Reference Reviews
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The list shows that the two largest categories of articles in the encyclopedia directly target social issues. The category labelled Pharmacological issues in society contains many articles about the influence of pharmaceuticals on human activities: for example, drugs as study aids, drugs for stimulating creativity in the arts and drug therapy as a sentence for sex offenders. This section also features a variety of articles on performance-enhancing drugs in specific sports. Social history of pharmacology features many articles on global pharmacological traditions, including dozens of articles dealing with herbal medicines. There are several book reviews interspersed throughout the encyclopedia; the subjects of these reviews range from contemporary journalism on drug scandals in sports to classic medical reference works. For the most part, the articles provide the social perspective that is the central purpose of the encyclopedia. Most of the articles also maintain focus on the reader's guide category in which they appear. However, there are articles that do not provide much in the way of a social perspective and may leave readers wondering how this "encyclopedia of pharmacology and society" differs from a work with a more clinical focus. There are also articles that do not seem to reflect the focus of their reader's guide categories, which may somewhat undermine the knowledge organization value of the reader's guide.

Although the articles do not provide references or in-text citations, each article is signed and provides a list of further readings. A resource guide in the back matter of the encyclopedia also provides suggestions for books, journals and websites. The listing for books is the most robust section of the resource guide. The section on journals omits several journals of importance and includes some questionable discontinued journals, while the section on websites does not list a single one of the National Library of Medicine's many important sources of drug information.

Despite these shortcomings, *The Sage Encyclopedia of Pharmacology and Society* is overall a work of good quality and has sufficient strengths to recommend it for general reference collections in public libraries that might not collect more clinical or technical pharmaceutical references. The encyclopedia may also be recommended to subject-specific academic collections in medicine, nursing, kinesiology, public health, social work and psychology.

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## References

Carpenter, D. (2014), *Reputation and Power: Organizational Image and Pharmaceutical Regulation at the FDA* Princeton University Press, Princeton, NJ.

Conrad, P. (2008), *The Medicalization of Society: On the Transformation of Human Conditions into Treatable Disorders*, Johns Hopkins University Press, Baltimore, MD.

## RR 2017/079
## Sandatlas

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Sandatlas.org

URL: www.sandatlas.org/

Last visited November 2016

Gratis

**Keywords** Geology, Rocks, Minerals
**Review DOI** 10.1108/RR-11-2016-0261

The Earth is home but we are often unfamiliar with it. *Sandatlas* is a fun website that describes the rocks around us. Created by an Estonian PhD student, it helps the user find descriptions and explanations of various igneous, sedimentary and metamorphic rocks. While the purpose of this site is educational, the images are beautiful and fascinating. Each section is followed by a bibliography.

Clicking on the link to study igneous rocks and minerals, the user finds an explanation that can be scanned for the interested novice or used by the more serious scholar to understand how they are classified as well as the evolution of the classification system. Large, detailed and brightly coloured images allow the user to see the rocks clearly, and the charts explain their chemical composition and rocks that do not readily fit into classification schemes (in this case, obsidian and diabase and scoria).

Sedimentary rocks include mudstone, sandstone and limestone. The composition of these can make for brilliant colouration – Bauxite with major impurities of iron oxides and hydroxides make it as orange as a pumpkin; the evaporate can be a different hue of coral; and sandstone can be in the rose to rust continuum. Travertine can take on mysterious patterns like marbleized paper. Metamorphic rocks are those that have been changed by elevated pressure and temperature. Eclogue is stunning, with green pyroxene omphalites and red garnet. Marble is metamorphic as well, recrystallized carbonate rock (limestone, dolomite rock).

Users can browse by type of rock, or use a list to navigate to specific rocks or topics such as conchoidal fractures, an explanation of what sand is and how it is formed, explanations of why there are "u" and "v" shaped valleys, and classification of sand (very fine to gravel, based

on the number of grains in one centimeter cubed) and volcanic gases, to name a few.

