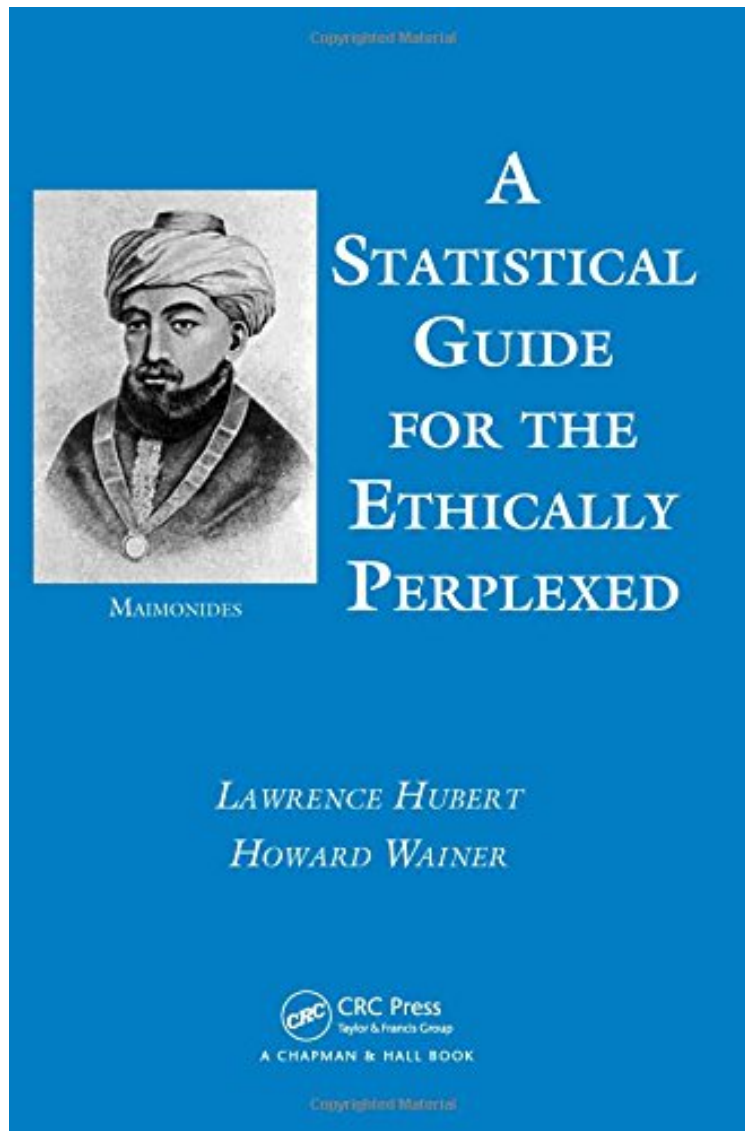


(Download) A Statistical Guide for the Ethically Perplexed

A Statistical Guide for the Ethically Perplexed

Lawrence Hubert, Howard Wainer
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#1981278 in Books Chapman and Hall/CRC 2012-09-27 2012-11-09Original language:EnglishPDF # 1 9.25 x 1.33 x 6.13l, 1.80 #File Name: 1439873682588 pages | File size: 29.Mb

Lawrence Hubert, Howard Wainer : A Statistical Guide for the Ethically Perplexed before purchasing it in order to gage whether or not it would be worth my time, and all praised A Statistical Guide for the Ethically Perplexed:

3 of 3 people found the following review helpful. mixing well-known stories like the Sally Clark case with personal anecdotes from the ...By Stijn DebrouwereAs another reviewer noted, this is one heckuva quirky book. Full of digressions, jumping from one topic to another, mixing well-known stories like the Sally Clark case with personal anecdotes from the authors and even within chapters a range of material from informal to rigorously mathematical.

This just adds to the charm, though. Most statistical texts pay scant attention to methodology, interpretation and the potential pitfalls of certain statistical methods except perhaps for routine and halfhearted checks of normality, homoscedasticity and the like. This text is 500 pages of antidote. In my mind, the problem with most researchers and statisticians is that they have the technical chops but not the statistical intuition and methodological expertise to safely work with data. It's just too easy to make mistakes, to misinterpret results and to see things that are not there. I don't know if reading this book is enough to gain that statistical intuition, but it's a good start. I plan to reread this at least once a year for the years to come. 6 of 6 people found the following review helpful. a book like no other

By Critical Reader this book is like no other. whether one considers its quirks to be bugs or features may be quite variable (I use that word in the lay sense!). for me, the quirks were big pluses. Overall, i loved the book--as pleasure reading! the quirks include: 1. assuming great understanding on the part of readers. a concept is mentioned with the tacit assumption that readers will either know about it or how to learn about it. (in some cases where I had no idea what was discussed, i just motored on, and in some i was off and googling..) 2. it has digressions on digressions. this too i think (like #1) a sign of respect for the readers --that's how intelligent conversation progresses, right? I appreciated the pleasant surprises from the turns the authors take 3. there extensive quotation from wikipedia. all quotes on subjects that i knew something about were seemingly accurate, but i think there is an anti-wikipedia snobbery out there and some readers may bristle at this. for me, this allowed the authors to really develop and support their points. heck, if they did not include, and i were so inclined (see #1), wikipedia is exactly where I was going to end up anyways... 4. for want of a better word: snarkiness. an opinion by Justice Sotomayor was cited with approval, but its sophistication was denigrated a bit, by pointing out that she was helped by smart clerks and extensive amicus briefs. Yet until we reach the stage where "Ask not what your country can do for you; ask what you can do for your country" is attributed to Ted Sorenson comments like these may seem gratuitous. (OBVIOUSLY the justice is not a stats maven...) Yet again, for me this was a plus: it emulates how my friends talk to each other, at least about other people! (We cite Ted Sorenson for the "Ask not" business--but blame "mission accomplished" on the actual speaker...) But more to the point, it gives the book vitality! You are reading the comments and ideas of real people overall, reading this book is like a taking nice walk with intelligent companions. the title might suggest something recondite; it is actually a romp

