

jmp oneway analysis

JMP One-Way Analysis: A Comprehensive Guide for Data Analysis

Introduction:

Are you grappling with analyzing data that involves comparing means across different groups? Do you need a powerful yet user-friendly statistical tool to unravel the significance of these differences? Then you've come to the right place. This comprehensive guide dives deep into JMP's one-way analysis of variance (ANOVA), a fundamental statistical technique for comparing the means of three or more groups. We'll navigate the process step-by-step, covering everything from data preparation to interpreting the results, empowering you to confidently perform and understand JMP one-way analysis. This guide provides a practical, hands-on approach, perfect for both beginners and experienced JMP users looking to refine their analytical skills. We'll explore various aspects, including choosing the right test, handling assumptions, and effectively visualizing your findings. Get ready to unlock the power of JMP for your statistical analysis needs!

1. Understanding One-Way ANOVA and its Application in JMP

One-way ANOVA is a powerful statistical technique used to determine if there's a statistically significant difference between the means of three or more independent groups. It's a crucial tool across various fields, including:

Medicine: Comparing the effectiveness of different treatments.

Engineering: Analyzing the performance of different manufacturing processes.

Marketing: Assessing the impact of various advertising campaigns.

Agriculture: Evaluating the yield of different crop varieties.

JMP simplifies this complex analysis, providing an intuitive interface and insightful visualizations. Unlike manual calculations, JMP handles the statistical complexities, allowing you to focus on interpreting the results and drawing meaningful conclusions.

1. Preparing Your Data for JMP One-Way ANOVA

Before launching into the analysis, meticulous data preparation is critical. Your data should be organized in a specific way for JMP to effectively perform the one-way ANOVA. Here's what you need to consider:

Data Structure: Your data should be in a tabular format, with one column representing the grouping variable (independent variable) and another column representing the dependent variable (the variable you're measuring).

Data Types: Ensure the grouping variable is categorical (nominal or ordinal), while the dependent variable is continuous (interval or ratio).

Missing Data: JMP offers several ways to handle missing data, from simple exclusion to more sophisticated imputation techniques. Understanding how you handle missing values is crucial for the accuracy of your results.

Outliers: Identify and address potential outliers in your dataset. Outliers can significantly influence the results of your ANOVA. JMP provides tools to visually identify outliers through box plots and other diagnostic plots.

1. Performing the One-Way ANOVA in JMP

Once your data is properly prepared, performing the one-way ANOVA in JMP is straightforward:

1. Import your data: Import your data into JMP. JMP supports various data formats, including CSV, Excel, and SAS.
2. Analyze > Fit Y by X: Select your dependent variable (Y) and your grouping variable (X).
3. Interpret the output: JMP provides a comprehensive output, including:

ANOVA table: This table provides the F-statistic, p-value, and degrees of freedom, allowing you to determine the statistical significance of the differences between group means.

Means and Error Bars: JMP generates means plots with error bars, providing a visual representation of the group means and their variability. This allows for a quick visual assessment of differences.

Post-Hoc Tests: If the ANOVA reveals a significant difference, post-hoc tests (like Tukey's HSD or Bonferroni) are used to determine which specific groups differ significantly from each other. JMP seamlessly integrates these tests.

1. Interpreting the Results and Drawing Conclusions

Interpreting the results of a JMP one-way ANOVA involves understanding the key statistics generated:

The F-statistic: This statistic measures the variance between the group means relative to the variance within the groups. A larger F-statistic suggests greater differences between the group means.

The p-value: This is the probability of observing the obtained results (or more extreme results) if there were no real difference between the group means. A p-value less than your chosen significance level (typically 0.05) indicates a statistically significant difference between at least two groups.

Effect Size: While the p-value indicates significance, effect size measures the magnitude of the

difference between group means. JMP doesn't directly calculate effect size for ANOVA, but you can calculate eta-squared (η^2) manually using the ANOVA table's sums of squares.

1. Checking Assumptions of One-Way ANOVA

One-way ANOVA relies on several key assumptions. Violating these assumptions can lead to inaccurate results. JMP helps you check these assumptions:

Normality: The dependent variable should be approximately normally distributed within each group. JMP provides histograms and normality tests to check this assumption.

Homogeneity of variances: The variance of the dependent variable should be approximately equal across all groups. JMP's ANOVA output often includes a test for homogeneity of variances (e.g., Levene's test).

Independence: Observations should be independent of each other. This assumption is crucial and relates to how your data was collected.

1. Advanced Techniques and Considerations

JMP offers advanced features to further refine your one-way ANOVA analysis:

Transformations: If the assumptions of normality or homogeneity of variances are violated, data transformations (e.g., logarithmic or square root transformations) can help to meet these assumptions.

Non-parametric alternatives: If the assumptions are severely violated, consider non-parametric alternatives like the Kruskal-Wallis test. JMP also offers this test.

Multiple comparisons: Properly handling multiple comparisons is crucial when conducting post-hoc

tests. JMP offers various methods to adjust p-values (e.g., Bonferroni correction) to control for the inflated Type I error rate.

1. Visualizing Your Results Effectively

Effective visualization is crucial for communicating the findings of your one-way ANOVA. JMP provides various tools for this:

Means plots with error bars: These plots visually represent group means and their variability.

Box plots: Box plots provide a visual summary of the distribution of the dependent variable within each group, including medians, quartiles, and outliers.

Histograms: Histograms allow you to visually assess the normality assumption within each group.

