### **How to Write A Research Paper**

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#### Introduction

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Research is a way of life. In our daily routine life we do research to find comparable rates, select the best school for our children, find the shortest route to our destination ,etc. This informal, experiential research helps us decipher the flood of information we encounter daily. Formal academic research differs from experiential research and may be more investigative in nature. For example, it may require us to learn about an area in which we have little knowledge or inclination to learn. It may be library-oriented or field-oriented, depending on the nature of the research . Academic Research like the everyday research we do, is associated with curiosity and intellectual discovery. The writing associated with academic research is demanding and challenging, with a methodology and discipline all its own. Although many of the concepts and processes of research are generic, academic research is discipline-specific and demands a more rigorous methodology.

#### **Components of Research Papers**

According to Fisher et al ,'It should be noted that manuscripts that are successfully submitted to a journal for publication have three main components: (1) the overall idea, (2) the execution of the work, and (3) the presentation of the work.' Writing the paper involves the third component,i.e. the presentation of work. Structure and Approach Scientific research must begin with a defined research question, which results in a welldesigned research protocol that plans the overall approach. This foundation should lead to a set of data from which the manuscript can be constructed.

Manuscripts submitted to journals for consideration for publication typically have the following components.

- Title Page
- Abstract
- Introduction
- Methods

- Results
- Discussion
- Conclusions
- Acknowledgements
- References
- Tables and Table Captions
- Figure and Figure Captions

Presentation of Academic work may be done in different styles. Moreover, some formats are preferable to use in circumscribed fields so you have to choose an appropriate style with great care. If you follow proper style your project will be of great success. Each style has different peculiarities and distinctive features.

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The most common styles that are used in academic writing are-

- 1. American Psychological Association (APA) Style. It is one of the most important and used formats if you are to write academic research paper. The guidelines to this style are chaste. That is why it is quite difficult to meet all the requirements of it. But in case you have done everything properly your paper writing would serve as a professional document. APA writing style does not use footnotes. Due to APA style of citations you are to attach in-text citations and a reference page to the end of your research paper. Another peculiar aspect of APA style is the title page. You have to mention the title of research work, the author's name and the name of institution on it. This style is preferential to social sciences. So with the topics in Business and Economics, Anthropology, Education, Law, Sociology or Political science you may boldly use this style.
- 2. Modern Language Association (MLA) Style. This style is not so strict comparing to APA or other styles. MLA writing style is considered to be the most used style for academic writing. It has its own citation and reference rules but in general you have a wide discretion. Here you are to pay attention to spacing and formatting requirements. In-text citations of this style are simple. You have to mention the author's last name and the page number only. All additional information would be given at the end of the research paper under the heading of "Works Cited". MLA is usually used for the topics on humanities. The topics include Philosophy, Religion, Literature, Music and Linguistics.

3. The Chicago style is another format used mostly for topics on humanitarian sciences. Here, unlike APA style, you are to use footnotes at the bottom of appropriate page. Pay attention to the fact that the alphabetical order of the bibliographical page would regard to the first name of the author. The numbers mentioned next to the cited information are to be linked to the footnote against the same number. The possible areas of using this style are various branches of History, humanities and art subjects.

#### **APA STYLE RESEARCH PAPER GUIDELINES**

The most widely acceptable format of writing a research paper is the APA Style. The structure of Research paper in APA style is as follows-

An APA-style paper includes the following sections: title page, abstract, introduction, method, results, discussion, and references. Your paper may also include one or more tables and/or figures. Different types of information about your study are addressed in each of the sections, as described below.

General formatting rules are as follows:

- 1. Do not put page breaks in between the introduction, method, results, and discussion sections.
- 2. The title page, abstract, references, table(s), and figure(s) should be on their own pages.
- 3. The entire paper should be written in the past tense, in a 12-point font, double-spaced, and with one-inch margins all around.

#### Title page

Title should be between 10-12 words and should reflect content of paper (e.g., IV and DV).

#### Abstract (Labeled, Centered, Not Bold)

Not more than 120 words, one paragraph, block format (i.e., don't indent), double-spaced. Provide overview of method, results, and discussion.

#### Introduction

(Do not label as "Introduction." Title of paper goes at the top of the page—not bold) The introduction of an APA-style paper is the most difficult to write.