For disciplines concerned with human well-being, such as medicine, psychology, and law, statistics must be used in accordance with standards for ethical practice. A Statistical Guide for the Ethically Perplexed illustrates the proper use of probabilistic and statistical reasoning in the behavioral, social, and biomedical sciences. Designed to be consulted when learning formal statistical techniques, the text describes common instances of both correct and false statistical and probabilistic reasoning. Lauded for their contributions to statistics, psychology, and psychometrics, the authors make statistical methods relevant to readers day-to-day lives by including real historical situations that demonstrate the role of statistics in reasoning and decision making. The historical vignettes encompass the English case of Sally Clark, breast cancer screening, risk and gambling, the Federal Rules of Evidence, "high-stakes" testing, regulatory issues in medicine, difficulties with observational studies, ethics in human experiments, health statistics, and much more. In addition to these topics, seven U.S. Supreme Court decisions reflect the influence of statistical and psychometric reasoning and interpretation/misinterpretation. Exploring the intersection of ethics and statistics, this comprehensive guide assists readers in becoming critical and ethical consumers and producers of statistical reasoning and analyses. It will help them reason correctly and use statistics in an ethical manner.

"This text draws attention to a topic that often seems to be neglected or at least carelessly regarded: the intersection of statistics and ethics. this text represents Hubert and Wainers attempt to balance statistics and standards of ethical practice. The authors achieve this by providing interesting and relevant real-life examples covering a variety of topics this book stands out as a unique text that combines a review of mathematical theorems and formulas, guidance on how to be sharp when using or interpreting statistics, and the impacts (often negative) that can happen (and have happened) when analyses are conducted carelessly. All of these components come together effectively to raise the readers awareness of ethics in creating and interpreting statistics, and ultimately help the reader become a more astute and ethically responsible analyst." Journal of Official Statistics, Vol. 30, No. 3, 2014 " a one-of-a-kind volume. In 18 pithy chapters, this paperback edition covers some of the most important issues of correct reasoning to reach correct conclusions. a lot of well written information. Do you really need another book, this book, on research and statistics? YES!" Malcolm James Ree, Personnel Psychology, Spring 2014 " a fascinating and at times perplexing read I learned some surprising things from reading it " Paul T. Seed, Significance, April 2014 " most should find it of great use as a guide to the literature on aspects of our discipline that we may lack a formal background in. This is especially so if we are most familiar with the application of statistics to the natural sciences rather than the human sciences. I think that a teacher of senior courses in applied statistics would find a use for this book in helping put some real-world flesh on the theoretical bones of the course. It would also be a useful source of readings (or lead to the discovery of readings) for handouts." Murray Jorgensen, Australian New Zealand Journal of Statistics, 2013 " even the most experienced statisticians will find the extensive quoted extracts and discussions entertaining, informative, and illuminating. The

volume will provide a great source of illustrative material to enliven courses teaching the ideas and methods behind the topics discussed within it. More than that, however, a course, or perhaps a reading group, based around this book would complement the necessarily dryer material describing the ideas and structures of statistical methods. It would drive home the vital importance of statistics to modern society and certainly make the students sit up and take notice. In short, the authors are to be congratulated on producing a wonderful volume. I believe that all students of statistics, perhaps of science more generally, would benefit substantially from reading it (and then re-reading it when they had a few years practical experience under their belts)."David J. Hand, *International Statistical* (2013), 81, 2 "valuable as a reference . There is a 40-page bibliography, a six-page author index, a 14-page subject index, and a 13-page list of sources, plus a 105 page online supplement that consists mostly of legal decisions and recommended reading. Using all the resources provided, one can assemble a very long list of issues and applications, with readings and references. recommended a resource the statistically sophisticated teacher can mine for material from which to create their own examples to engage students."Robert W. Hayden, MAA , December 2012 "This thorough and readable work covers important topics spanning specific and general causation to experimental design. It offers engaging examples, lucid explanations, and a thorough consideration of truly important issues, giving readers the knowledge to deal more effectively with ethically charged situations. A valuable guide for sorting through ethical issues in the behavioral, social, and biomedical sciences."C.K. Gunsalus, Director, National Center for Professional and Research Ethics, and Research Professor, Coordinated Science Laboratory, University of Illinois at Urbana-Champaign

About the Author Lawrence Hubert is the Lyle H. Lanier Professor of Psychology and a professor of statistics and educational psychology at the University of Illinois. He is a fellow of the American Statistical Association, American Psychological Association, Association for Psychological Science, American Association for the Advancement of Science, and American Educational Research Association. Dr. Hubert has been a recipient of honors, including the Jacob Cohen Award for Distinguished Contributions to Teaching and Mentoring from Division 5 of the American Psychological Association. His research focuses on the development of exploratory methods for data representation in the behavioral sciences, emphasizing cluster analysis, spatially oriented multidimensional scaling techniques, and network representation procedures. Howard Wainer is a Distinguished Research Scientist at the National Board of Medical Examiners and adjunct professor of statistics at the Wharton School of the University of Pennsylvania. He is a fellow of the American Statistical Association and American Educational Research Association. Dr. Wainer has been a recipient of several honors, including the Samuel J. Messick Award for Distinguished Scientific Contributions Award from Division 5 of the American Psychological Association and the Career Achievement Award from the National Council on Measurement in Education. His research encompasses the use of graphical methods for data analysis and communication, robust statistical methodology, and the development and application of generalizations of item response theory.