

Guidelines on Writing a Well-structured Research Report

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Writing a research report may be an intimidating task that may lead to procrastination however, with careful planning, thought and commitment, this can be achieved. The guidelines presented in this article will assist the student with pointers on writing a well-structured research report.

Getting Started¹

1. Identify a topic and why it is important.
2. Formulate a hypothesis.
3. State your aim and specific objectives. Objectives are the stepping stones to reaching the aim.
4. What are the results/findings from your study? Present results as graphs, tables, p-values etc.
5. What is the meaning of your results?
6. What is the overall finding from your study?

Once you've identified and answered the above mentioned points, you're ready to start drafting a report.

Structure and Tense^{1,2,3}

The following sections, and the tenses they are written in, include:

1. Abstract

This section summarises the outline of the study and should contain information pertaining to the purpose of the study, materials and methods used, results obtained, a brief discussion and conclusions. It is easiest to write the abstract last and it is usually written in the past tense.

2. Introduction and Literature Review

The introduction of a report should include information about your chosen discipline. The information provided should start off broad and be narrowed down to your research question (funnel approach). Mention your hypothesis, and your research aims and objectives. It is usually written in the present tense.

3. Materials and Methods

This section is the easiest to do. This section should be accurate and provide as much detail as possible to allow another researcher to repeat the study. This section is always written in the past tense as you've already done the study.

4. Results

This section is the most important section in your report. Without any results, the study is meaningless; therefore, a lot of effort should be put into this section. It is important to include a brief summary of the data as this will tell the examiner/reader what he/she is looking at. This section is written in the past tense however, the present tense is used when referring to figures, tables etc.

5. Discussion

This section is used to interpret and discuss your results (i.e. what do the results mean). Compare your results to those published in previous articles and discuss the limitations of your findings. This section is written in the present tense however, the past tense is used when summarising findings.

6. Conclusion

This section should summarise the main findings of the study. Furthermore, the implications, limitations and future directions of the study are stated. It is important that you do not include any information not previously mentioned in this section. A combination of tenses is used.

Format

It is important to format your report according to the Faculty of Health Sciences Style Guide for Theses, Dissertations and Research Reports (University of the Witwatersrand). The style guide is available from the following link:

<http://www.wits.ac.za/media/wits-university/faculties-and-schools/health-sciences/research-entities/documents/FACULTY%20OF%20HEALTH%20SCIENCES%20STYLE%20GUIDE%20FOR%20THESES-DISSERTATIONS-AND-RESEARCH%20REPORTS-Updated%20Marh%202016.pdf>

Important points to remember³:

1. Font style and size: Times New Roman or Arial, size 12, 1.5 line spacing
2. Length of a standard research report (monograph): 60-80 pages
 - General information and references – 20%
 - Introduction and literature review – 25%
 - Materials and methods – 25%
 - Results and discussion – 30%
3. Use UK spelling (not US spelling)
4. Use italics for the names of species, and the titles journals and books
5. Referencing style: Harvard or Vancouver (be consistent). When an author/author et al. is used to cite an article, always include the year in brackets e.g. Milner et al. (2016).

6. Numerals: Ten and below should be written in words, numerals above ten can be illustrated using numbers or text. Remember to never start a sentence with a numeral number.
7. Table legends should be placed above tables.
8. Figure legends should be placed below figures.
9. Include axis titles on graphs.

References

1. Kallestinova ED. How to write your first research paper. *Yale J Biol Med.* 2011; 84(3):181-190.
2. Using tenses in scientific writing.
<http://services.unimelb.edu.au/__data/assets/pdf_file/0009/471294/Using_tenses_in_scientific_writing_Update_051112.pdf> (Accessed 27.06.16).
3. Faculty of Health Sciences Style Guide for Theses, Dissertations and Research Reports.
<<http://www.wits.ac.za/media/wits-university/faculties-and-schools/health-sciences/research-entities/documents/FACULTY%20OF%20HEALTH%20SCIENCES%20STYLE%20GUIDE%20FOR%20THESES-DISSERTATIONS-AND-RESEARCH%20REPORTS-Updated%20Marh%202016.pdf>> (Accessed 27.06.16).