A Good Title States the Relationship Between the Predictor (Independent) Variables and the Criterion (Dependent) Variable and Identifies the Subjects

Author [You will type your name]

Affiliation [You will type “Allegheny College”]

Date

Pledge: ____________________________________________________________
[Your signature]

Approved:

______________________________________________________________
(Insert name of first reader)

______________________________________________________________
(Insert name of second reader)

Items presented in brackets and/or in red type are helpful suggestions/instructions that are not necessarily parts of the paper.

PLEASE NOTE: The title page/signature page should be your first page and you should start your page numbering with this page.
Abstract

The abstract appears on a separate page and is written in block style (i.e., no paragraphing). The abstract should summarize the entire article including an introduction to the topic, a statement of the hypotheses or predictions, a brief description of the subjects and methods, a description of the major results, and an explanation of why the present results were obtained. This section can be very difficult to write and is best written after the entire paper is complete. It is important to be detailed enough so the reader can understand what the study was about and decide whether to read the entire article. A well written abstract is accurate, concise, specific, and self-contained.

The abstract should:

- accurately reflect the purpose and content of your paper.
- report rather than evaluate.
- be coherent and readable.
- be concise.

The Title Goes Here

[This is your introduction section]

The paper begins with the introduction which is labeled with the title of your paper. The introduction should begin by reviewing the relevant literature and be written with the assumption that the reader has some knowledge of the area of interest. There should be some continuity between previous research in the area and the purpose of the present study. The variables under study should be described and the hypotheses stated such that the expectations of the experimenter are clear.

The introduction should:
- introduce the problem and why it is important.
- explain the importance of the problem and why new research is important.
- provide a summary of earlier work; assume that your reader has a basic knowledge of your subject.
- include your hypotheses and your approach


Method

Research Participants/Subjects

When using non-human animals as subjects, the genus, species, and/or strain of animal should be reported, as well as other identifying information such as the supplier of the animal (name and location). The number of animals used, their gender (number of each), age (usually the range), and weight (usually the mean and standard deviation) should be reported. Details of their care and handling should also be given (e.g., housing, light cycle, availability of food and water). The total number of animals should be given, as well as the number of animals assigned to each experimental condition.
For humans, you should describe the research participants. What kind of people are they? How old are they? What is their gender breakdown? To provide this information you will need to produce descriptive statistics of your participants.

**Measures/Materials/Apparatus**

This section should describe the measures, materials, and/or apparatus used in the study with references as appropriate.

**Procedure**

The purpose of this section is to tell your reader exactly what was done in the study. For your project, it is sufficient to indicate that surveys were distributed in introductory courses. A general description of the survey should be included as well as a description of what specific parts of the survey were used for this study.

The methods section should:

- identify subsections
- introduce participant characteristics
- describe the procedures that were used for selecting your participants
- give information about your sample size and conditions used.
- include information regarding measures and covariates.
- describe your research design
- list any experimental manipulations in detail.


**Results**

In this section, describe the results but do not give an explanation as to why these results occurred. You should include both descriptive and inferential statistics, written in text and presented graphically. When reporting descriptive statistics, you should include a measure of central tendency (either the mean or the median) and a measure of variability (either the standard deviation or the standard error of the mean) for each condition. Typically, you do not report
individual or raw data. When presenting results in figures and tables, be sure to mention them in the text, referring to all tables as tables and all graphs, pictures, and drawings as figures. Each table, with its title and headings, and each figure, with its caption, should be self-explanatory. The titles of tables appear on the same page as the table; figure captions all go on the same page and are identified by the figure number. Tables and figures are placed at the end of the manuscript in the following order: tables, figure captions, figures.

When reporting inferential statistics, you should identify the statistical test used (e.g., $F$ or $t$), the calculated value of the statistic, the associated degrees of freedom and the probability of obtaining that statistic ($p$ value). If the statistical test used is unusual for your type of data, explain why; otherwise, assume that your reader understands why you used the test statistic. You must also indicate whether or not your results were significant and the alpha level used to make that decision. For example, “All comparisons were done using a alpha level of .05. Those subjects that received the placebo showed higher pain sensitivity than those receiving morphine, $F(1, 29) = 4.76, p = .034$.”

