

Book reviews

Studieweek 1995

J. W. Booij (Ed.)

Publishers: Nederlandse Vereniging voor Orthodontische, The Netherlands

Price: 85 Dutch guilders

ISBN: 90-8006-472-6

Every five years the Netherlands Society for Orthodontic Study organizes a study week pursuing a theme with a mixture of international and local speakers. This volume is the proceedings of the 1995 meeting.

The quality of production is excellent and the book is a pleasure to handle. Its theme is the quality of care as viewed by both the professional and the patient. The keynote speaker is Professor H. S. Duterloo, who gives a careful review of the current movement towards evidence-based decision-making in orthodontics. The succeeding speakers pursue the theme with varying degrees of success. Some simply offer an update on their favourite topic or appliance system. Others present or review research which consciously aims to inform clinical decisions. Is there any evidence to support dental

orthopaedics? What most influences patient satisfaction? How can guidelines influence the quality of care? How do we choose the best treatment? These, amongst others, are questions which are addressed. At the same time there are research reports on topics such as genetics and the facial musculature, facial morphology and biting forces, development of the dentition, and notably the relationship between force and tooth movement.

The book offers some interesting contributions to its theme topic but is unlikely to become the definitive work on the subject. It would be a useful reference book for the library but will probably not appeal to many individual purchasers.

D. C. Tidy

Statistics: Principles and Methods, 3rd edition (1996)

Richard A. Johnson and Gouri Bhattacharyya

John Wiley & Sons, Inc., New York

Price: £21.50

ISBN: 0-471-04194-7

This book covers the topics expected in an introductory applied statistics course, and takes the reader beyond the basic minimum. However, neither the use of examples from all walks of life, nor the semi-mathematical style, is ideal for dental researchers, or indeed anyone not still considering their choice of career. Unfortunately statistics in dental research is still poorly catered

for, but now that there are several medical statistics books that can be recommended, a book of this sort is nowhere in contention.

This is not a criticism of the book, which is aimed at American undergraduates. I found little to quarrel with: it is very well presented, and at the price, for a hardback with over 700 pages, it is very reasonable. Apart from the numerous

photographs and other illustrations, it has exercises at the end of each chapter, some based on the Minitab computer program, and several data sets for the reader to analyse. Minitab output is also explained in the text. However,

access to Minitab is not essential for following the course. It seems excellent for its purpose, but may not find a market on this side of the Atlantic.

Susan Chinn

Methods and Applications of Linear Models: Regression and Analysis of Variance (1996)

Ronald R. Hocking

Publisher: John Wiley & Sons, Inc., New York

Price: £55.00

ISBN: 0-471-59282-X

In his preface the author states that one of the aims of this book is to present statistical methods in such a way that the user will more easily understand the applications of the methods and be able to assess whether the computer software available to him or her reflects the method. Whilst the book succeeds in achieving the conceptual simplicity, it still requires a degree of mathematical understanding and ability which is not characteristic of the orthodontic profession. It is unlikely that anyone wishing to use the techniques explained in this book would be happy to do so without the advice and support of a statistician.

The first four chapters, which form the introduction in basic theory, would provide a

useful introduction for use on linear models and in particular Chapter 4, 'Simultaneous inference in test and confidence intervals', is worthwhile reading for anyone considering a study analysing multiple variables on the same subjects. Whilst in places these chapters may appear mathematically intimidating, the formulae are given and developed as part of the rigorous mathematical treatment and can be ignored by the casual reader as the information they are likely to require is well and simply put in the text.

The remainder of the text is probably too mathematically complex for most readers of this Journal and this book's role is likely to be as a reference text for the statistician.

D. R. Stirrups