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Book Review

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Jelke Bethlehem. *Understanding Public Opinion Polls.* 2018 Boca Raton, FL: Taylor & Francis Group. ISBN-13: 978-1-4987-6974-7, 286 pp, USD 47.96.

With the increasing use of public opinion polling to collect information on almost every aspect of modern life, it becomes more and more difficult for people to separate the good polls from the bad ones and to determine whether the outcomes of a poll are valid or not. An easy-to-follow guidance is much needed. This book "Understanding Public Opinion Polls" by Dr. Jelke Bethlehem is written for professionals who have no prior training in relevant fields but need to judge the outcome of polls such as journalists, politicians, and decision makers among other non-experts in polling. The book, in the author's own words, is a "not-so-technical introduction" to public opinion polling. It can be viewed as providing a checklist to evaluate the quality of different polls or a how-to cookbook for conducting polls with appropriate methodologies that result in valid outcomes. The book covers all elements of conducting a poll, including the definition of a target population, the questionnaire design, the mode choice, sample design, weighting, data analysis, and the publication of the results. It is not uncommon for an "all-inclusive" book on survey statistics and methodology to be "too heavy" for entry-level readers. This book achieves a balance by including examples in each chapter to make it easier for readers to digest the relevant information on statistics and methodology.

Chapter 1 of the book provides an overview of the book's content. Chapter 2 gives a brief history of polls starting from their origin in ancient Greece to the development of modern sampling theory, the emergence of public opinion polls, and finally the rise of online polls. The remainder of the chapters can be grouped into three parts. Part One includes Chapter 3 to Chapter 7 and each covers a key component of a poll. Part Two focuses on two specific types of polls that are of the most interest to readers: online polls in Chapter 8 and election polls in Chapter 9. Part Three of the book is about data analysis and publication. The book concludes with Chapter 12 that summarizes all chapters and provides a checklist of poll quality for readers.

Part One includes five chapters with each covering a vital component of a poll. Chapter 3 provides an overview of the questionnaire design covering topics such as the types of survey questions, the question order effects, and questionnaire pretesting methods. The author recommends ignoring the poll outcomes if the instrument is poorly designed. Chapter 4 describes four major modes of data collection (i.e., face-to-face, telephone, mail, and online polls). The author provides pros and cons for each mode in terms of data quality and costs. After reading this chapter, it should become clear to readers that some

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tradeoff has to be made when selecting the mode of data collection. Chapter 5 covers sampling as another key component of a poll. Throughout the book, the author emphasizes the importance of selecting a random sample using probability based methods so that unbiased estimates of population characteristics can be computed and the precision of the estimates can be determined. The author elaborates more on this topic in Chapter 5. Instead of reviewing the theory of sampling - which can be "too heavy" for readers without relevant background—the author provides step-by-step instructions on how to draw a random sample using devices such as the random number generator or a spreadsheet. In this chapter, the author also reviews quota sampling and issues associated with self-selection to prepare readers for the upcoming review of online polls. Chapter 6 is on estimation. Again, the author uses easy-to-follow examples to explain concepts associated with estimates, estimators and the margin of error. With an example, the author demonstrates how to estimate a population mean and percentage as well as how to determine the sample size. The first four chapters of Part One cover what constitutes a good poll. In Chapter 7, the author changes gear to talk about why nonresponse occurs, its consequences, and how to use adjustment weighting to remove or reduce the bias.

In Part Two, the author applies the guidance that was provided in Part One to examine two types of polls that are of the most interest— online polls and election polls. In Chapter 8, the author discusses issues of online polls under the total survey error framework. Online polls have become more and more popular because they seem to be easy, cheap, and fast at collecting large amounts of data. However, they also suffer from serious methodological issues, such as undercoverage, self-selection bias, nonresponse, and measurement errors. Readers should have a more comprehensive view of online polls after reading this chapter. Next, the author changes subjects and describes election polls in Chapter 9. This includes both pre-election polls and exit polls. Pre-election polls are conducted before an election takes place whereas exit polls are conducted on the day of the election. The author describes the pros and cons for both types of polls. As in previous chapters, the author provides examples in Chapter 8 and Chapter 9 to help readers understand what is covered.

Part Three of the book is devoted to analysis and publication. Chapter 10 is about data analysis. It mainly focuses on exploratory analysis such as how to examine the distribution of a single variable, how to examine the relationship between two variables, and how to present data in graphs such as bar charts, boxplots, and scatterplots. The author uses a small data set and the open source software R to illustrate the type of analysis covered in the chapter. This is a cheap and simple approach for readers who do not have access to expensive statistical software. Chapter 11 describes how to produce a research report—the key components of a research report and how to present the poll outcomes using graphs in a meaningful way. The book concludes with Chapter 12, summarizing all topics covered in previous chapters and providing a checklist for readers to determine the quality of a poll. If readers are running short of time, they can go to Chapter 12, particularly the checklist (i.e., Table 12.1), to guide their evaluation of a poll's quality.

In summary, this is a comprehensive how-to guide for readers who need to judge the outcomes of polls and who want to conduct polls but don't have the necessary training in relevant fields. The book covers all the key components of a poll and provides ample examples to explain abstract concepts and procedures. The examples are not only relevant

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to what is being described but also will allow readers to connect them with the polls they see on a regular basis. The idea that readers will be able to evaluate the quality of a poll by marking yes or no for each item on the checklist from Chapter 12 is quite useful. If there are many "No" answers, it is clear that the outcomes of the poll cannot be taken seriously. But what if the answers to five or six of the nine checklist items are "Yes", what shall the reader do? And does it matter which five or six items are marked as "Yes"? That is, are all the items equally important when judging the poll quality? Questions like these may motivate readers to dive deeper and learn more about statistics and survey research. Nevertheless, this book is a well-written introduction for anyone who is interested in public opinion polling.