

## Writing a Good Research Paper

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### Abstract

*A research paper is a piece of academic writing that provides analysis, interpretation, and arguments based on in-depth independent research. A good research paper solidifies a researcher's skill in scholarly writing. This paper describes the process it takes to write a good research paper; it highlights the processes necessary to write various sections of a research paper - Abstracts, Introduction, Literature Review, Methodology, Results and Discussion, and Conclusion. Digesting this research paper's content would ensure researchers can document information that would otherwise seep through due to a lack of research writing skills. The aim of this is to ensure that researchers can make original contributions to the scholarly base. An author's career, institution, and nation will be impacted by high-quality publication in indexed journals. Significant rejections could result from poor scientific writing. Therefore, writing a successful scientific publication for a peer-reviewed journal takes considerable time and expertise. A few easy actions and advice are provided to help researchers publish the findings of their work in the right scientific publications with greater expertise. Effective scientific writing frequently adheres to a specific format with important elements. The introduction to a specific issue with relevant background literature and theories to be studied, a list and explanation of the techniques, results, and a discussion that connects the results to the topic's broader information should all be included in a scientific paper's main text. For early researchers aiming to raise the caliber of their submissions for publication, this review piece is essential.*

### Keywords

Writing; research



## I. Introduction

Writing a good research paper requires fine writing skills that have been fine-tuned over a number of years. While many researchers perfect their skills in their varying careers, many fail to hone their writing skills. This leads to a seep through of information that would otherwise be beneficial. But with the advent of technology, it can be said that learning writing skills has relatively become easier. The content of this research paper contains valuable information on how researchers have honed their writing skills of becoming valuable carriers of knowledge. However, to write a research paper correctly, an author should have one of the following knowledge and skills:

- reading at a university level
- academic writing
- critical thinking
- good academic practice
- editing and proofreading

The researcher must take the following actions in writing (Caulfield, 2020a; Shah, 2015):

1. Describe the subject: You should introduce your topic and explain why it is fascinating and significant to the reader in the first paragraph of your essay. Writing a compelling first line will help you do this. The topic's importance is made clear in this introductory statement. Consider this as a forceful statement, question, fact, statistic, or quick anecdote that will pique the audience's interest in your subject.
2. You must describe the context of the research after grabbing the audience's attention. An illustration of this is how you might give context and focus on the topic in an argumentative essay. However, in this case, it is necessary to include a summary of earlier comparable studies because it involves empirical study. It gives a brief overview of the research study's current state. There should be a sincere relationship to the literature. To support your job in the research field, you must have a comprehensive understanding of the pertinent research.
3. Establishing the research problem and questions comes third. The sentences that follow will make the connection and identify the research issues:
  - a. Although x has been thoroughly investigated, y has received little consideration.
  - b. The ramifications of the x study merit additional investigation.
  - c. It is usually believed that x..., but y...
4. Describe the goals: This is the moment to go into more detail about what you hope to learn. The position that the thesis statement states is what the body of the article will support with evidence. This would apply to the following claims: The purpose of the study was to respond to the following research questions: What impact does the patients' daily drug consumption have on them?

## II. Review of Literature

A literature review is a piece of academic writing that demonstrates knowledge and understanding of the academic literature. This knowledge describes the specific topic context of the topic. The main aim of a literature review is to build an argument, that is, relevant context should not just be put together aimlessly. Establishing a literature review presents the author's understanding of the topic of the field of research, reading combined with critical analysis will help an author refine a piece of research work which consequently makes the basis of the research for carrying out investigative work. Ultimately, the literature should include:

1. information on the topic
2. context of the research
3. knowledge of previous research conducted in the same context
4. new areas of research that would be investigated should be presented
5. and, ultimately, the basis of investigation of an argument should be formed rather than just a library of words (The University of Edinburgh, 2022)

The following sub-topics will help outline a literature review correctly:

1. narrow your topic and select papers accordingly
2. search for literature
3. read the selected articles thoroughly and evaluate them
4. organize the selected articles and look for patterns to develop subtopics
5. develop a thesis or purpose statement
6. write the literature review
7. review your work

This section buttresses the seven steps necessary for the literature review. It also contains useful information sources for the required steps of a literature review:

