

***Scientific Writing: A Guide by Robert J. Sternberg***

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This article aims to summarize the last edition of an important recourse for scientific writing: *The fourth edition Psychologist's Companion* (Sternberg, 2003). It represents a literary masterpiece that must be read repeated times for students and researchers of any science's subdivision, especially for those of Psychology and related areas. The author, Robert Sternberg, provides detailed and attractive information about technical and scientific knowledge to readers interested in writing a paper.

This book was first published in 1977, titled as *Writing the Psychology Paper* (Sternberg, 1977). The second and third editions were published, respectively, in 1988 and 1993. The fourth edition includes 16 chapters, two more than does third edition. The majority of these chapters refers to rules to be followed by Psychology researchers who want to see their papers published on renowned journals. Countless hints are written based on author's experience as editor and reader.

Sternberg writes with a special style: fluent, easy, clear and accurate. With humor, he facilitates readers' learning process. The quality of his discourse is illustrated when the introduction section is briefly analyzed: this part is a model of paragraphs' distribution that provides information to be discussed from first chapter to sixteenth one. Moreover, each chapter is by its own an example of scientific writing criteria, such as formal rule of orthography and punctuation, ideas organization, methodological issues, references writing, among others.

In the first chapter, eight frequent misconceptions are discussed and respective solutions are presented. Sternberg comments on main students' interest: they want to discover new data, but they do not make efforts to communicate their discoveries to scientific community. Unfortunately, some of these common mistakes are reinforced by conventional educational dynamics. Although all misconceptions are very important to researchers be aware of, the second one: "The important thing is what you say, not how you say it": It may be considered one of the most serious, because it is on the beginning of a paper writing process.

In the second chapter, steps to write a library research paper are presented. The first task suggested is deciding upon a topic for a paper. Then, Sternberg teaches how to conduct a literature review through author and topic cards. This procedure reduces students' suffering. In the following chapter, a discussion is conducted on steps to write an experimental research paper. Planning this kind of investigation is firstly treated, including some hints in writing a consent form, essential when it comes to ethics. It is followed by steps in executing an experimental study, analyzing and reporting its data. The absence of an unique and absolutely certain guide to find a good idea is emphasized. So, in these two chapters, the author provides a guide from the first step to the last one, teaching how the process occurs from the initial idea to paper publication.

Independently of paper type, there are some general rules designed to help researchers to write an attractive paper. In fourth chapter, Sternberg exposes 28 rules for writing a Psychology paper. Among all of them, the second one: "Write for your reader", seems to be one of the most important hints. Therefore, from beginners to experts, everybody interested in this academic world must follow the rules presented in this chapter.

Furthermore, as knowledge are being more and more spread through Internet, in chapter five, advantages and disadvantages of using this source are presented. The author quotes some specific types of useful online information, such as journal articles, magazine and newspaper articles and government databases. As well as in other chapters, Sternberg provides a critical analysis of information based on this kind of source. To finish it, he deals with using the Internet to publicize research findings: they can be quickly disseminated, but the author's idea can also be stolen. So, researchers have to consider good and not so good aspects related to using Internet knowledge. This book makes it possible!

On top of all that, in chapter six, Sternberg explains the meanings of some words, that are frequently misused. It includes 61 nontechnical terms, such as using of among-between, compare to-compare with, that which, fewer-less, among others, and 70 technical terms (for example, ability-capacity, anxiety-fear, classical and operant conditioning, compulsion-obsession). This section is very useful, because sometimes dictionary definitions (when there is the specific word looked for) are not clear enough to solve authors' doubts.

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Beyond Sternberg contribution to scientific writing from his own experience, he summarizes the American Psychological Association (APA) Guidelines for Psychology Papers in chapter seven. Rules of format, legibility, grammar, quantitative issues, references, author notes, footnotes, among others, are presented and illustrated. There are specific examples that facilitate reader's comprehension and application. Although he emphasizes the importance of reading the original manual, the main rules recommended in this source are presented clearly and synthetically in this chapter.

The eighth chapter is a guide for data presentation in form of tables or figures. Sternberg helps authors to communicate their findings to scientific community, but most of all, he helps them to understand their own data. How could a researcher expose effectively his results to others without really understanding them first?

One of the most searched information is where researchers shall look for knowledge they need to start writing their Psychology paper. In chapter nine, there is an updated list of the most important and reliable sources: general and journal references. Sternberg emphasizes the role of this paper section: other people will probably search for articles authors have used to write their papers.

After dealing with formal and organizational aspects that are essential for the whole process of scientific research, in the tenth chapter, Sternberg discusses the main criteria in evaluating relevance to scientific knowledge by psychology papers. All researchers are obligated to read this section if they want to have their papers accepted by journal editors. Reading the eight standards presented process of publicizing an article can be effectively improved. This book author's sincerity is amazing: he writes, for example, that it is necessary to know editors area of research. In addition, in chapters 11 and 12, Sternberg enumerates, respectively, important hints for submitting a psychology paper to a journal, from deciding upon a journal to editorial decision's aftermath, and 29 suggestions of what authors should write, how they should do it and what to do with what they write. So, reading these last three chapters will make winning acceptances from psychology journals more possible.

All professor and professional researchers must pay special attention on chapters 13, 14 and 15. In thirteenth section, Sternberg explores 18 hints to write adequately a

grant or contract proposal, increasing authors chances of being successful in getting the so expected funding. In chapter 14, necessary steps in looking for and deciding upon a book publisher. Moreover, in chapter 15, Sternberg orientates professors in their main socially known role: writing effective lectures. Learning process will surely get better after reading the 15 suggestions presented in this chapter. The first one: "Do not read", must be memorized for every professor, because students may fall into sleep when listening to a read lecture.

In the final chapter, (16), there are 50 tips summarized by, at least, 12 experts on writing articles, such as Sternberg, Bem, Eisenberg, Tesser, among others. For example, "write an abstract that contains the information a reader most would want to know" — the sixteenth tip, is a fundamental suggestion, as lots of people will probably read only articles' abstracts.

The major relevance of this book, if it is possible to categorize which information is less or more important than others, is related to Sternberg's ability in supplying with a compendium of objective suggestions a big gap in conventional psychology curriculum: students do not know how to write a library research paper nor an experimental research one. As students and professors do not learn scientific writing techniques on their own, all academic or professional psychologists are invited to read this guide whenever it is necessary to report a study, or even to read some papers. Reinforcing what is said for Sternberg, this masterpiece aims to improve psychologists students and professionals writing, through a critical summary of formal, methodological, linguistic and psychological knowledge.

### References

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