The Results section should:

• give detailed information about dates and times of recruiting, follow-up information and sources of your subjects.
• include all of your statistics and data analysis. This should be an accurate and unbiased report of the data.
• report any additional analyses that were done.
• present the total number of participants/animals/subjects recruited, and how many were assigned to each group. Also include the number that did not complete the experiment, and why.
• describe how any interventions or manipulations were used, and provide evidence that they were done so in the manner they were intended. Also include any adverse events.
• include your baseline demographic and/or clinical characteristics for each group.

Discussion

The discussion section usually starts with a description of the major findings of the experiment and a statement as to whether or not the hypotheses were supported. Explanations should be given as to why these results occurred, comparisons with the work of others should be made, and explanations for contradictory results given. This section usually ends with a discussion of the importance of the results and, if appropriate, the application of the results.

The discussion section should:

- include the theoretical, clinical or practical significance of your outcomes.
- describe any problems or issues that are still unresolved.

References

The reference section begins on a new page. This section lists all sources cited in the paper, in alphabetical order, using correct APA format. Do not include sources that are not cited in the paper. The general form of references is: author last name, initials. (year). Title of article. Title of Journal, volume #, pages. For example:


Invert each author’s name (last name, first initials), and put an ampersand (&) between the second to last and last authors. The title of the article is written in sentence case (only capitalize the first word of the title), and the journal title is written in title case (capitalize the first letter of all major words) and italicized. The volume number is also italicized; do not use the abbreviation vol. before volume number and do not use an abbreviation for page (p., pp., pg.,) before the page numbers. When retrieving information from electronic sources, provide the date of retrieval and the name of the source (e.g., Retrieved November 2, 2004, from the PsycINFO database). If the source is also available in a print version, after the title, in brackets, note that an electronic version was used.

Appendix A

Below are some general guidelines regarding APA format. The paper should be typed using a serif font such as Times New Roman and using a 12-point font size. The margins should be 1 inch (if you are using Microsoft Word, the default margin size is 1.25 inches, so be sure to change it) and the entire paper should be double spaced. Do not put extra spaces between section headers and the start of each section. **WARNING**: Microsoft Word has a default setting of “Auto” for “Space After” under “Paragraph”. This will leave an extra half-line at the end of every paragraph. This is incorrect. You must set “Space After” to “0”.

If a heading is on the last line of a page, move it to the top of the next page, do not leave widows and orphans. Each page (including the title page) should have a short title and page number, and this should be in the same font type and size as the rest of your paper. The short title is used by the editors of the journal to identify the manuscript prior to publication (should the pages become separated) and should be the first 2-3 words from the title. There should be 5 spaces between the short title and the page number; the page header should be right justified and placed 1/2 inch from the top of the page. Use the header function to do this.

The running head is a shortened version of the title that will appear on the top of each page when the paper is printed in a journal. The running head is typed in all capital letters and is no longer than 50 characters long (including spaces). When typing the words "Running head", notice that the word "Running" is capitalized, but the word "head" is not. The title, author's name, and affiliation should be centered in the middle of the page. Use print preview to see how it looks and adjust if necessary.

The abstract appears by itself on the second page of the paper and the section headers is centered at the top of the page. The abstract is written in block style and is no longer than 120
words. The body of the paper begins on the third page of the paper and starts with the introduction. This section is not given a header, but rather the title of the paper appears at the top of the page. The rest of the paper is continuous from the introduction through the discussion section, new sections do not start on new pages. The method, results, and discussion sections all have headers that appear at the start of each section and these headers are centered on the line. The method section is typically divided into subjects (participants), apparatus (materials or measures), and procedure subsections. The headers for these subsections are **bold** faced and are flush with the left margin.

When using the work of others, paraphrasing is preferred over using direct quotations, writing that is composed of stringing together quotations from other sources is not only unimaginative, it is unacceptable for professional work. When citing sources in the text, you must credit the source by indicating the last name(s) of the author(s) and the year of publication. The first time you cite a source, use all authors (unless more than 6) and the year, the next time you cite the same source, use just the first author followed by et al., and the year (with 2 authors, always cite both authors, with more than 6 authors use et al. for the first citation). When citing several works by different authors, list them alphabetically by the last name of the first author; when citing several different works by the same author(s) list them by year of publication (oldest source first).