Article Outline:

Title: Mastering JMP One-Way Analysis: A Step-by-Step Guide

Introduction: Hooking the reader and overview of the guide.

Chapter 1: Understanding One-Way ANOVA and its Application in JMP

Chapter 2: Preparing Your Data for JMP One-Way ANOVA

Chapter 3: Performing the One-Way ANOVA in JMP

Chapter 4: Interpreting the Results and Drawing Conclusions

Chapter 5: Checking Assumptions of One-Way ANOVA

Chapter 6: Advanced Techniques and Considerations

Chapter 7: Visualizing Your Results Effectively

Conclusion: Summary and key takeaways

(The content above covers each point of this outline.)

FAQs:

1. What is the difference between a one-way and a two-way ANOVA? A one-way ANOVA compares the means of groups based on one independent variable, while a two-way ANOVA compares means based on two or more independent variables.
1. What if my data violates the assumptions of ANOVA? Consider data transformations or non-parametric alternatives like the Kruskal-Wallis test.
1. How do I interpret the p-value in JMP's ANOVA output? A p-value less than your significance level (usually 0.05) indicates a statistically significant difference between at least two groups.
1. What are post-hoc tests, and why are they important? Post-hoc tests determine which specific groups differ significantly from each other after a significant ANOVA result.
1. How can I handle missing data in my JMP dataset? JMP offers various methods, including exclusion and imputation. Choose the method appropriate for your data and research question.

1. What is the effect size, and how is it calculated in the context of ANOVA? Effect size (e.g., eta-squared) measures the magnitude of the difference between group means. It's calculated using the sums of squares from the ANOVA table.

1. What are some common visualizations used to present ANOVA results? Means plots with error bars, box plots, and histograms are commonly used.

1. Can I perform a one-way ANOVA with unequal sample sizes in each group? Yes, JMP can handle unequal sample sizes.

1. What are the limitations of one-way ANOVA? One-way ANOVA only considers one independent variable. For analyzing multiple independent variables, consider factorial ANOVA or other multivariate techniques.

Related Articles:

1. JMP ANOVA Tutorial for Beginners: A step-by-step guide for beginners to learn ANOVA using JMP software.

2. Understanding ANOVA Assumptions in JMP: A detailed explanation of the assumptions of ANOVA and how to check them in JMP.
3. Post-Hoc Tests in JMP: A Practical Guide: A comprehensive guide to conducting and interpreting post-hoc tests in JMP.
4. Data Transformation Techniques for ANOVA in JMP: A guide to using data transformations to meet the assumptions of ANOVA.
5. Non-parametric Alternatives to One-Way ANOVA in JMP: Explores non-parametric alternatives when ANOVA assumptions are violated.
6. Visualizing ANOVA Results in JMP: Advanced techniques for creating informative visualizations of ANOVA results.
7. Interpreting ANOVA Output in JMP: A detailed explanation of interpreting the different components of JMP's ANOVA output.
8. JMP for Statistical Analysis: A Beginner's Guide: A broader introduction to using JMP for various statistical analyses.
9. Comparing Means: A Comprehensive Guide to Statistical Tests: A broader overview of various statistical tests used for comparing means.

jmp oneway analysis: JMP for Basic Univariate and Multivariate Statistics Ann Lehman, Norm O'Rourke, Larry Hatcher, Edward Stepanski, 2013 Learn how to manage JMP data and perform the statistical analyses most commonly used in research in the social sciences and other fields with JMP for Basic Univariate and Multivariate Statistics: Methods for Researchers and Social Scientists, Second Edition. Updated for JMP 10 and including new features on the statistical platforms, this book offers clearly written instructions to guide you through the basic concepts of research and data analysis, enabling you to easily perform statistical analyses and solve problems in real-world

research. Step by step, you'll discover how to obtain descriptive and inferential statistics, summarize results clearly in a way that is suitable for publication, perform a wide range of JMP analyses, interpret the results, and more. Topics include screening data for errors selecting subsets computing the coefficient alpha reliability index (Cronbach's alpha) for a multiple-item scale performing bivariate analyses for all types of variables performing a one-way analysis of variance (ANOVA), multiple regression, and a one-way multivariate analysis of variance (MANOVA) Advanced topics include analyzing models with interactions and repeated measures. There is also comprehensive coverage of principle components with emphasis on graphical interpretation. This user-friendly book introduces researchers and students of the social sciences to JMP and to elementary statistical procedures, while the more advanced statistical procedures that are presented make it an invaluable reference guide for experienced researchers as well.

jmp oneway analysis: JMP Start Statistics John Sall, Mia L. Stephens, Ann Lehman, Sheila Loring, 2017-02-21 This book provides hands-on tutorials with just the right amount of conceptual and motivational material to illustrate how to use the intuitive interface for data analysis in JMP. Each chapter features concept-specific tutorials, examples, brief reviews of concepts, step-by-step illustrations, and exercises. Updated for JMP 13, JMP Start Statistics, Sixth Edition includes many new features, including: The redesigned Formula Editor. New and improved ways to create formulas in JMP directly from the data table or dialogs. Interface updates, including improved menu layout. Updates and enhancements in many analysis platforms. New ways to get data into JMP and to save and share JMP results. Many new features that make it easier to use JMP.

