## Research Article<sup>1</sup>

# BASIC STRUCTURE OF SCIENTIFIC ARTICLE-IMRAD METHODOLOGY



# **Creative Writing**

**Keywords:** IMRAD methodology, scientific article, SEO, abstract, keywords.

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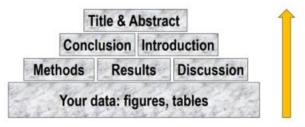
#### **Abstract**

The paper will present the basic structure of writing a scientific paper, so-called IMRAD methodology (Introduction, Materials and Methods, Results, Discussion, Conclusion, Acknowledgments, References). The process and direction of writing a scientific paper will be shown with reference to the most important rules in writing a paper, all with the aim of ranking the paper itself. Five basic rules for increasing the visibility of the work itself and basic SEO optimization will be shown through practical examples of presentations with reference to the importance of the abstract itself and keywords. The importance of social networks and ways of promoting the work itself will also be clearly shown.

# The Process of Writing Scientific Article

It is not a problem to determine the titles in advance and enter the research findings and the content of the paper in accordance with the so-called IMRAD (Introduction, Methods, Results, and Discussion) format used in the majority of scientific journals. Introduction, Materials and Methods, Results, Discussion, Conclusion, Acknowledgments, and References make up the basic article's structure for most of scientific journals.

No matter how logical it seems that the text is entered in the order in which the methodology is stated, the process of preparing the work goes in reverse. First, after the research done and the results obtained, the Materials and Methods section is written, then the Results, Discussion, Conclusion and only at the end the Introduction, after which the title, abstract and key words can be clearly defined.



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Editors (and reviewers) dislike wasting their time on manuscripts that are not well-written. Read the authors' guidelines first (Instruction for authors). Put the header and subtitle you intend to include here. Create a plan including your objectives, strategies, findings, ideas, and outcomes.

<sup>&</sup>lt;sup>1</sup> This paper was presented on the 5th International Multidisciplinary Scientific Conference (IMSC-2022) held by The Association-Institute for English Language and American Studies, Tetovo, North Macedonia.

You will have the appropriate structure and know how to prepare and compose your content with these heading and subheading preparations. You must first begin the document by adding the headings and subheadings you intend to use. Your objectives, your methods, your discoveries, and your thoughts will all fall into the right places if you create a framework into which to put them.

#### What Should Each Section Contain?

#### **Abstract**

Your paper's abstract should only highlight the most intriguing and significant aspects of your research. Use your most succinct and significant sentences on a page when writing your abstract, integrate them into an abstract, and then count the words. Far more people will see it than the published article itself. Maximum word count for the abstract is 250. Mathematical formulas and abbreviations should not be used in the abstracts. The abstract, which is a one-paragraph summary of the entire report, should contain the following information: Purpose, methodology, results, conclusions, recommendations, and additional data.

# **Keywords in your Article are Crucial**

The importance of keywords extends beyond indexation services. Furthermore crucial for SEO. Your article will rank at the top if you use the right keywords. Examining the words used in the key texts in your field may be the most beneficial strategy. Incorporate keywords in the abstract's opening few sentences as well as the title. You can mix many words as keywords instead of using only one. You may uncover the most popular terms by using tools like Google Trends and Google AdWords Keyword Tools.

Create a title, abstract, and keywords that are well-prepared, attractive, instructive, and effective. They are crucial for searching and indexing. Consider including 1-2 words that are associated with your content. Include keywords in your title's first 65 characters to make it easier for search engines to list it.



# The Significance of Keywords for Improved Work Ranking

Include key terms and significant findings in the first two sentences of your abstract. Often, search engine results only show the first two sentences. Use the keyword(s) 3–6 times. Keep in mind that the goal of your summary is to succinctly and clearly communicate the main elements of your research.

