



Review Article

Components of Writing a Review Article

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A B S T R A C T

The term research is well-known to the logical world which plays an important role in finding the new problems and solutions, ideas, techniques, procedures, drugs, etc. Good use of research knowledge especially in writing is imperative to make it beneficial for larger community. In writing of knowledge, proper review of literature is very essential to gather research-problem-related information. Writer should follow the steps throughout collection of data during writing of review article. Review of literature increases clarity, reliability, uniformity and critical evaluation of evidence. This paper attempts to explain the guidelines and steps of review manuscript writing.

Keywords: Guidelines, Review, Characteristics

Introduction

Literature review is the most important aspect of research.¹ A review article is a critical analysis of the literature in a specific area of knowledge through outline, classification, comparison, etc.² A good review article requires briefing, analysing, and synthesizing the study that has been completed on a particular topic. It makes the data more accessible and convenient to publication of research.³ The foremost aim of a review paper is to examine the current status of the given topic as well as talk about the research methodologies and research-problem-related findings. A review text should enclose a complete list of references that are cited in the text.⁴ During writing of review paper, researcher should keep in mind about readers' approaches (i.e., professionals in specific research field, students or beginner research scholars, etc.).^{2,5}

Purpose of a review article

With the help of review article, researcher has to organize,

synthesize and evaluate the literature; in addition, to discover patterns and development in the literature and evaluate the research gaps and propose new research areas.²

Types of Review Article

Review (Overview) Article

There are two basic types of review articles: one is systematic, another is non-systematic. An advanced preparation of specific methodology of review paper is needed in systematic review. Non-systematic review may require a selection of a wide variety of topic-related technical outcome which reflects the expert experiences and interests of the writer.⁴

Critical Review

It analyses the potency as well as fault of a research article after studying the discussed research problem and scientific contents. The review should appropriately explain the



problem and its related data, then analyse it and, in the end, discuss research outcome that must be based on scientific facts and reasoning but not on individual attention.⁴

Article Review

To write this type of article, read carefully the article to be reviewed, list concern scientific issues, make a summary version, discuss with colleagues and revise at least one time prior to final submission.

Surveys

The surveys are useful because sometimes they provide an important technological literature to the scientific community. It usually contains wide literature and technical details of concerned scientific investigation.

Historical Articles

This type of article provides historical information and their understanding.

Book Reviews

This review is related to one particular book or a series of books. It preferably discusses only the important knowledge which is derived from the book or its chapters.

Strategic Technical Reviews

It evaluates the long-term technical advancement in regional, global or corporate technological and related matters.⁴

Narrative Review

In this review, particular studies are evaluated and summarised by the author's own experience and existing theories. It gives a qualitative result.²

Key Points to Write a Scientific Review Article (SRA)

Good scientific review writing contains suitable headings and proper arrangement of information.⁵

1. Keep minimal abbreviations and explain them. Because, sometimes, reader belonging to another field might start reading from any middle page instead of the first page might not be able to recognize unusual abbreviations, and consequently stop reading the manuscript. In figures and tables abbreviations must be clarified at the end of the title.⁶
2. Author must avoid writing long and multiverb sentences. Explain the things in simple and monoverb sentences.
3. Refrain from writing long expressions in parenthesis to avoid heavy reading. Replace such sentences by double inverted commas and semicolon or split sentences. Try to write only one message per sentence.
4. Write the literature in paragraphs everywhere, not in single sentence.⁶
5. Flow of content must be maintained to make the writing easy to read from beginning to end.⁵

6. Inclusion of sections in the review is required to describe the method used, types and presentation of information. These sections are similar to the method section of a scientific research paper and enable other researchers to do the same kind of review work but interpretations may differ.
7. Critical analysis of the available literature deconstructs the topic into its basic knowledge, for example, historical background and origins of the theme, its main ideas.⁵ It also focuses on the strengths, deficiencies, omissions, inaccuracies, errors and key contributions. This analysis shows different research designs and methodologies, differences in findings or conclusions and topic-related controversies. It is helpful to expand understanding of new research approaches.
8. Focus on the title and related topics will make the paper brief and convincing. Researcher should create a map in mind, story board, or other conceptual themes.
9. For effective information, charts, graphs, or other visuals must be included.
10. Explain future research possibilities by describing new research advancements, writing factors that have shaped and resolved the controversies.
11. Literature should be revised many times to make it clear, concise, and comprehensible.
12. Before submission, the article must be reviewed by several reviewers and topic experts to expose weaknesses of structure and writing style of the paper. The review paper will get additional content, and get conflicting views will get resolved earlier.⁵
13. If Digital Object Identifier (DOI) is available, it should be added at the end of references, to make it more easily accessible.
14. Check that references in the text are in the list, and vice versa, this will save weeks of delay at the publishing stage.
15. Include tables and figures and add two to three sentences to express related result or information, and their scientific importance. This type of information will increase impact of the article. Informative table and figure will be beneficial for readers because many readers study the figures first.
16. Insert illustrations, especially plants, animals, tools and objects because readers like them.⁶
17. Review paper may vary in length. Narrative reviews may comprise of 8,000 to 40,000 words including every heading but systematic review papers have usually less than 10,000 words.