jmp oneway analysis: Analysis of Repeated Measures Martin J. Crowder, David J. Hand, 2017-10-24 Repeated measures data arise when the same characteristic is measured on each case or subject at several times or under several conditions. There is a multitude of techniques available for analysing such data and in the past this has led to some confusion. This book describes the whole spectrum of approaches, beginning with very simple and crude methods, working through intermediate techniques commonly used by consultant statisticians, and concluding with more recent and advanced methods. Those covered include multiple testing, response feature analysis, univariate analysis of variance approaches, multivariate analysis of variance approaches, regression models, two-stage line models, approaches to categorical data and techniques for analysing crossover designs. The theory is illustrated with examples, using real data brought to the authors during their work as statistical consultants.

jmp oneway analysis: Practical Data Analysis with JMP Robert Carver, SAS Institute, 2010 Practical Data Analysis with JMP uses the powerful interactive and visual approach of JMP to introduce readers to the logic and methods of statistical thinking and data analysis. The book can stand on its own or be used to supplement a standard introduction-to-statistics textbook.

jmp oneway analysis: Fundamentals of Predictive Analytics with JMP, Second Edition Ron Klimberg, B. D. McCullough, 2017-12-19 Going beyond the theoretical foundation, this step-by-step book gives you the technical knowledge and problem-solving skills that you need to perform real-world multivariate data analysis. --

jmp oneway analysis: Biostatistics Using JMP Trevor Bihl, 2017-10-03 Analyze your biostatistics data with JMP! Trevor Bihl's Biostatistics Using JMP: A Practical Guide provides a practical introduction on using JMP, the interactive statistical discovery software, to solve biostatistical problems. Providing extensive breadth, from summary statistics to neural networks, this essential volume offers a comprehensive, step-by-step guide to using JMP to handle your data. The first biostatistical book to focus on software, Biostatistics Using JMP discusses such topics as data visualization, data wrangling, data cleaning, histograms, box plots, Pareto plots, scatter plots, hypothesis tests, confidence intervals, analysis of variance, regression, curve fitting, clustering, classification, discriminant analysis, neural networks, decision trees, logistic regression, survival analysis, control charts, and metaanalysis. Written for university students, professors, those who perform biological/biomedical experiments, laboratory managers, and research scientists, Biostatistics Using JMP provides a practical approach to using JMP to solve your biostatistical

problems.

jmp oneway analysis: Practical Data Analysis with JMP, Third Edition Robert Carver, 2019-10-18 Master the concepts and techniques of statistical analysis using JMP Practical Data Analysis with JMP, Third Edition, highlights the powerful interactive and visual approach of JMP to introduce readers to statistical thinking and data analysis. It helps you choose the best technique for the problem at hand by using real-world cases. It also illustrates best-practice workflow throughout the entire investigative cycle, from asking valuable questions through data acquisition, preparation, analysis, interpretation, and communication of findings. The book can stand on its own as a learning resource for professionals, or it can be used to supplement a college-level textbook for an introductory statistics course. It includes varied examples and problems using real sets of data. Each chapter typically starts with an important or interesting research question that an investigator has pursued. Reflecting the broad applicability of statistical reasoning, the problems come from a wide variety of disciplines, including engineering, life sciences, business, and economics, as well as international and historical examples. Application Scenarios at the end of each chapter challenge you to use your knowledge and skills with data sets that go beyond mere repetition of chapter examples. New in the third edition, chapters have been updated to demonstrate the enhanced capabilities of JMP, including projects, Graph Builder, Query Builder, and Formula Depot.

jmp oneway analysis: *Applied Regression Modeling* Iain Pardoe, 2013-01-07 Praise for the First Edition The attention to detail is impressive. The book is very well written and the author is extremely careful with his descriptions . . . the examples are wonderful. —The American Statistician Fully revised to reflect the latest methodologies and emerging applications, *Applied Regression Modeling, Second Edition* continues to highlight the benefits of statistical methods, specifically regression analysis and modeling, for understanding, analyzing, and interpreting multivariate data in business, science, and social science applications. The author utilizes a bounty of real-life examples, case studies, illustrations, and graphics to introduce readers to the world of regression analysis using various software packages, including R, SPSS, Minitab, SAS, JMP, and S-PLUS. In a clear and careful writing style, the book introduces modeling extensions that illustrate more advanced regression techniques, including logistic regression, Poisson regression, discrete choice models, multilevel models, and Bayesian modeling. In addition, the Second Edition features clarification and expansion of challenging topics, such as: Transformations, indicator variables, and interaction Testing model assumptions Nonconstant variance Autocorrelation Variable selection methods Model building and graphical interpretation Throughout the book, datasets and examples have been updated and additional problems are included at the end of each chapter, allowing readers to test their comprehension of the presented material. In addition, a related website features the book's datasets, presentation slides, detailed statistical software instructions, and learning resources including additional problems and instructional videos. With an intuitive approach that is not heavy on mathematical detail, *Applied Regression Modeling, Second Edition* is an excellent book for courses on statistical regression analysis at the upper-undergraduate and graduate level. The book also serves as a valuable resource for professionals and researchers who utilize statistical methods for decision-making in their everyday work.