Include key terms and significant findings in the first two sentences of your abstract. In most cases, search engine results just show the first two sentences. Use the keyword(s) 3–6 times. Keep in mind that the goal of your summary is to succinctly and clearly communicate the main elements of your research. Implement keywords associated with your field. If you're unsure, look up the terms in the key texts in your area of expertise. Ensure that the keywords are used effectively and within context. Too many duplicate keywords, also referred to as keyword stuffing, are disliked by search engines and might "delete" your post, making it more difficult to discover online.

Five tips to increase your findings of article:

- 1. Create a well formatted and understandable title which will attract readers
- 2. Prepare your text to be SEO optimized
- 3. Use keywords in title and in firs 65 characters in abstract
- 4. Be sociable
- 5. Often share your article via social networks and mails

#### Introduction

Readers prefer to discover the information explaining why you conducted the study in the introduction. While avoiding a thorough review of the literature or a summary of the findings, the introduction should clearly identify the goals of the study and offer an acceptable background. The reader should be informed about the purpose of the study in a brief and effective introduction. The most effective introductions are one page long. An extremely short overview of what is currently known in your research field should be the first paragraph. It must briefly summarize what is currently known and present the most recent findings. The second paragraph, which summarizes what other people have done in this field, the limitations on the work done so far, and the unanswered questions, should come right after this. Describe what is unknown to us here. This brings us to the final paragraph, which should be very explicit about what you conducted and why. Why did we do this study?

The introductory part shouldn't contain a lot of information that is better covered in the discussion. Do not be frightened to start your introduction by quoting from the literature while leaving out the results. Readers cannot place your work in the perspective of what has come before since there is a lack of information about what was actually discovered. It is usually preferable to cite the conclusions of earlier studies rather than the primary authors' names and specifics of the

objectives or techniques. The final paragraph of the introduction, which describes your goal or hypothesis, is the most crucial section. Never conclude the opening part with a brief synopsis of your own findings.

It is important to use research from more recent works in this section; ideally, use works that are no older than three to five years. Your work will undoubtedly be of higher quality and have a greater chance of being accepted if you use more recent research from respectable journals, so this content should be cited. Giving credit to others for their creative and intellectual works that you used to support your research can be done through citations. Additionally, it can be used to track down specific sources and prevent plagiarism. A citation typically contains the author's name, the date, the name of the publisher, the name of the journal, or a DOI (Digital Object Identifier). The information required for a citation, its arrangement, punctuation, and other formatting are all determined by the citation style. Further information regarding the software's use and the citation system itself may be found at <a href="https://pitt.libguides.com/citationhelp">https://pitt.libguides.com/citationhelp</a>. Using an online citation manager makes it simple to handle all of your references. Mendeley, EndNote, and Zotero are a few examples of popular tools.

#### **Methods**

The methods section's goal is to explain how you got your results. As a result, you must provide accurate information on the study's design, the techniques you employed, and the data analysis process. You should also mention the location of the study's operations. Every measurement that is mentioned in the results section needs to be accompanied by an explanation of how it was obtained. Participants, study design, particular procedures, data analysis, and other headings that are utilized in methods sections typically dictate their own material. It is crucial to always include specifics about how you determined your sample size.

### Results

The purpose of this section—which is the most crucial one in your article to provide detailed responses to the objectives you set in the introduction. The study sample should be accurately described in paragraph 1 of the results section for the results to be clearly generalizable. Identify the study's authors here, and characterize the sample.

Because this is where you address the objectives or test the hypothesis presented at the end of the Introduction section, paragraph 2 will clarify what your paper is really about. Keep in mind that data and results are not the same thing. The data that is already shown in a table or a figure should not be repeated in the text. It's a good idea to briefly summarize your findings in the text and then support them with evidence from figures or tables. If you want to compare your findings to those of other studies, the discussion area is the appropriate place to do so. It is probably OK to report percentages with just one decimal point when there are more than 100 participants in a

study group. Each participant will, however, represent more than 2% of the sample if there are fewer than 50 people in the groups. It is preferable to only utilize entire percentages in this situation. Use of whole numbers is more accurate when the sample size is less than 20, and each participant represents more than 5% of the sample.

