

A research report informs the reader completely and accurately about an investigation and its outcome without belaboring the issue. There are instances when a research report is the only source of information about a specific problem area. In psychology, research reports are written in **APA style**. The following outline is consistent with the rules of writing established in the Publication Manual of the American Psychological Association: 6th edition, and is in keeping with various Psychology Journals.

A complete research report includes the following:

- Title
- Abstract
- Introduction
- Method
- Results
- Discussion
- References

Title: The title appears on the title page with the student's name, course number, course title, and date submitted. Do not use the caption, title. The title should convey to the reader the topic that is studied. In an experimental study, this might include the independent and dependent variables. In a correlational study, the title might include predictor and criterion variables.

Abstract: A brief summary of the study. It includes statements about the problem, method, results and conclusions. Usually, an abstract is between 100-175 words, and it is used for indexing. The abstract is placed on the second page of the report.

Introduction: This section begins the body of the research report. Center the title at the top of the page. Start the introduction with a statement of the research problem. Then, cite the relevant research. The literature review provides a context and rationale for the hypothesis that is under investigation. Mainly cite primary sources. Paraphrase rather than quoting directly from the past literature and document the source by listing the authors name and year of publication in parenthesis. When documenting, you can use the name of the author in the sentence followed by the date of publication in parentheses: e.g., Donald (1994) or (Donald, 1994). The introduction section ends with a statement of the hypothesis under study together with operational definitions for the variables in the hypothesis statement.

Method: A description of how the study was carried out. Accuracy is important. The method section must be written with enough detail to permit replication. It is usually subdivided into the following sections:

Participants: Describes who the research participants were, how they were selected, and how many were used.

Materials or Apparatus: A complete description of the type of equipment and stimulus materials used in the research. If researchers developed their own stimulus materials, then they must describe how it was done. If researchers use existing materials, then they must document the source or explain how they acquired the materials.

When surveys or tests are used as outcome measures, each must be described briefly with an appropriate citation. Indicate the number of items, response categories and how it is scored. If researchers develop their own surveys, they must describe how the measure was constructed and provide the entire measure in the Appendix.

It is also important to document the reliability and validity of all of your measures. For reliability, specify what estimation procedure(s) you used. For validity, you must explain how you assessed construct validity.

Procedure: Complete details about how the research was conducted. Report the participants' instructions and all of the experimental manipulations. Indicate how many trials were used and in what order the experimental conditions were run. Provide enough detail to permit replication.

Results: A summary of the experimental findings. Report the results in a summarized fashion using Tables and Figures when necessary. Raw data should not be included. Describe the results of all the statistical tests whether or not they are in accord with the hypothesis. Please consult your textbook or the APA Manual for a description of the correct format to use when presenting data. If you use a Table or a Figure make sure that you inform the reader in the text about the data that is presented. For example: Table 1 presents the means for each of the experimental conditions. Consult your textbook for the details of how to format a table or figure in APA style.

To report the results of statistical tests, make sure that you use appropriate format. Some examples are as follows:

- As predicted, the first grade girls reported a significantly greater liking for school than did the first-grade boys, $F(1, 34) = 123.07, p = .01$.
- A significant relationship was found between high school grades and job success, $r(52) = .90, p = .01$.
- Means (with standard deviations in parentheses) for the experimental and control groups were 2.4 (1.0) and 6.7 (2.1), respectively.

Discussion: Results are evaluated and interpreted in the discussion. Were your results consistent with the hypothesis? Why or why not. The consistency between your findings and those of previous research must be discussed along with plausible explanations for discrepancies. Consider whether there are larger implications for the findings or whether there are alternative ways to interpret the results. What conclusions can be made from these findings? Identify any limitations to your findings?

References: An alphabetized list of all the sources of information that are used and cited in the text of your paper. The form of each citation must be in accord with the description in the APA Manual. Start a new page for the references and use the heading References the top of the page.

Mather, M., & Knight, M. (2005). Goal-directed memory: The role of cognitive control in older adults' emotional memory. *Psychology and Aging, 20*, 554-570. doi:10.1037/0882-7974.20.4.554.)

Jones, W., & White, P. (1971). *Psychology*. New York: Macmillan.

Author, I. (date). Title of article, *Name of Periodical* [Online], Available: <http://www.uncc.edu>

Some editorial details

- Double-space the research report.
- Use 1" margins and left adjust the text.
- Most of the report will be written in the past tense
- Staple or bind the report.
- Use a spell checker and proofread the report
- Make sure that sources are properly cited. Do not plagiarize.
- Use 12 cpi

Guidelines for Grading Lab Papers

- Paper will be graded as follows, A = Excellent, B=Good, C=Adequate, D=Marginally acceptable, F= Unacceptable
- 70% of grade will be based on content
- 30% of grade will be based on use of APA style
- Proofread your work. Spelling and grammar are important. A deduction of one letter grade will be made for a paper with several careless mistakes

Research Proposal

A research proposal involves the following four steps: Selecting a research problem, reviewing the literature, Designing a study, and Writing the proposal. In selecting the problem, choose a topic that you are genuinely interested in. It may be a replication with extension of a published finding or it may be an original idea. After choosing a topic, use PsychINFO (PubMed) to identify articles on that research topic. Read articles from the psychological journals to become familiar with the research topic and to find out how studies in that area are carried out. Take notes as you read the journal articles, because you will need to refer to the journal articles when you are designing your own study and writing your proposal.

The research proposal is written in APA style, however, it differs in two important ways from the research report. It is written in the future tense and it does not include the results and discussion sections. The proposal should include these sections:

- Title
- Abstract
- Introduction
- Method
- Expected Results
- References (Must have at least 10 articles)

Problems with writing a research proposal often stem from a failure of planning enough time for each of the four steps outlined above. It takes time to select a problem and to conduct a literature review. Sometimes journal articles are not available in the UNCC library and must be obtained through interlibrary loan. This procedure can take several weeks. Writing an independent research proposal is a semester long project.