jmp oneway analysis: Fundamentals of Predictive Analytics with JMP, Second Edition Ron Klimberg, B. D. McCullough, 2017-12-19 Written for students in undergraduate and graduate statistics courses, as well as for the practitioner who wants to make better decisions from data and models, this updated and expanded second edition of *Fundamentals of Predictive Analytics with JMP(R)* bridges the gap between courses on basic statistics, which focus on univariate and bivariate analysis, and courses on data mining and predictive analytics. Going beyond the theoretical foundation, this book gives you the technical knowledge and problem-solving skills that you need to perform real-world multivariate data analysis. First, this book teaches you to recognize when it is appropriate to use a tool, what variables and data are required, and what the results might be. Second, it teaches you how to interpret the results and then, step-by-step, how and where to perform and evaluate the analysis in JMP . Using JMP 13 and JMP 13 Pro, this book offers the following new

and enhanced features in an example-driven format: an add-in for Microsoft Excel Graph Builder dirty data visualization regression ANOVA logistic regression principal component analysis LASSO elastic net cluster analysis decision trees k-nearest neighbors neural networks bootstrap forests boosted trees text mining association rules model comparison With today's emphasis on business intelligence, business analytics, and predictive analytics, this second edition is invaluable to anyone who needs to expand his or her knowledge of statistics and to apply real-world, problem-solving analysis. This book is part of the SAS Press program.

jmp oneway analysis: *JMP for Basic Univariate and Multivariate Statistics* Ann Lehman, PhD, Norm O'Rourke, Ph.D., R.Psych., Larry Hatcher, Ph.D., Edward J. Stepanski, Ph.D., 2013-04-16 Updated for JMP 10, the book provides hands-on tutorials with just the right amount of conceptual and motivational material to illustrate how to use the intuitive interface for data analysis in JMP. Features concept-specific tutorials, examples, brief reviews of concepts, step-by-step illustrations, and exercises.

jmp oneway analysis: Introduction to Biostatistics with JMP Steve Figard, 2019-10-04 Explore biostatistics using JMP® in this refreshing introduction Presented in an easy-to-understand way, Introduction to Biostatistics with JMP® introduces undergraduate students in the biological sciences to the most commonly used (and misused) statistical methods that they will need to analyze their experimental data using JMP. It covers many of the basic topics in statistics using biological examples for exercises so that the student biologists can see the relevance to future work in the problems addressed. The book starts by teaching students how to become confident in executing the right analysis by thinking like a statistician then moves into the application of specific tests. Using the powerful capabilities of JMP, the book addresses problems requiring analysis by chi-square tests, t tests, ANOVA analysis, various regression models, DOE, and survival analysis. Topics of particular interest to the biological or health science field include odds ratios, relative risk, and survival analysis. The author uses an engaging, conversational tone to explain concepts and keep readers interested in learning more. The book aims to create bioscientists who can competently incorporate statistics into their investigative toolkits to solve biological research questions as they arise.

jmp oneway analysis: Fundamentals of Predictive Analytics with JMP, Third Edition Ron Klimberg, 2023-04-18 Written for students in undergraduate and graduate statistics courses, as well as for the practitioner who wants to make better decisions from data and models, this updated and expanded third edition of Fundamentals of Predictive Analytics with JMP bridges the gap between courses on basic statistics, which focus on univariate and bivariate analysis, and courses on data mining and predictive analytics. Going beyond the theoretical foundation, this book gives you the technical knowledge and problem-solving skills that you need to perform real-world multivariate data analysis. Using JMP 17, this book discusses the following new and enhanced features in an example-driven format: an add-in for Microsoft Excel Graph Builder dirty data visualization regression ANOVA logistic regression principal component analysis LASSO elastic net cluster analysis decision trees k-nearest neighbors neural networks bootstrap forests boosted trees text mining association rules model comparison time series forecasting With a new, expansive chapter on time series forecasting and more exercises to test your skills, this third edition is invaluable to those who need to expand their knowledge of statistics and apply real-world, problem-solving analysis.

jmp oneway analysis: JMP Start Statistics John Sall, Ann Lehman, Lee Creighton, 2001 JMP IN® is an interactive software tool especially designed for statistical visualization and exploratory data analysis. JMP's goal is to analyze data in as graphical a way as possible, enabling you to discover more, interact more, and understand more.

jmp oneway analysis: Statistics and Probability with Applications for Engineers and Scientists Bhisham C. Gupta, Irwin Guttman, 2013-04-29 Introducing the tools of statistics and probability from the ground up An understanding of statistical tools is essential for engineers and scientists who often need to deal with data analysis over the course of their work. Statistics and Probability with Applications for Engineers and Scientists walks readers through a wide range of popular statistical techniques, explaining step-by-step how to generate, analyze, and interpret data for diverse

applications in engineering and the natural sciences. Unique among books of this kind, *Statistics and Probability with Applications for Engineers and Scientists* covers descriptive statistics first, then goes on to discuss the fundamentals of probability theory. Along with case studies, examples, and real-world data sets, the book incorporates clear instructions on how to use the statistical packages Minitab® and Microsoft® Office Excel® to analyze various data sets. The book also features:

- Detailed discussions on sampling distributions, statistical estimation of population parameters, hypothesis testing, reliability theory, statistical quality control including Phase I and Phase II control charts, and process capability indices
- A clear presentation of nonparametric methods and simple and multiple linear regression methods, as well as a brief discussion on logistic regression method
- Comprehensive guidance on the design of experiments, including randomized block designs, one- and two-way layout designs, Latin square designs, random effects and mixed effects models, factorial and fractional factorial designs, and response surface methodology
- A companion website containing data sets for Minitab and Microsoft Office Excel, as well as JMP ® routines and results