1. Narrow your topic and select sub-topics accordingly: Consider your specific area of study, and think about what interests you and what interest other researchers in your field. Talk to colleagues in your field, brainstorm, and read recent issues of journals in your field. It would also be useful to limit your scope to a smaller study area (University of Guelph, 2023a)
2. Source for searching your literature: Define your source selection criteria. These could be articles published within a specific time range, focusing on a specific geographic region, or using a specific methodology. Also, search for keywords and search a library base. Refer to a reference list of recent articles and reviews. This will lead to other useful papers. It is also important to include any studies contrary to your point of view
3. Read the selected articles thoroughly and evaluate them: Evaluate and synthesize the study's findings and conclusion, also note the following:
  - assumptions some or most researchers seem to make
  - methodologies, testing procedures, subjects, and materials used by other researchers
  - experts in the field, including names and labs that are frequently mentioned
  - conflicting theories, results, and methodologies
  - popularity of theories and how this has/has not changed over time
4. Organize the selected papers by looking for patterns and by developing subtopics: Organize findings that are common or contested. Also, document important trends in the research. It would be wise to discuss the most influential theories.
5. Develop a thesis or purpose statement: Write one or two sentences summarizing the conclusion you have reached about the major trends and development you see in the research that has been conducted on your subject.
6. After researching and putting all these points together, the next item is to write your literature review. It would help to follow an organizational structure that includes the headings and the subheadings you constructed, and make certain that each section links logically to the one before and after it. Structure your sections by themes or subtopics, not by individual theorists or researchers. Tip: if you find that each paragraph begins with a researcher's name, it might indicate that, instead of evaluating and comparing the research literature from an analytical point of view, you have simply described what the researcher has done. For example, look at the following two passages and note that Student A merely describes the literature while Student B takes a more analytical and evaluative approach by comparing and contrasting:

Student A: Smith 2000 concludes that personal privacy in their living quarters is the most important factor in nursing home residents' perception of their autonomy, suggesting that the physical environment in the more public spaces of the building did not have much impact on their perceptions; he also claimed that the need to control one's environment is a fundamental need of human life;

Student B: After studying residents and staff from two intermediate care facilities in Calgary, Alberta, Smith (2000) concluded that except for the amount of personal privacy available to residents, the physical environment of these residents had minimal if any effect on their perception of control (autonomy); this link: further suggest ways on integrating critical thinking into the literature review (University of Guelph, 2023d).

And last but not least, to review the literature review, look at the topic of each paragraph - ensure that they present a clear position, and are logically developed from beginning to end. It would be wise to read the literature review out loud, that way you will be able to determine where to put appropriate punctuation marks, transitional words, paragraphs, bulletproof points, and correct grammatical errors.

### III. Research Methods

A research methodology refers to the practical 'how' of a research study. For this, the researcher determines:

- i. What type of data to collect;
- ii. who to collect it from
- iii. how to collect it
- iv. and most crucial of all, how to analyze it

So, in a methodology, the author is expected to:

- i. Introduce the methods: introduce the methodological approach used in the investigation of your research problem, your methodological approach can either be quantitative or qualitative;
- ii. Establish methodological reconnection: Explain the relevance of your methodological approach. Keep in mind that the connection between your methods and research problem should be clear. This means that your methodology of research must be appropriate to achieve the paper's objective.
- iii. Introduce your instruments: Indicate the research instruments that will be used in collecting the data and explain how they will be used. These tools and instruments would be your survey, questionnaires for interviews, and observation. However, if your methods include archival research or analyzing existing data, provide background information for documents, including who the original researcher is, as well as how the data were created and gathered.
- iv. Discuss your analysis: Explain how you are going to analyze the results of your data-gathering process. It is also required that, depending on your methodology, you research for ways on how you can best execute your study either by using statistical analysis or exploring theoretical perspectives to support your explanation of observed behaviors.
- v. Provide background information: When using methods that your readers may be unfamiliar with, make sure to provide adequate information about these methods. It would also help if you can provide your research methodology meaning so you can present a clear and comprehensive research context.
- vi. Discuss the sampling process: Sampling procedures are vital components of your methodology. Hence, it is necessary to explain the reason behind your sampling procedure. For example, if you are using statistics in your research, indicate why you choose this method as well as your sampling procedure.
- vii. Address the research limitation: Make sure to address possible limitations you may encounter in your research, such as practical limitations that may affect your data-gathering process. If there are potential issues you anticipate, indicate your reason and why you still decide to use the methodology despite the risks.
- viii. Lastly, follow these tips:
  - limit the number of irrelevant details you include;

