Design and Analysis of Group- Randomized Trials

David M. Murray
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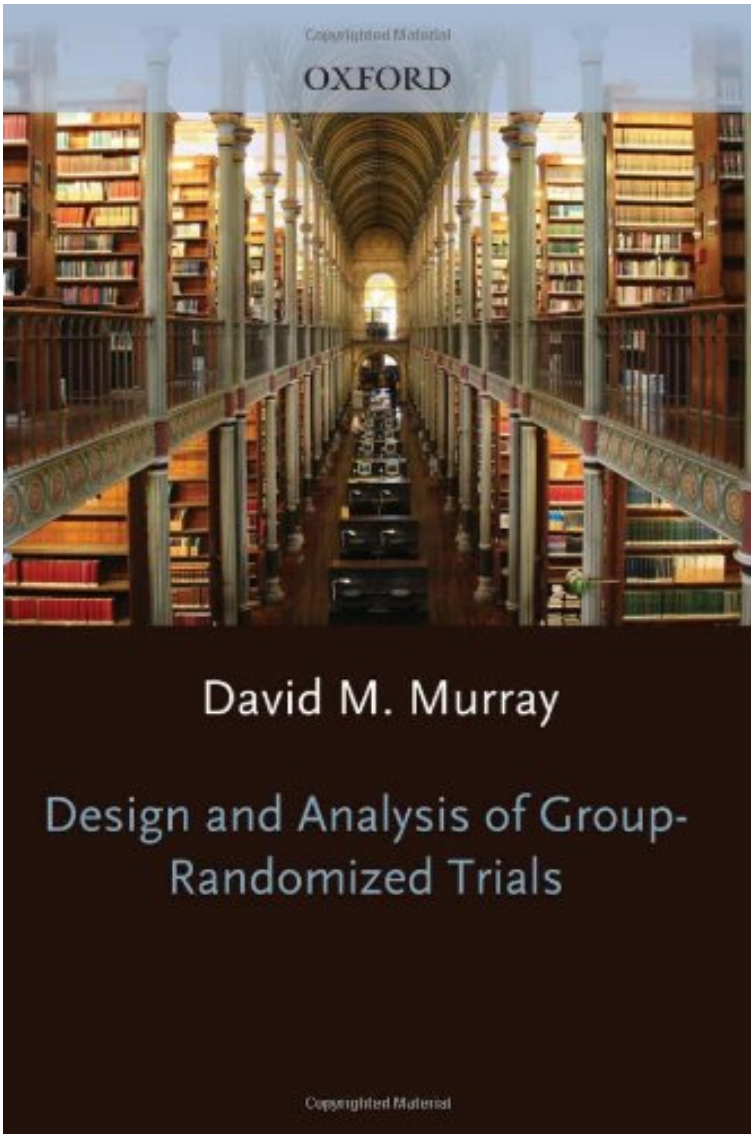

#1798108 in Books David M Murray 1998-05-15Original language:EnglishPDF # 1 6.80 x 1.30 x 9.20l, 1.83 #File Name: 0195120361467 pagesDesign and Analysis of Group Randomized Trials | File size: 62.Mb

David M. Murray : Design and Analysis of Group- Randomized Trials before purchasing it in order to gage whether or not it would be worth my time, and all praised Design and Analysis of Group- Randomized Trials:

0 of 0 people found the following review helpful. Five StarsBy Lowest J.Excellent!6 of 7 people found the following review helpful. Nice book with a major flawBy JerryWithaJGroup-randomized trials are trials in which randomization takes place at a level higher than the individual subject. For example, for logistical reasons a comparison of two programs might be undertaken by randomizing communities to program, in which case the community rather than the resident is the unit of analysis.Even though Murray's text was published in 1998, it is still the outstanding book in the

field. (Are there any others?) You will find reading this book to be a profitable experience if only because you can point to it (literally!) when telling someone that the number of observations is the number of CITIES that were randomized to be targeted with an anti-smoking campaign or not and NOT the number of RESIDENTS. The writing is clear and straightforward. To get the most out of it you should be comfortable with with mathematical models (use the Search Inside facility to look at the bottom of page 140, for example), which are used to describe things unambiguously rather than to develop mathemeatical theory. Even if you are not comfortable with mathematical models, there is a lot to be gained from Murray's discussion of the issues.The flaw is MAJOR. The book contains numerous analyses of data from the Minnesota Hearth Health Program. However, Murray is not able to provide the original data. With the original data, one could be an active learner by replicationg his analyses and trying other aproaches to see what effects they might have. Without the data, learning is much more passive.I struggled hard choosing the number of stars. I thought about 3 starts because, when you get right down to it, the analysis of group-randomized trials livolves nothing more than a particular kind of hierarchical model, which other texts discuss splendidly. However, if someone wanted to know about group randomized trials specifically, this is where I would send him/her, hence the 4 stars. If the data were available, the rating would be 5 stars without question.

This text provides the most comprehensive treatment of the design and analytic issues involved in group-randomized trials. GRTs are comparative studies conducted to evaluate the effect of a health promotion intervention in which the units of assignment are identifiable groups (e.g., schools, worksites) and the units of observation are members of those groups (e.g., students, workers). The book reviews the underlying issues, the most widely used research designs, and analytic strategies. There is an emphasis on mixed-model regression, with two chapters illustrating the analytic methods in SAS PROC MIXED and GLIMMIX. There is also a detailed chapter on power analysis and sample size calculation.

"This book is an important addition to any public health or medical library. It is well-written and much needed."--Doody's JournalAbout the AuthorDavid M. Murray has spent his career evaluating intervention programs designed to improve the public health. Beginning in the late 1980s, Dr. Murray focused on the design and analysis of group-randomized trials in which groups are randomized to conditions and members of those groups are observed to assess the effect of an intervention. He has worked on many of these trials, collaborating with colleagues around the country. He has also conducted research to develop and test new methods for their design and analysis. Dr. Murray served as the first Chair of the Community-Level Heath Promotion study section, which reviews many of the group-randomized trials submitted to NIH. After 35 years at the University of Minnesota, the University of Memphis, and the Ohio State University, Dr. Murray joined the NIH in September 2012, as the Associate Director for Prevention and Director of the Office of Disease Prevention. He is responsible for promoting and coordinating prevention research among and between NIH Institutes and Centers and other public and private entities.