Assuming no background in probability and statistics, *Statistics and Probability with Applications for Engineers and Scientists* features a unique, yet tried-and-true, approach that is ideal for all undergraduate students as well as statistical practitioners who analyze and illustrate real-world data in engineering and the natural sciences.

jmp oneway analysis: JMP Essentials Curt Hinrichs, Chuck Boiler, Susan Walsh, 2020-03-17 Grasp the essentials of JMP to generate rapid results. *JMP Essentials: An Illustrated Guide for New Users*, Third Edition, is designed for new or novice JMP users who need to generate meaningful analysis quickly. The book focuses on the most commonly used platforms and typical workflow of the user, from data importing, exploring, and visualizing to modeling and sharing results with others. Throughout the book, the authors emphasize results over theory, providing just the essential steps with corresponding screenshots. In most cases, each section completes a JMP task, which maximizes the book's utility as a reference. This edition has new instructions and screenshots reflecting the features added to the latest release of JMP software, including updated sections on JMP Dashboard Builder, Query Builder, the Fit Model platform, JMP Public and JMP Live, and a more detailed look at the JMP website. Each chapter contains a family of features that are carefully crafted to first introduce you to basic features and then move on to more advanced topics. *JMP Essentials: An Illustrated Guide for New Users*, Third Edition, is the quickest and most accessible reference book available.

jmp oneway analysis: ,

jmp oneway analysis: JMP 9 Basic Analysis and Graphing SAS Publishing, 2010 *JMP 9 Basic Analysis and Graphing* documents the basic JMP 9 statistical platforms, provides an overview of basic statistical methods, and describes some JMP 9 report windows and options. This book covers univariate analysis, capability analyses, bivariate scatterplot, one-way ANOVA, contingency tables analysis, simple logistic regression, and paired data. Also included are instructions for using charts, overlay plots, interactive data visualization, contour plots, bubble plots, three-dimensional scatterplots, scatterplot matrices, ternary plots, tree maps, and more.

jmp oneway analysis: Elementary Statistics Using JMP Sandra D. Schlotzhauer, 2007 Learn how to perform basic statistical analyses using the powerful JMP software. *Elementary Statistics Using JMP* bridges the gap between statistics texts and JMP documentation. Author Sandra Schlotzhauer opens with an explanation of the basics of JMP data tables, demonstrating how to use JMP for descriptive statistics and graphs. The author continues with a lucid discussion of fundamental statistical concepts, including normality and hypothesis testing. Using a step-by-step approach, she shows analyses for comparing two groups, comparing multiple groups, fitting regression equations, and exploring contingency tables. For each analysis, the author clearly explains assumptions, the statistical approach, the JMP steps and results, and how to make conclusions from the results. Statistical methods include: *histograms, box plots, descriptive statistics, stem-and-leaf plots *mosaic plots, bar charts, and treemaps *t-tests and Wilcoxon tests to compare two independent or paired groups *one-way ANOVA and Kruskal-Wallis tests, and selected

multiple comparison techniques *Pearson and Spearman correlation coefficients *regression models for lines, curves, and multiple variables *residuals plots and lack-of-fit tests for regression
*Chi-square tests, Fisher's Exact test, and measures of association for contingency tables.
Understand how to interpret both the graphs and text reports, as well as how to customize JMP results to meet your needs. Packed with examples from a broad range of industries, this text is ideal for novice to intermediate JMP users. Prior statistical knowledge, JMP experience, or programming skills are not required.

jmp oneway analysis: Pharmaceutical Quality by Design Using JMP Rob Lievense, 2018-10-03 Solve your pharmaceutical product development and manufacturing problems using JMP . Pharmaceutical Quality by Design Using JMP : Solving Product Development and Manufacturing Problems provides broad-based techniques available in JMP to visualize data and run statistical analyses for areas common in healthcare product manufacturing. As international regulatory agencies push the concept of Quality by Design (QbD), there is a growing emphasis to optimize the processing of products. This book uses practical examples from the pharmaceutical and medical device industries to illustrate easy-to-understand ways of incorporating QbD elements using JMP. Pharmaceutical Quality by Design Using JMP opens by demonstrating the easy navigation of JMP to visualize data through the distribution function and the graph builder and then highlights the following: the powerful dynamic nature of data visualization that enables users to be able to quickly extract meaningful information tools and techniques designed for the use of structured, multivariate sets of experiments examples of complex analysis unique to healthcare products such as particle size distributions/drug dissolution, stability of drug products over time, and blend uniformity/content uniformity. Scientists, engineers, and technicians involved throughout the pharmaceutical and medical device product life cycles will find this book invaluable. This book is part of the SAS Press program.

jmp oneway analysis: Validating Clinical Trial Data Reporting with SAS Carol I. Matthews, Brian C. Shilling, 2008 This indispensable guide focuses on validating programs written to support the clinical trial process from after the data collection stage to generating reports and submitting data and output to the Food and Drug Administration.

jmp oneway analysis: Multiple Comparisons and Multiple Tests Using SAS, Second Edition Peter H. Westfall, Randall D. Tobias, Russell D. Wolfinger, 2011 New and extensively updated for SAS 9 and later, this work provides cutting-edge methods, specialized macros, and proven best bet procedures. The book also discusses the pitfalls and advantages of various methods, thereby helping readers to decide which is the most appropriate for their purposes. 644 pp. Pub. 7/11.