You may simply need to show the results as tables and graphics in some publications. Do not introduce a discussion, describe research findings, or use quotations in this part of the text.

#### **Discussion**

Your paper's discussion section should summarize your key results. As you go forward, keep track of the literature that supports your findings and the literature that disagrees them. You should discuss your findings in this section and make references to the quotes you included in the paper's introduction. Make an effort to support and compare your findings with the work-related statements and the findings you mentioned in the introduction.

The first paragraph should be a brief overview of what you actually discovered and why it was significant. Describe the results and arguments you made as a result of your labor and research. You can restate the objectives in broader terms, but avoid the temptation to repeat the findings identically from the results section. Start with sentences like: *The findings of this study indicated that... Our findings suggest that..., This study's objective was to, and its findings included*, etc. This part should highlight the overall significance of your findings. Be honest, describe your discovery in detail, and indicate how it will advance our understanding.

You may think more broadly now without going overboard with the implications. It's crucial to remember to never interpret your findings beyond the limitations of the subjects included in your study and to avoid making inaccurate inferences when discussing the significance of your findings. Never end a discussion with the phrase, "More research is needed... of We are right now looking into whether..." Telling your readers what research you believe they should conduct or what you plan to do next is inappropriate. The goal of writing a paper is to explain what you have discovered and what it means, not to make suggestions for future study that you or other researchers might conduct.

## **Conclusion**

One brief section can summarize the study's key finding. Conclusions may be presented separately or in combination with the discussion section, results, or both. In this work, do not cite any other publications. The conclusion should summarize your findings and highlight how your efforts and findings contributed to your overall argument.

# **Appendices**

If there are multiple appendices, each one should be labeled A, B, etc. The following format should be used for formulas and equations in appendices: Unit. (A.1), (A.2), etc.; in the next appendix, (B.1) and so on. In the same way, use Table A.1, Figure A.1, etc., for tables and figures.

# Acknowledgments

At the conclusion of the article, before the paper, include the acknowledgments in a separate section. They shouldn't be included in the title, as a footnote, or anywhere else. Identify the people who helped with the research by providing their names (eg providing translation assistance, writing assistance or proofreading, etc.).

## **Reference Style**

The reference style defined by the journal to which you are submitting the articles should be used for all manuscript formatting. A referencing style is a uniform approach to cite your sources both in the content of your writing and in the reference list. Using parenthesis in the text to indicate the author and the year of publication (APA) is one approach. Another is to number the references within the text (IEEE). Both APA and IEEE demand in-text citations and a reference list at the end of your paper. The significant difference between both of them is the usage of numbered citations by IEEE as compared to APA. The following formats are most frequently: ACM, ACS, APA, ABNT, Chicago, Harvard, IEEE, MLA, Turabian, and Vancouver.

Despite the wide range of styles, the following three are the most popular:

- APA (American Psychological Association) used by Education, Psychology, and Sciences.
  - MLA (Modern Language Association) style used by the Humanities.
  - Chicago/Turabian style used by Business, History, and the Fine Arts.

#### **Conflict of Interest**

When an author's financial interests or other potential for real personal gain could compromise or seem to fairly compromise the independence of judgment in the research or scholarship reported in the manuscript submission that is when a conflict of interest exists.

# Important of Social Networks for Growing your Audience

Social networking is one of the most effective tools at your disposal for locating and growing your audience. With the help of websites like Twitter, Facebook, and LinkedIn, you may rapidly and directly interact with a sizable network of potential readers. To help more people find

your content, use hashtags to connect your work with trending themes. Be cordial by following and interacting with people in your profession, leaving comments on their postings, and striking up dialogues. By answering questions, comments, and tweets, you may create a community. To make your posts stand out, include photos. You can schedule numerous postings to increase the possibility that more people will see your research by timing your posts to coincide with their lunch and tea breaks.

## References

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