Fisher Exact Probability Test

Fisher's LSD Friedman Test Goodness-of-Fit Tests Grounded Theory

k-Means Cluster Analysis

Kolmogorov-Smirnov Test for One Sample Kolmogorov-Smirnov Test for Two Samples Kruskal-Wallis One-Way Analysis of Variance

Latent Class Analysis Likelihood Ratio Test

Lilliefors Test for Normality

Mann-Whitney U Test (Wilcoxon Rank-Sum Test)

McNemar Test for Significance of Changes

Median Test Meta-Analysis

Multiple Comparisons Multiple Factor Analysis

Multiple Imputation for Missing Data

Multivariate Analysis of Variance (MANOVA)

Newman-Keuls Test

O'Brien Test for Homogeneity of Variance

Observational Studies

One-Way Analysis of Variance

Page's L Test

Paired Samples t Test (Dependent Samples t Test)

Path Analysis
Peritz Procedure

Scan Statistic
Shapiro-Wilk Test for Normality
Structural Equation Modeling
t Test for Two Population Means
Tests of Mediating Effects
Three-Card Method
Tukey-Kramer Procedure
Wilcoxon Signed Ranks Test

Statistical Tests

Analysis of Covariance (ANCOVA)

Analysis of Variance (ANOVA)

Behrens-Fisher Test

Binomial Distribution/Binomial and Sign Tests

Binomial Test

Bonferroni Test

Bowker Procedure

Chi-Square Test for Goodness of Fit

Chi-Square Test for Independence

Classification and Regression Tree

Cochran Q Test

Dixon Test for Outliers

Dunn's Multiple Comparison Test

Excel Spreadsheet Functions

Fisher Exact Probability Test

Fisher's LSD

Friedman Test

Goodness-of-Fit Tests

Kolmogorov-Smirnov Test for One Sample

Kolmogorov-Smirnov Test for Two Samples

Kruskal-Wallis One-Way Analysis of Variance

Latent Class Analysis

Likelihood Ratio Test

Lilliefors Test for Normality

Mann-Whitney U Test (Wilcoxon Rank-Sum Test)

McNemar Test for Significance of Changes

Median Test

Multiple Comparisons

Multivariate Analysis of Variance (MANOVA)

Newman-Keuls Test

O'Brien Test for Homogeneity of Variance

One- and Two-Tailed Tests

One-Way Analysis of Variance

Page's L Test

Paired Samples t Test (Dependent Samples t Test)

Peritz Procedure

Repeated Measures Analysis of Variance

Shapiro-Wilk Test for Normality

t Test for Two Population Means

Tests of Mediating Effects

Tukey-Kramer Procedure

Wilcoxon Signed Ranks Test

Tests by Name

Adjective Checklist

Alcohol Use Inventory

Armed Forces Qualification Test

Armed Services Vocational Aptitude Battery

Basic Personality Inventory

Bayley Scales of Infant Development

Beck Depression Inventory

Behavior Assessment System for Children

Bender Visual Motor Gestalt Test

Bracken Basic Concept Scale-Revised

California Psychological Inventory

Career Assessment Inventory

Career Development Inventory

Career Maturity Inventory

Carroll Depression Scale

Children's Academic Intrinsic Motivation Inventory

Clinical Assessment of Attention Deficit

Clinical Assessment of Behavior

Clinical Assessment of Depression

Cognitive Abilities Test

Cognitive Psychometric Assessment

Comrey Personality Scales

Coping Resources Inventory for Stress

Culture Fair Intelligence Test

Differential Aptitude Test

Ecological Momentary Assessment

Edwards Personal Preference Schedule

Embedded Figures Test

Fagan Test of Infant Intelligence

Family Environment Scale

Gerontological Apperception Test

Goodenough Harris Drawing Test

Graduate Record Examinations

Holden Psychological Screening Inventory

Illinois Test of Psycholinguistic Abilities

Information Systems Interaction Readiness