jmp oneway analysis: JMP , 2000

jmp oneway analysis: JMP for Basic Univariate and Multivariate Statistics Ann Lehman, 2005 Doing statistics in JMP has never been easier as readers learn how to manage JMP data and perform the statistical analyses most commonly used in research in the social sciences and other fields. Clearly written instructions cover the basic concepts of research and data analysis, enabling users to easily perform statistical analyses and solve problems in real-world research.

jmp oneway analysis: SAS Programming for R Users Jordan Bakerman, 2019-12-09 SAS Programming for R Users, based on the free SAS Education course of the same name, is designed for experienced R users who want to transfer their programming skills to SAS. Emphasis is on programming and not statistical theory or interpretation. You will learn how to write programs in SAS that replicate familiar functions and capabilities in R. This book covers a wide range of topics including the basics of the SAS programming language, how to import data, how to create new variables, random number generation, linear modeling, Interactive Matrix Language (IML), and many other SAS procedures. This book also explains how to write R code directly in the SAS code editor for seamless integration between the two tools. Exercises are provided at the end of each chapter so that you can test your knowledge and practice your programming skills.

jmp oneway analysis: Risk-Based Monitoring and Fraud Detection in Clinical Trials Using JMP and SAS Richard C. Zink, 2014-07-01 Improve efficiency while reducing costs in clinical trials with

centralized monitoring techniques using JMP and SAS. International guidelines recommend that clinical trial data should be actively reviewed or monitored; the well-being of trial participants and the validity and integrity of the final analysis results are at stake. Traditional interpretation of this guidance for pharmaceutical trials has led to extensive on-site monitoring, including 100% source data verification. On-site review is time consuming, expensive (estimated at up to a third of the cost of a clinical trial), prone to error, and limited in its ability to provide insight for data trends across time, patients, and clinical sites. In contrast, risk-based monitoring (RBM) makes use of central computerized review of clinical trial data and site metrics to determine if and when clinical sites should receive more extensive quality review or intervention. *Risk-Based Monitoring and Fraud Detection in Clinical Trials Using JMP and SAS* presents a practical implementation of methodologies within JMP Clinical for the centralized monitoring of clinical trials. Focused on intermediate users, this book describes analyses for RBM that incorporate and extend the recommendations of TransCelerate Biopharm Inc., methods to detect potential patient-or investigator misconduct, snapshot comparisons to more easily identify new or modified data, and other novel visual and analytical techniques to enhance safety and quality reviews. Further discussion highlights recent regulatory guidance documents on risk-based approaches, addresses the requirements for CDISC data, and describes methods to supplement analyses with data captured external to the study database. Given the interactive, dynamic, and graphical nature of JMP Clinical, any individual from the clinical trial team - including clinicians, statisticians, data managers, programmers, regulatory associates, and monitors - can make use of this book and the numerous examples contained within to streamline, accelerate, and enrich their reviews of clinical trial data. The analytical methods described in *Risk-Based Monitoring and Fraud Detection in Clinical Trials Using JMP and SAS* enable the clinical trial team to take a proactive approach to data quality and safety to streamline clinical development activities and address shortcomings while the study is ongoing. This book is part of the SAS Press

jmp oneway analysis: Phenomenology of Illness Havi Carel, 2016 The experience of illness is a universal and substantial part of human existence. Like death, illness raises important philosophical issues. But unlike death, illness, and in particular the experience of being ill, has received little philosophical attention. This may be because illness is often understood as a physiological process that falls within the domain of medical science, and is thus outside the purview of philosophy. In *Phenomenology of Illness* Havi Carel argues that the experience of illness has been wrongly neglected by philosophers and proposes to fill the lacuna. *Phenomenology of Illness* provides a distinctively philosophical account of illness. Using phenomenology, the philosophical method for first-person investigation, Carel explores how illness modifies the ill person's body, values, and world. The aim of *Phenomenology of Illness* is twofold: to contribute to the understanding of illness through the use of philosophy and to demonstrate the importance of illness for philosophy. Contra the philosophical tendency to resist thinking about illness, Carel proposes that illness is a philosophical tool. Through its pathologising effect, illness distances the ill person from taken for granted routines and habits and reveals aspects of human existence that normally go unnoticed. *Phenomenology of Illness* develops a phenomenological framework for illness and a systematic understanding of illness as a philosophical tool.

jmp oneway analysis: SAS for Mixed Models Walter W. Stroup, George A. Milliken, Elizabeth A. Claassen, Russell D. Wolfinger, 2018-12-12 Discover the power of mixed models with SAS. Mixed models—now the mainstream vehicle for analyzing most research data—are part of the core curriculum in most master's degree programs in statistics and data science. In a single volume, this book updates both SAS® for Linear Models, Fourth Edition, and SAS® for Mixed Models, Second Edition, covering the latest capabilities for a variety of applications featuring the SAS GLIMMIX and MIXED procedures. Written for instructors of statistics, graduate students, scientists, statisticians in business or government, and other decision makers, SAS® for Mixed Models is the perfect entry for those with a background in two-way analysis of variance, regression, and intermediate-level use of SAS. This book expands coverage of mixed models for non-normal data and mixed-model-based

precision and power analysis, including the following topics: Random-effect-only and random-coefficients models Multilevel, split-plot, multilocation, and repeated measures models Hierarchical models with nested random effects Analysis of covariance models Generalized linear mixed models This book is part of the SAS Press program.

