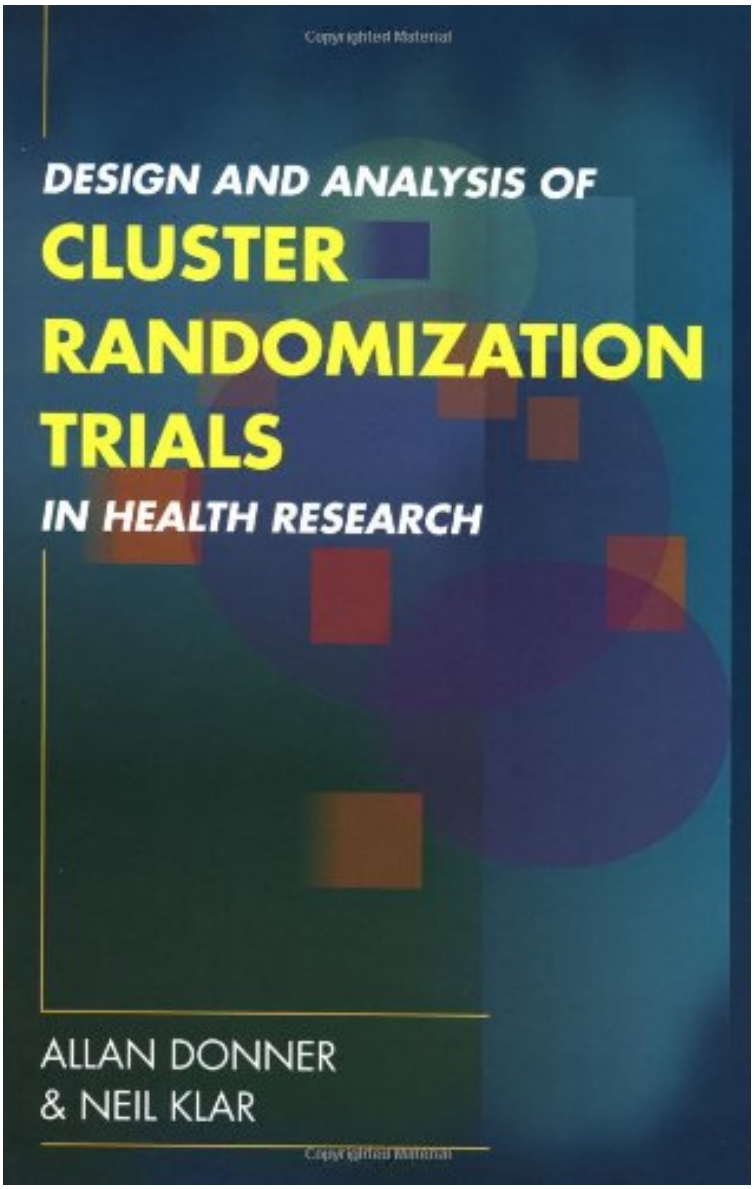
# Design and Analysis of Cluster Randomization Trials in Health Research (Hodder Arnold Publication)

*Allan Donner, Neil Klar*

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**Allan Donner, Neil Klar : Design and Analysis of Cluster Randomization Trials in Health Research (Hodder Arnold Publication)** before purchasing it in order to gage whether or not it would be worth my time, and all praised Design and Analysis of Cluster Randomization Trials in Health Research (Hodder Arnold Publication):

