Rudner, Lawrence M. & William D. Schafer (1999). "How to write a scholarly research report." *Practical Assessment, Research & Evaluation*, 6(13), http://pareonline.net/getvn.asp?v=6&n=13 (accessed 10 November 2009).

## **How to Write a Scholarly Research Report**

Lawrence M. Rudner, ERIC & University of Maryland William D. Schafer, University of Maryland

Researchers communicate their results and help accumulate knowledge through conference papers, reports, on-line journals and print journals. While there are many rewards for having research disseminated in a scholarly outlet, the preparation of a good research report is not a trivial task.

This article discusses the common sections of a research report along with frequently made mistakes. While the emphasis here is on reports prepared for scholarly, peer-reviewed publication, these points are applicable to other forms of research reports. Dissertations and theses, for example, provide more detail than scholarly publications yet they adhere to the same basic scientific writing principles. Since all scientific research involves observation, description and analysis, points made in this article are applicable to historical and descriptive, as well as to experimental, research.

[...]

## FIRST STEPS IN WRITING A RESEARCH REPORT

You should constantly think about writing your report at every stage of your research activities. [...]

Plan your report to focus on a single important finding or highly related group of findings. In the process of analyzing your data, you probably uncovered many relationships and gained numerous insights into the problem. Your journal article submission, however, should contain only one key point. The point should be so fundamental that you should be able express it in one sentence or, at most, in a paragraph. If you have several key points, consider writing multiple manuscripts.

When writing your manuscript, keep in mind that the purpose is to inform the readers of what you investigated, why and how you conducted your investigation, the results and your conclusions. As the investigator and writer, your job is simply to report, not to convince and usually not to advocate. You must provide enough detail so readers can reach their own conclusions about the quality of your research and the veracity of your conclusions.

## SECTIONS OF YOUR REPORT

Title - It is important that the title be both brief and descriptive of your research. Search engines will use the title to help locate your article. Readers make quick

decisions as to whether they are going to invest the time to read your article largely based on the title. Thus, the title should not contain jargon or vernacular. Rather, the title should be short (generally 15 words or less) and clearly indicate what the study is about. If in doubt, try to specify the cause and effect relationship in your key point. Avoid trite and wasteful phrases such as "A study of ..." or "An investigation to determine ..."

{Personal data - For the sake of the course Digital Methods for Internet Research, include your name, student number, the course, the assignment number, your supervisor, your team members, the date, and your email address.}

[...]

**Introduction** - You will usually start your report with a paragraph or two presenting the investigated problem, the importance of the study, and an overview of your research strategy. You do not need to label this section. Its position within the paper makes that obvious.

The introductory paragraphs are usually followed by a review of the literature. Show how your research builds on prior knowledge by presenting and evaluating what is already known about your research problem. Assume that the readers possess a broad knowledge of the field, but not the cited articles, books and papers. Discuss the findings of works that are pertinent to your specific issue. You usually will not need to elaborate on methods *here*.

The goal of the introduction and literature review is to demonstrate "the logical continuity between previous and present work" (APA, 1994, p. 11). This does not mean you need to provide an exhaustive historical review. Analyze the relationships among the related studies instead of presenting a series of seemingly unrelated abstracts or annotations. The introduction should motivate the study. The reader should understand why the problem was researched and why the study represents a contribution to existing knowledge. Unless the study is an evaluation of a program, it is generally inappropriate to attempt to motivate the study based on its social importance.

**Method** - The method section includes separate descriptions of the sample, the materials, and the procedures. These are subtitled and may be augmented by further sections, if needed.

Describe your sample with sufficient detail so that it is clear what the sample represents. A discussion of how the sample was formed is needed for replicability and understanding your study. [...]

A description of your instruments, including all surveys, tests, questionnaires, interview forms, searches, and other tools used to provide data, should appear in the materials subsection. Evidence of reliability and validity should be presented. Since reliability is a property of scores from a specific use of a specific instrument for a specific population, you should provide reliability estimates based on your data.

The design of the study, whether it is a case study, a controlled experiment, a meta- analysis, or some other type of research, is conveyed through the procedures subsection. It is here that the activities of the researcher are described, such as what was said to the participants, how groups were formed, what control mechanisms were employed, etc. The description is sufficient if enough detail is present for the reader to replicate the essential elements of the study. [...]

**Results** - Present a summary of what you found in the results section. Here you should describe the techniques that you used, each analysis and the results of each analysis.

Start with a description of any complications, such as [...] missing data that may have occurred. Examine your data for anomalies, such as outliers, points of high influence, miscoded data, and illogical responses. Use your common sense to evaluate the quality of your data and make adjustments if need be. Describe the process that you used in order to assure your readers that your editing was appropriate and purified rather than skewed your results. [...]

For most research reports, the results should provide the summary details about what you found rather than an exhaustive listing of every possible analysis and every data point. Use carefully planned tables and graphs. While tables and graphs should be self- explanatory, do not include a table or graph unless it is discussed in the report. Limit them to those that help the reader understand your data as they relate to the investigated problem.

**Discussion** - At this point, you are the expert on your data set and an authority on the problem you addressed. In this section, discuss and interpret your data for the reader, tell the reader of the implications of your findings and make recommendations. Do not be afraid to state your opinions.

Many authors chose to begin the discussion section by highlighting key results. Return to the specific problem you investigated and tell the reader what you now think and why. Relate your findings to those of previous studies, by explaining relationships and supporting or disagreeing with what others have found. Describe your logic and draw your conclusions. Be careful, however, not to over generalize your results. Your conclusions should be warranted by your study and your data.

Be sure to recognize the limitations of your study. Try to anticipate the questions a reader will have and suggest what problems should be researched next in order to extend your findings into new areas.

**References** - There should be a one-to-one match between the references cited in the report and the references listed in the reference section.

{For footnotes/endnotes as well as the bibliographic references, please follow the MLA style guide: http://owl.english.purdue.edu/owl/resource/747/01/}

{Appendix - Attach your complete data sets to your paper or, preferably, make them available on-line and reference them in your paper. Researchers would like to be able to verify results.}

Editor's note: The reference to APA in the text refers to the American Psychology Association's style guide. In Media Studies at the University of Amsterdam, please use the MLA style (Modern Language Association).