jmp oneway analysis: *Problem Solving for New Engineers* Melisa Buie, 2017-07-20 This book brings a fresh new approach to practical problem solving in engineering, covering the critical concepts and ideas that engineers must understand to solve engineering problems. *Problem Solving for New Engineers: What Every Engineering Manager Wants You to Know* provides strategy and tools needed for new engineers and scientists to become apprentice experimenters armed only with a problem to solve and knowledge of their subject matter. When engineers graduate, they enter the work force with only one part of what's needed to effectively solve problems -- Problem solving requires not just subject matter expertise but an additional knowledge of strategy. With the combination of both knowledge of subject matter and knowledge of strategy, engineering problems can be attacked efficiently. This book develops strategy for minimizing, eliminating, and finally controlling unwanted variation such that all intentional variation is truly representative of the variables of interest.

jmp oneway analysis: *Introduction to the Practice of Statistics* David S. Moore, George P. McCabe, Bruce A. Craig, 2009 The new Sixth Edition brings the acclaimed IPS approach to a new generation, with a number of enhancements in the text and with breakthrough media tools for instructors and students. It demonstrates how statistical techniques are used to solve real-world problems, combining real data and applications with innovative pedagogy, both in the text and via electronic media. New Format Options *Introduction to the Practice of Statistics*, Sixth Edition is available as:

- A core book containing the first 13 chapters in hardcover (1-4292-1622-0) or paperback (1-4292-1621-2). Companion chapters 14-17 are available on the book's CD and web site.
- Extended Version (hardcover; includes chapters 1-15): 1-4292-1623-9

jmp oneway analysis: *JSL Companion* Theresa Utlaut, Georgia Morgan, Kevin Anderson, 2018-04-06 Confidently navigate your JMP Scripting Language journey with this example-driven guide! With more than 200 example scripts and applications, *JSL Companion: Applications of the JMP Scripting Language*, Second Edition provides scripters with a resource that takes them beyond the basics of the JMP Scripting Language (JSL) and serves as a companion to writing applications. Avid JSL scripters Theresa L. Utlaut, Georgia Z. Morgan, and Kevin C. Anderson have tapped their expertise to write a task-oriented approach that allows readers to learn scripting by immersion. This edition builds on the earlier edition with substantial new content for scripting enhanced JMP features, such as Graph Builder, new query methods, and enriched display box functionality. A new chapter is dedicated to creating applications with the Add-In Builder and Application Builder. The "Know Your Tools" topic has been expanded, including a section on how to use the JMP Debugger. The book begins with an introduction that is intended for the JSL novice and quickly moves into the building blocks of JSL, which include input and output, working with data tables, script-writing essentials, and JMP data structures. The next chapters provide the foundation for building an application and focus on creating reports, communicating with users, customizing displays, and writing flexible scripts. The final chapters include building and deploying applications and helpful tips on planning scripts, debugging, and improving performance.

jmp oneway analysis: *The Little SAS Book* Lora D. Delwiche, Susan J. Slaughter, 2019-10-11 A classic that just keeps getting better, *The Little SAS Book* is essential for anyone learning SAS programming. Lora Delwiche and Susan Slaughter offer a user-friendly approach so that readers can quickly and easily learn the most commonly used features of the SAS language. Each topic is presented in a self-contained, two-page layout complete with examples and graphics. Nearly every section has been revised to ensure that the sixth edition is fully up-to-date. This edition is also interface-independent, written for all SAS programmers whether they use SAS Studio, SAS Enterprise Guide, or the SAS windowing environment. New sections have been added covering PROC SQL, iterative DO loops, DO WHILE and DO UNTIL statements, %DO statements, using

variable names with special characters, the ODS EXCEL destination, and the XLSX LIBNAME engine. This title belongs on every SAS programmer's bookshelf. It's a resource not just to get you started, but one you will return to as you continue to improve your programming skills. Learn more about the updates to *The Little SAS Book, Sixth Edition* [here](#). Reviews for *The Little SAS Book, Sixth Edition* can be read [here](#).

jmp oneway analysis: Mathematical Statistics Dieter Rasch, Dieter Schott, 2018-03-19
Explores mathematical statistics in its entirety—from the fundamentals to modern methods This book introduces readers to point estimation, confidence intervals, and statistical tests. Based on the general theory of linear models, it provides an in-depth overview of the following: analysis of variance (ANOVA) for models with fixed, random, and mixed effects; regression analysis is also first presented for linear models with fixed, random, and mixed effects before being expanded to nonlinear models; statistical multi-decision problems like statistical selection procedures (Bechhofer and Gupta) and sequential tests; and design of experiments from a mathematical-statistical point of view. Most analysis methods have been supplemented by formulae for minimal sample sizes. The chapters also contain exercises with hints for solutions. Translated from the successful German text, *Mathematical Statistics* requires knowledge of probability theory (combinatorics, probability distributions, functions and sequences of random variables), which is typically taught in the earlier semesters of scientific and mathematical study courses. It teaches readers all about statistical analysis and covers the design of experiments. The book also describes optimal allocation in the chapters on regression analysis. Additionally, it features a chapter devoted solely to experimental designs. Classroom-tested with exercises included Practice-oriented (taken from day-to-day statistical work of the authors) Includes further studies including design of experiments and sample sizing Presents and uses IBM SPSS Statistics 24 for practical calculations of data *Mathematical Statistics* is a recommended text for advanced students and practitioners of math, probability, and statistics.

