Applied Univariate, Bivariate, and Multivariate Statistics

Description: A clear and efficient balance between theory and applications of statistical modeling techniques in the social and behavioral sciences

Written as a general and accessible introduction, Applied Univariate, Bivariate, and Multivariate Statistics provides an overview of statistical modeling techniques used in fields in the social and behavioral sciences. Providing a unique balance of statistical theory and methodology, the book surveys both the technical and theoretical aspects of good data analysis.

Featuring applied resources at various levels, the book includes statistical techniques such as t-tests and correlation as well as more advanced procedures such as MANOVA, factor analysis, and structural equation modeling. To promote a more in–depth interpretation of statistical techniques across the sciences, the book surveys some of the technical arguments underlying formulas and equations. Applied Univariate, Bivariate, and Multivariate Statistics also features:

- Demonstrations of statistical techniques using software packages such as R and SPSS®
- Examples of hypothetical and real data with subsequent statistical analysis
- Historical and philosophical insights into many of the techniques used in modern social science
- A companion website that includes further instructional details, additional data sets, solutions to selected exercises, and multiple programming options

An ideal textbook for courses in statistics and methodology at the upper–undergraduate and graduate–level in psychology, political science, biology, sociology, education, economics, communications, law, and survey research, Applied Univariate, Bivariate, and Multivariate Statistics is also a useful reference for practitioners and researchers in their field of application.

Daniel J. Denis, PhD, is Associate Professor of Quantitative Psychology in the Department of Psychology at the University of Montana where he teaches courses in univariate and multivariate statistics. He has published a number of articles in peer–reviewed journals and has served as consultant to researchers and practitioners in a variety of fields. He is also founder of The Mathematical Psychology Lab, which is a think tank with the mission of advancing the teaching, learning, and application of mathematical and statistical tools.

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