A good introduction will summarize, integrate, and critically evaluate the empirical knowledge in the relevant area(s) in a way that sets the stage for your study and why you conducted it. The introduction starts out broad (but not too broad!) and gets more focused toward the end.

#### Method

(labeled, centered, bold) The Method section typically includes Participants, Materials and/or Apparatus, and Procedure sections. If the design is particularly complicated (multiple IVs in a factorial experiment, for example), you might also include a separate Design subsection or

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have a "Design and Procedure" section. Note that in some studies (e.g., questionnaire studies in which there are many measures to describe but the procedure is brief), it may be more useful to present the Procedure section prior to the Materials section rather than after it.

#### Results

(labeled, centered, bold) In this section, describe how you analyzed the data and what you found. If your data analyses were complex, feel free to break this section down into labeled subsections, perhaps one section for each hypothesis. □ Include a section for descriptive statistics □ List what type of analysis or test you conducted to test each hypothesis. □ Do not spend any time interpreting or explaining the results; save that for the Discussion section.

#### Discussion

(labeled, centered, bold) The goal of the discussion section is to interpret your findings and place them in the broader context of the literature in the area. A discussion section is like the reverse of the introduction, in that you begin with the specifics and work toward the more general (funnel out). Some points to consider: 

What are the limitations of the study. 

What additional questions were generated from this study? What further research should be conducted on the topic? What gaps are there in the current body of research? Whenever you present an idea for a future research study, be sure to explain why you think that particular study should be conducted. What new knowledge would be gained from it? 

Final paragraph: Be sure to sum up your paper with a final concluding statement. Don't just trail off with an idea for a future study. End on a positive note by reminding your reader why your study was important and what it added to the literature.

#### References

(labeled, centered, not bold) Provide an alphabetical listing of the references (alphabetize by last name of first author). Double-space all, with no extra spaces between references.

Journal article example: [Note that only the first letter of the first word of the article title is capitalized; the journal name and volume are italicized. If the journal name had multiple words, each of the major words would be capitalized.]

Ebner-Priemer, U. W., &Trull, T. J. (2009). Ecological momentary assessment of mood disorders and mood

dysregulation. Psychological Assessment, 21, 463-475. doi:10.1037/a0017075

Book chapter example: [Note that only the first letter of the first word of both the chapter title and book title are capitalized.] Stephan, W. G. (1985). Intergroup relations. In G. Lindzey& E. Aronson (Eds.), The handbook of social psychology (3rd

ed., Vol. 2, pp. 599-658). New York: Random House.

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Book example: Gray, P. (2010). Psychology (6th ed.). New York: Worth.

Table There are various formats for tables, depending upon the information you wish to include. See the APA manual. Be sure to provide a table number and table title (the latter is italicized). Tables can be single or double-spaced.

Figure If you have more than one figure, each one gets its own page. Use a sans serif font, such as Helvetica, for any text within your figure. Be sure to label your x- and y-axes clearly, and make sure you've noted the units of measurement of the DV. Underneath the figure provide a label and brief caption (e.g., "Figure 1. Mean evaluation of job applicant qualifications as a function of applicant attractiveness level"). The figure caption typically includes the IVs/predictor variables and the DV. Include error bars in your bar graphs, and note what the bars represent in the figure caption: Error bars represent one standard error above and below the mean.

#### **In-Text Citations**

When citing sources in your paper, you need to include the authors' names and publication date. You should use the following formats:

When including the citation as part of the sentence, use AND: "According to Jones and Smith (2003), the..."

When the citation appears in parentheses, use "&": "Studies have shown that priming can affect actual motor behavior (Jones & Smith, 2003; Klein, Bailey, & Hammer, 1999)." The studies appearing in parentheses should be ordered alphabetically by the first author's last name, and should be separated by semicolons.

If you are quoting directly (which you should avoid), you also need to include the page number.

For sources with three or more authors, once you have listed all the authors' names, you may write "et al." on subsequent mentions. For example: "Klein et al. (1999) found that...." For sources with two authors, both authors must be included every time the source is cited. When a source has six or more authors, the first author's last name and "et al." are used every time the source is cited (including the first time).