jmp oneway analysis: Introduction to Statistical Quality Control Douglas C. Montgomery, This book is about the use of modern statistical methods for quality control and improvement. It provides comprehensive coverage of the subject from basic principles to state-of-the-art concepts. and applications. The objective is to give the reader a sound understanding of the principles and the basis for applying them in a variety of situations. Although statistical techniques are emphasized. throughout, the book has a strong engineering and management orientation. Extensive knowledge. of statistics is not a prerequisite for using this book. Readers whose background includes a basic course in statistical methods will find much of the material in this book easily accessible--

jmp oneway analysis: Introductory Statistics 2e Barbara Illowsky, Susan Dean, 2023-12-13
Introductory Statistics 2e provides an engaging, practical, and thorough overview of the core concepts and skills taught in most one-semester statistics courses. The text focuses on diverse applications from a variety of fields and societal contexts, including business, healthcare, sciences, sociology, political science, computing, and several others. The material supports students with conceptual narratives, detailed step-by-step examples, and a wealth of illustrations, as well as collaborative exercises, technology integration problems, and statistics labs. The text assumes some knowledge of intermediate algebra, and includes thousands of problems and exercises that offer instructors and students ample opportunity to explore and reinforce useful statistical skills. This is an adaptation of *Introductory Statistics 2e* by OpenStax. You can access the textbook as pdf for free at openstax.org. Minor editorial changes were made to ensure a better ebook reading experience. Textbook content produced by OpenStax is licensed under a Creative Commons Attribution 4.0 International License.

jmp oneway analysis: Computational Learning Approaches to Data Analytics in Biomedical Applications Khalid Al-Jabery, Tayo Obafemi-Ajayi, Gayla Olbricht, Donald Wunsch, 2019-11-20
Computational Learning Approaches to Data Analytics in Biomedical Applications provides a unified framework for biomedical data analysis using varied machine learning and statistical techniques. It presents insights on biomedical data processing, innovative clustering algorithms and techniques,

and connections between statistical analysis and clustering. The book introduces and discusses the major problems relating to data analytics, provides a review of influential and state-of-the-art learning algorithms for biomedical applications, reviews cluster validity indices and how to select the appropriate index, and includes an overview of statistical methods that can be applied to increase confidence in the clustering framework and analysis of the results obtained. - Includes an overview of data analytics in biomedical applications and current challenges - Updates on the latest research in supervised learning algorithms and applications, clustering algorithms and cluster validation indices - Provides complete coverage of computational and statistical analysis tools for biomedical data analysis - Presents hands-on training on the use of Python libraries, MATLAB® tools, WEKA, SAP-HANA and R/Bioconductor

jmp oneway analysis: Online Statistics Education David M Lane, 2014-12-02 Online Statistics: An Interactive Multimedia Course of Study is a resource for learning and teaching introductory statistics. It contains material presented in textbook format and as video presentations. This resource features interactive demonstrations and simulations, case studies, and an analysis lab. This print edition of the public domain textbook gives the student an opportunity to own a physical copy to help enhance their educational experience. This part I features the book Front Matter, Chapters 1-10, and the full Glossary. Chapters Include:: I. Introduction, II. Graphing Distributions, III. Summarizing Distributions, IV. Describing Bivariate Data, V. Probability, VI. Research Design, VII. Normal Distributions, VIII. Advanced Graphs, IX. Sampling Distributions, and X. Estimation. Online Statistics Education: A Multimedia Course of Study (<http://onlinestatbook.com/>). Project Leader: David M. Lane, Rice University.

jmp oneway analysis: Design and Analysis of Experiments Douglas C. Montgomery, 2017 The eighth edition of Design and Analysis of Experiments continues to provide extensive and in-depth information on engineering, business, and statistics-as well as informative ways to help readers design and analyze experiments for improving the quality, efficiency and performance of working systems. Furthermore, the text maintains its comprehensive coverage by including: new examples, exercises, and problems (including in the areas of biochemistry and biotechnology); new topics and problems in the area of response surface; new topics in nested and split-plot design; and the residual maximum likelihood method is now emphasized throughout the book--

jmp oneway analysis: The Basic Practice of Statistics David S. Moore, 2010 This is a clear and innovative overview of statistics which emphasises major ideas, essential skills and real-life data. The organisation and design has been improved for the fifth edition, coverage of engaging, real-world topics has been increased and content has been updated to appeal to today's trends and research.

jmp oneway analysis: Testing 1 - 2 - 3 Johannes Ledolter, Arthur J. Swersey, 2007 This book gives students, practitioners, and managers a set of practical and valuable tools for designing and analyzing experiments, emphasizing applications in marketing and service operations such as website design, direct mail campaigns, and in-store tests.

jmp oneway analysis: Design and Analysis of Experiments Douglas C. Montgomery, 2005 This bestselling professional reference has helped over 100,000 engineers and scientists with the success of their experiments. The new edition includes more software examples taken from the three most dominant programs in the field: Minitab, JMP, and SAS. Additional material has also been added in several chapters, including new developments in robust design and factorial designs. New examples and exercises are also presented to illustrate the use of designed experiments in service and transactional organizations. Engineers will be able to apply this information to improve the quality and efficiency of working systems.

Additional Resources

jmp oneway analysis

[Jmp Oneway Analysis](#)

Jmp Oneway Analysis

Related Articles

- [ivme wellness aesthetics milwaukee historic third ward](#)
- [lab 11 your wellness profile](#)
- [km accounting](#)

[Back to Home](#)