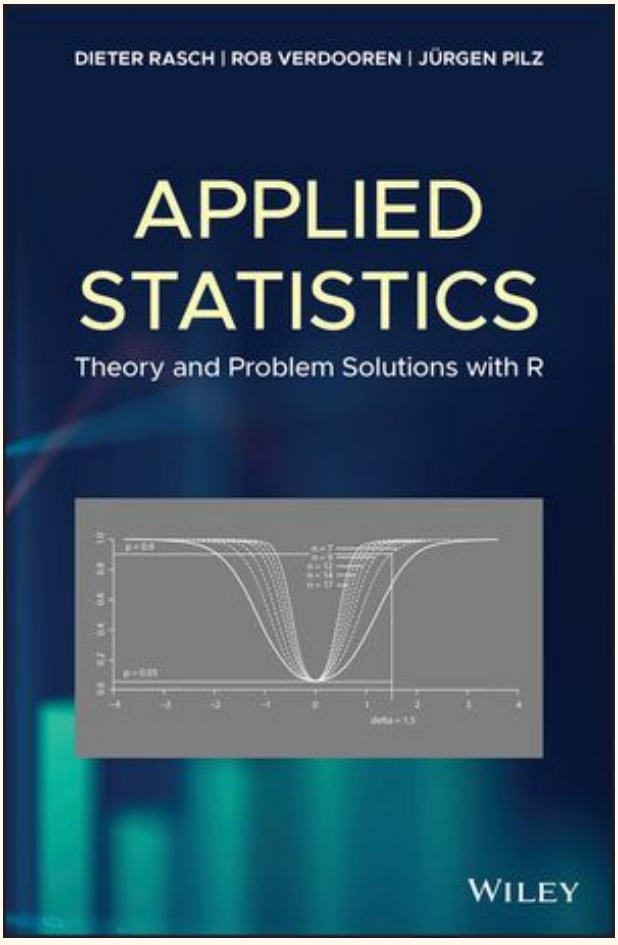
By Dieter Rasch, Rob Verdooren, Jürgen Pilz
Published by John Wiley & Sons, Inc

Applied Statistics
Theory and Problem Solutions with R



DESCRIPTION

Instructs readers on how to use methods of statistics and experimental design with R software

Applied statistics covers both the theory and the application of modern statistical and mathematical modelling techniques to applied problems in industry, public services, commerce, and research. It proceeds from a strong theoretical background, but it is practically oriented to develop one's ability to tackle new and non-standard problems confidently. Taking a practical approach to applied statistics, this user-friendly guide teaches readers how to use methods of statistics and experimental design without going deep into the theory.

___

Applied Statistics: Theory and Problem Solutions with R includes chapters that cover R package sampling procedures, analysis of variance, point estimation, and more. It follows on the heels of Rasch and Schott's Mathematical Statistics via that book's theoretical background—taking the lessons learned from there to another level with this book’s addition of instructions on how to employ the methods using R. But there are two important chapters not mentioned in the theoretical back ground as Generalised Linear Models and Spatial Statistics.

- Offers a practical over theoretical approach to the subject of applied statistics
- Provides a pre-experimental as well as post-experimental approach to applied statistics
- Features classroom tested material
- Applicable to a wide range of people working in experimental design and all empirical sciences
- Includes 300 different procedures with R and examples with R-programs for the analysis and for determining minimal experimental sizes

Applied Statistics: Theory and Problem Solutions with R will appeal to experimenters, statisticians, mathematicians, and all scientists using statistical procedures in the natural sciences, medicine, and psychology amongst others.

ABOUT THE AUTHOR

DIETER RASCH, PHD, is scientific advisor at the Center for Design of Experiments at the University of Natural Resources and Life Sciences, Vienna, Austria. He is also an elected member of the International Statistical Institute (ISI) and the Institute of Mathematical Statistics (IMS).

ROB VERDOOREN, PHD, is a Consultant Statistician at Danone Nutricia Research, Utrecht, The Netherlands.

JÜRGEN PILZ, PHD, is the Head of the Department of Applied Statistics at AAU Klagenfurt, Austria. He is also an elected member of the International Statistical Institute (ISI) and the Institute of Mathematical Statistics (IMS).

—

TABLE OF CONTENTS