#### **Secondary Sources**

"Secondary source" is the term used to describe material that is cited in another source. If in his article entitled "Behavioral Study of Obedience" (1963), Stanley Milgram makes reference to the ideas of Snow (presented above), Snow (1961) is the primary source, and Milgram (1963) is the secondary source. Try to avoid using secondary sources in your papers; in other words, try to find the primary source and read it before citing it in your own work. If you must use a secondary source, however, you should cite it in the following way:

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Snow (as cited in Milgram, 1963) argued that, historically, the cause of most criminal acts...

The reference for the Milgram article (but not the Snow reference) should then appear in the reference list at the end of the paper.

#### **Other Essential Considerations**

Other essential points that require special attention are language of the Research Paper, Documentation of Sources, Conclusion and Acknowledgements .

#### Language of Research Paper

According to Kathleen Cali and Kim Bowen (2013),"many elements of writing contribute to an author's style, but three of the most important are *word choice*, *sentence fluency*, and *voice*."

#### **Word Choice**

Good writers are concise and precise, weeding out unnecessary words and choosing the exact word to convey meaning. Precise words — active verbs, concrete nouns, specific adjectives — help the reader visualize the sentence. Good writers use adjectives sparingly and adverbs rarely, letting their nouns and verbs do the work.

Good writers also choose words that contribute to the flow of a sentence. Polysyllabic words, alliteration, and consonance can be used to create sentences that roll off the tongue. Onomatopoeia and short, staccato words can be used to break up the rhythm of a sentence.

Sentence fluency is the flow and rhythm of phrases and sentences. Good writers use a variety of sentences with different lengths and rhythms to achieve different effects. They use parallel structures within sentences and paragraphs to reflect parallel ideas, but also know how to avoid monotony by varying their sentence structures.

Good writers also arrange their ideas within a sentence for greatest effect. They avoid loose sentences, deleting extraneous words and rearranging their ideas for effect. Many students initially write with a looser oral style, adding words on to the end of a sentence in the order they come to mind. This rambling style is often described as a "word dump" where everything in a student's mind is dumped onto the paper in no particular order. There is nothing wrong with a word dump as a starting point: the advantage of writing over speaking is that writers can return to their words, rethink them, and revise them for effect. Tighter, more readable style results when writers choose their words carefully, delete redundancies, make vague words more specific, and use subordinate clauses and phrases to rearrange their ideas for the greatest effect.

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#### Voice

Because voice is difficult to measure reliably, it is often left out of scoring formulas for writing tests. Yet *voice* is an essential element of style that reveals the writer's personality. A writer's voice can be impersonal or chatty, authoritative or reflective, objective or passionate, serious or funny.

A scientific manuscript is meant to convey technical information to the reader. Therefore, it is generally designed to be a straightforward presentation and discussion. Paragraphs and sentences should be simply constructed. One point of view that supports this concept is that the scientific aspect of the manuscript may be challenging enough for the reader to comprehend, therefore the text itself should support the endeavor to convey the scientific information, rather than acting to further obscure the concepts and results.

#### **Documentation of sources**

As a writer of academic papers, you must document any source of information which you use in your research papers, articles, presentations and any kind of scientific projects.

If you properly document the original works of other authors your ideas are based upon, it makes easy for the readers to see and consult the resources you used. Furthermore, accurate and proper quoting shall help you avoid plagiarism, which is considered a serious breach of academic conduct.

There are 3 methods of including other writer's work into your paper. They are citing (quoting), paraphrasing and summarizing.

Citation should repeat the original text word-for-word and include a reference to the original writer of the source document.

Paraphrasing means retelling a passage of the original text using your own words and sentence structures. The author of the original must also be referenced.

Summarizing means reproducing only the most important ideas and main points of the source using your own words. It usually summarizes a larger statement in a form of a shorter explanation. However, the original source must be referenced, too.

#### Conclusion

Conclusion involves a brief introduction and stating of major results in brief. It ends with a statement of how the work contributes to the field of study.

#### Acknowledgements

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- 3. http://www.aresearchguide.com/styleguides.html
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- 5. https://www.hamilton.edu/documents/Writing%20an%20APA%20Style%20Research%20Paper%20PDFF.pdf
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