10 of 10 people found the following review helpful. A GREAT book, for the right audienceBy Stephen LubyI am an epidemiologist responsible for designing and overseeing implementation, analysis and reporting of a number of cluster randomized health intervention trials in developing countries. I found this book absolutely terrific for several reasons. First, the scope of the book is broad. This is not just a compilation of statistical methods. The authors discuss the rationale for cluster randomization, its historic development, specific issues that arise in planning the studies, securing informed consent and other ethical issues affected by cluster design. The final chapter reviews the central themes of the book in discussing how to fully report a cluster randomized trial. Throughout these chapters the authors describe both the theoretical issues raised, as well as practical solutions. Second, the book represents a succinct and collected discussion of the relevant issues. As a non-statistician, I don't read the primary statistical literature. I do read health intervention studies that employ a cluster randomized method. I may attend an occasional short seminar on cluster design, or discuss particular issues with collaborating statisticians, but until I read this book, I felt I was freelancing each design and analysis issue. After reading the book I have exposure to the whole paradigm. I can understand the design and analysis choices, make better decisions, and make consultations with my collaborating statisticians more focused and productive. Third, options for analysis, including their assumptions, advantages and disadvantages, as well as methods for calculating sample size are systematically presented. This directly empowers the reader to make balanced and sound decisions about appropriate study size and analytic approach. Fourth, the book is readable. The ideas, at times, are quite dense, but because of the abundant use of practical examples, the authors consistently communicate their message clearly. I hesitated to buy this book for months, because of the price tag for a 178 page book of unknown quality. After reading it, I am convinced that a short course would not have taught me as much. Moreover I now have a reference book that I can use in thinking through each of the issues for my studies, for teaching my epidemiological trainees, and for citing when writing manuscripts. In short, a GREAT book for the right audience.4 of 5 people found the following review helpful. good boodBy Arizona RNThis is a good book by two well known experts in the field. I like the book but wish it was a little bit more 'how to' do the analysis. The book is short and spends a lot of time (to many pages) defining what the issues are with analysis of cluster data. I would not have bought the book if I needed those issues defined. I needed help with the statistical analysis and there is not quite enough information there. Would have liked to see some sample data and some SAS output. But still its a good book and I learned a great deal reading it.9 of 18 people found the following review helpful. my faverite book .By A Customeri love this book it is so good.my father wrote this book.my name is even in it.i am ten years old.but if you like epidiniology and biostatistcks you'll love this book. (...)

A cluster randomization trail is one in which intact social units, or clusters of individuals, are randomized to different intervention groups. Trials randomizing clusters have become particularly widespread in the evaluation of non-therapeutic interventions, including lifestyle modification, educational programs and innovations in the provision of health care. The units of randomization in such studies are diverse, ranging from relatively small clusters such as families or households, to entire neighborhoods or communities, but also encompassing workplaces, hospital wards, classrooms and medical practices. The increasing popularity of this design among health researchers over the past two decades has led to an extensive body of methodology on the subject. This book is the first to present a systematic and unified treatment of this topic; it contains distinctive chapters on the history of cluster randomized trials, ethical issues, meta-analysis and guidelines. Written by two of the leading authorities in the field, this book is an essential reference text for investigators in the planning or analysis stages of a study. It is also highly suitable for use as a textbook in a graduate-level course in research methodology, and is aimed at biostatisticians, epidemiologists, health service researchers and public health professionals.

"The authors of this book cover an important area of statistical application infrequently discussed in biostatistics texts, namely methods appropriate to situations where the experimental units are groups of people instead of individuals. The stated purpose is to bring to the biostatistical community an understanding of cluster randomization methods. ... The authors have done a very good job of explaining why traditional methods are inappropriate and they provide discussion of several alternative analyses that can be used to generate more appropriate results at both the cluster and individual levels. ... [T]he coverage is understandable to those without a great deal of rigorous background in statistics and so it is fair to say that the book is not written for experts. ... This particular book fills an important void in the biostatistics area specifically because it is written in way that is understandable to a group of people who need to learn about the issues discussed."--Doody'sFrom the Back CoverA cluster randomization trial is one in which intact social units, or clusters of individuals, are randomized to different intervention groups. Trials randomizing clusters have become particularly widespread in the evaluation of non-therapeutic interventions, including lifestyle modification, educational programmes and innovations in the provision of health care. The increasing popularity of this design among health researchers over the past two decades has led to an extensive body of methodology on the subject. This is the first book to present a systematic and united treatment of this topic; it contains distinctive chapters on the history of cluster randomized trials, ethical issues and reporting guidelines.About the AuthorAllan Donner is Professor and

Chair of the Department of Epidemiology and Biostatistics, University of Western Ontario, Canada. Neil Klar is Senior Biostatician in the Division of Preventive Oncology, Cancer Care Ontario, Canada.