- your approaches section must be detailed and easy to understand: in your methodology section, you shouldn't include any information that won't aid readers in understanding the processes you've selected;
- examples of irrelevant knowledge include descriptions of fundamental processes that are not necessary - basic approaches should only be discussed if they are novel and unfamiliar to the readers;
- do not disregard any problems that may appear when gathering the data, instead of just ignoring them, explain what you did to deal with them;

#### **IV. Results and Discussion**

The results section of your research paper contains a description of the main findings of your research, whereas the discussion section interprets the results for the readers and provides the significance of the findings. The discussion should not repeat the findings. Since your results follow your methods, you want to provide information about what you discovered from the methods you used, you should also include information about the measurement of your data, variables, treatment, and statistical analyses. You should delve into the significance, importance, and applicability of your discoveries in the Discussion part. Although your Discussion and Conclusion themes frequently overlap, they are typically independent portions. When writing the discussion section of your paper, there are a few faults you should try to avoid:

- Don't introduce new results: Only the information that has already been reported in your results section should be discussed.
- Don't overstate your case: Avoid making assumptions about your data that aren't directly supported by.
- The explanation of your limitations should not highlight the study's flaws, but rather work to increase your credibility.
- It should concentrate on summarizing and analyzing your findings, demonstrating how they connect to the subject of your literature review, paper, or dissertation, and providing evidence in support of your overall thesis.

There are various approaches to writing this section, but you should center your work on the following crucial ideas:

1. Summarize: Reiterate your research question at the beginning of this section and succinctly summarize your key findings. Use a summary to gain a rapid overview of all significant findings and speed up the process. Instead of simply restating all the information you have already provided, strive to provide a concise summary of the overall finding that directly addresses your primary research question. This should be summed up as only one paragraph.
2. Interpret: Even if the relevance of your findings may seem obvious to you, it's crucial to explain it to your reader by demonstrating how they directly address your research topic. Depending on the nature of the research, your interpretations will take many forms, however, the following are some common methods:
  - finding links, patterns, and correlations in the data
  - evaluating if the outcomes are in line with your predictions or proved your theories
  - Setting your results in the context of existing research
  - Taking into account potential counterarguments and presenting your case

Using the same format as your findings section, you might arrange your discussion around important themes, theories, or research topics. You might alternatively start by emphasizing the most important or unexpected findings.

Examples: Sentence starts for interpreting

- According to the premise...
- In contrast to the proposed association...
- The findings contradict Smith's (2022) assertions that...

Be sure to link your findings to the academic works you reviewed in the literature review in addition to providing your personal opinions. The discussion should demonstrate how your results fit with our current understanding, what fresh insights they add, and what implications they have for theory or practice.

## V. Conclusion

A conclusion is the final paragraph of the research paper. This section ensures that your research all ties together - the best conclusion for research summarizes the paper without being redundant. It expresses the impact of the research. Also, concluding paragraphs should be clear (a conclusion is the final paragraph of the research paper, and it should help the reader understand why the topic matters to them. It is also important to address opposing views and make your point. Ultimately, your conclusion should also serve as a basis for continuing research, it should spotlight new ideas to resolve issues you highlighted in your paper or offer new approaches to the topic. Writing the conclusion therefore simply entails the following (Caulfield, 2020b; Youseff, 2022):

1. Describe the research issue: In essence then Reiterating the research problem is included in the first section of the conclusion. Avoiding wording it exactly as it did in the Introduction is one thing to watch out for. It is recommended to avoid beginning your conclusion with "In conclusion" or "To conclude" given that you must restate your research problem.
2. Summarize the paper: After restating the issue, you should go back and discuss how the paper's body approached solving it and the results that resulted from that strategy. Briefly explain the main points, highlighting how each one contributed to solving the research challenge. You can also note any opposing views. Focus on describing your arguments in general terms rather than going into specifics about the data or putting out fresh ideas. Summarize your findings while making sure to make it obvious that the research challenge was resolved.
3. Talk about the implications: After summarizing your main points or conclusions, the conclusion considers the further ramifications of your study. This entails summarizing the main ideas from your article, whether they are theoretical or practical. This is frequently done by including a proposal for further study or a call to action.

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