Users can leave their thoughts on a comment feature, so the experts can share their knowledge about these rocks. Students and scholars will appreciate this website for the content, and those of us who simply want to revel in the beauty of rocks will appreciate it as well.

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## RR 2017/080
## Statistics from A to Z: Confusing Concepts Clarified

*Andrew A. Jawlik*

Wiley

Hoboken, NJ

2016

xxvi + 419 pp.

ISBN 978 1 119 27203 8 (print); ISBN 978 1 119 27200 7 (ePub) £48.50 $49.95 (print); £30.99 $32.99 (e-book)

**Keywords** Dictionaries, Statistics, Mathematics

**Review DOI** 10.1108/RR-01-2017-0006

Everyone needs to know a bit about the interpretation of statistical data. I would go so far as to say that some understanding of statistics is an essential part of democracy. The average citizen, faced with statements like "kills 99 per cent of all known germs" or "contains 25 per cent less fat", needs to know what they actually mean. This understanding is rendered difficult by the fact that many ordinary citizens have an aversion to numbers, and most especially to numbers accompanied by Greek squiggles. People who would be ashamed to admit to any degree of illiteracy will laughingly announce that their eyes glaze over when they see numbers on a page. There is therefore a need for general books and other guides to help. The classic of these is, of course *How to Lie with Statistics* (Huff, 1954) – still a useful tool sixty years on.

Producing and understanding statistical data is an important part of all scientific, and especially, social scientific research. Though qualitative approaches have made an edge in the social sciences in recent years, it is by and large true that "if you cannot count it, it does not count." Research workers therefore need detailed guides to statistical methods. We have recommended numerous reference tools in this journal over the years, notably the American Psychological Association *APA Dictionary of Statistics and Research Methods* (Zedeck, 2014) (*RR* 2014/163); *Dictionary of Statistics* (Upton and Cook, 2014) (*RR* 2014/264); and, my first choice among such dictionaries, *The Cambridge Dictionary of Statistics* (Everitt and Skrondal, 2011) (*RR* 2011/224).

Many scientific researchers speedily get a grip on statistical methods. The two disciplines which most depend on statistics however, are psychology and sociology, and unfortunately these disciplines tend to attract students who have specialised in humanities-based subjects at school, and are more averse to numbers than most scientists. Students in these disciplines therefore need extra guidance.

This book seems to me to be aimed at scientific researchers rather than at the general public or at social science students. It consists of 75 articles, arranged in alphabetical order. Each has a first page of brief definitions, followed by three or four pages of detailed analytic discussion. These take statistical methods up to a very advanced level – the author claims that it is possible to pass Six Sigma Black Belt using it (I must admit that I had never heard of Six Sigma before, until I looked it up - www.bing.com/search?q=six+sigma+explained&form=PRGBEN&pc=EUPP_UP97&httpsmsn=1&refig=5125c51690b14906bee1fdff3f22d9ba&pq=six+sigma&sc=8-9&sp=2&qs=AS&sk=AS1 but, having done so, even the depth of statistical skills needed for the yellow belt level looked terrifying to me, so black belt must be pretty impressive).

The potential market for this book, lying somewhere between a specialised dictionary and an advanced textbook, is therefore more limited than its title might suggest. It would be too off-putting to be of use to general readers, so I would not recommend it for public library purposes. Mathematics undergraduates would find it a very useful tool for getting into the practical applications of their subject, but it would probably not suit undergraduates in non-mathematical subjects. Even among taught postgraduates, looking around my own institution I can see that many of the neuroscience students would be able to use this as a quick reference tool, though a lot of them probably already know enough about statistical methods for their own purposes. Many of the clinical psychologists would need something more basic to start with, though they might work up to this level. The social work masters students need some understanding of statistics but would find this completely beyond them.

All libraries should try to acquire as many basic texts on the interpretation of statistics as possible. Most libraries would benefit from acquiring reference tools such as *The Cambridge Dictionary of Statistics*. Academic libraries catering for mathematicians and for postgraduate scientific researchers would find this book a useful quick reference tool, supplementing the