Applied Longitudinal Data Analysis for Epidemiology
A Practical Guide
Jos W. R. Twisk
Institute for Research in Extramural Medicine, Amsterdam, The Netherlands

This practical guide is for non-statisticians and all those undertaking medical research or epidemiological studies. Here the most important techniques available for longitudinal data analysis are discussed, including simple techniques such as the paired t-test and summary statistics, and more sophisticated techniques like generalised estimating equations and random coefficient analysis. A distinction is made between longitudinal analysis with continuous, dichotomous, and categorical outcome variables.

Features
• Clearly understandable by non-statisticians
• Compares and contrasts different techniques and methods of analysis
• Illustrated with examples of real-life research questions

Contents

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Medical Statistics from A to Z
A Guide for Clinicians and Medical Students
Brian Everitt
Institute of Psychiatry, London, UK

From ‘Absolute risk’ to ‘Zero-sum game’ – this accessible introduction to the terminology of medical statistics encompasses more than 1500 terms all clearly explained, illustrated and defined in non-technical language, and without any mathematical formulae! A painless guide to the bewildering world of medical statistics for doctors and students alike.

Features
• An accessible, user friendly, non-technical introduction to statistics
• 1500 terms and definitions, supplemented with suggested further reading and references, helpful tips and asides, and illustrated throughout
• Cross-referencing between related entries provides easy navigation and a deeper insight into the topic

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Epidemiological Studies
A Practical Guide
Alan J. Silman
and Gary J. Macfarlane
Both from University of Manchester, UK

From a review of the first edition:
‘… a practical guide to epidemiological studies which takes the reader through all the steps involved in clear and concise stages … evolved from a teaching programme in epidemiology for public health students, and has obviously benefited from refinements made by feedback from participants … a very useful and user-friendly volumes as an introduction to the field of epidemiology.’

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New sections on:
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A Simple Introduction to the Analysis of Complex Data
William D. Dupont
Vanderbilt University, Tennessee, USA

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Features
• Covering advanced topics like generalized linear models, survival analysis, or repeated-measures analysis of variance without requiring students to have advanced mathematical skills
• These techniques have become invaluable in analyzing complex data from population-based medical research
• Numerous real examples from the medical literature illustrate these techniques

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Graham A. J. Ayliffe
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Mary P. English
United Bristol Hospitals Trust, UK

Foreword by Bill Newsom

An absorbing account of the continuing battle to control hospital infections, from the earliest days of hospital care when bad air or miasma was thought to be the cause, to the present day and the emergence of antibiotic-resistant ‘superbugs’ such as MRSA and necrotizing fasciitis.

Features
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Richard J. Epstein
National Cancer Centre, Singapore and University of Singapore

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In many clinical and health policy decisions it is necessary to counter-balance benefits and risks, and to trade off competing objectives such as maximizing life expectancy vs optimizing quality of life vs minimizing the resources required. This text plots a clear course through these complex and conflicting variables and will be indispensable for practitioners and trainees, and students studying clinical decision analysis, EB-medicine, and clinical epidemiology.

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Charles C. Miller
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Michael J. Reardon
Baylor College of Medicine, Houston, USA
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Les Irwig
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Harvard School of Public Health, USA

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