Author Guidelines

- Follow the journal guidelines.
- Write first draft of the article.
- Get feedback from co-authors.
- Agreement of all authors must be ensured before final

- submission of manuscript to the journal.
- Sign copyright agreement.
- Corresponding author must communicate to the editor, reply to reviewer remarks and finally check the galley proof.^{7,8}

Format of Review Article

Following format consists of title, list of authors, abstract, table of contents, etc.

Title of Article

It helps readers decide whether to read the article or not. The title must be unambiguous and informative. It should consist of important words and specify that the text is a review paper. Important message of the article may be included in title,⁹ for example, effect of ageing on weight-bearing joints. Title must be comprehensible by those scientists too who belong the other fields.⁶ Do not use abbreviations in the title.¹⁰ Write the title in brief; if the specification is necessary, longer subtitle will be an option. The length of the title must be short (8 to 12 words).²

Tense of language

Present tense indicates general validity of the results and points out what the author wants to convey by this article; using the past tense indicates that the outcome has not been ascertained yet.¹¹ The title may be in the form of question if it has not been resolved at the time of article writing.²

S. No.	Section	Characteristics
1.	Title of Article	Nonambiguous and informative, 8-12 words
2.	List of Authors	Contact information of involved persons
3.	Abstract	Planned end products, 200-250 words
4.	Introduction	General and scientific issues, 10-20% of main text
5.	Material and methods	Research approach, inclusion and exclusion criteria of studies, meta-analysis
6.	Main Text of the Review Article	Reasoning-based information and ideas, 70-90% of main text
7.	Conclusion	Discussion of outcome, interpretations, 5-10 % of core text
8.	Acknowledgement	Appreciation of all contributors

9.	References	Minimization of plagiarism
10.	Illustrations	Description of relationships among research question, theories, etc.

List of Authors

Provide contact information of persons who have contributed considerably in collection, exploration and/or writing the literature.²

The author list may be ordered alphabetically or on the basis of involvement. The name of the author who has done most of the research work, that is, collection and writing of literature, and so on, appears first on the list. Authors listed between first and last author have substantial contribution in completion of the research. Usually, it is assumed that the last author named on the list organized the review plan and proposed the original idea.²

Abstract

There are two types of abstracts: one is informative abstract which describes the planned end product and result of the review manuscript or specifies the text structure. Second is descriptive abstract which describes the covered subject without specific details. Present tense will be used in the writing. Usually the length of abstract is 200 to 250 words.

Informative Abstract

Structured abstract includes the following heads:

- **Objectives:** Illustrate the background and purpose of the review in one or two sentences in present tense.
- **Material and Methods:** Write a few lines to present a general picture of the research methodology of article in past tense.
- **Result:** Describe outcomes in few sentences.² Results are the most important component of the abstract. Write the result clearly; keep away from using long and vague sentences.^{12,13} Discuss findings with expert and co-authors.¹²
- **Conclusion:** Conclusion is objective-linked and consists of one or two sentences in present tense.²

Introduction

It gives information about the background, why this topic was chosen, describes the focus and illustrates the article arrangement.²

Write the societal and general issues in one to two paragraphs readable to the public. Describe topic-related scientific issues in one or two paragraphs. Inclusion of theme-related one to two nice colour figures will make the manuscript more attractive.⁶ Introduction includes new viewpoint, knowledge gaps and conflicts in thoughts. Justify

the reason of review the literature. Length of introduction will be 10% to 20% of the main text.²

Material and Methods

Structured and good reviews must have this section. This section includes information about data sources, for example, references of data. It contains research approach, inclusion and exclusion criteria of studies, how many studies have screened and included and write the statistical process of meta-analysis.²

Main Text of the Review Article

In this section reasoning-based structure of the topic is included.¹⁴ Subheadings reflect the content and organization of the different parts of the main text. Each paragraph may cover one idea, characteristic or topic. Don't refer only one study in each paragraph.

Wherever required, link the research findings to the research problem described in the introduction. Three tenses (simple present, simple past and present perfect) are frequently used. Length of this section is about 70% to 90% of main text.²

Conclusions

It should always emphasize the key points presented in the article.¹⁵ It replies the research problem described in the introduction section. Discuss the inferences of the outcome, interpretations by the writer and identify the unsolved questions. Summarise and draw the conclusions in present tense. It has 5% to 10% length of the core text.²

Acknowledgement

Acknowledge the people who have contributed in searching, structuring and writing of literature. Include full names of individuals who assisted the project to get results. Mention the name of the funding group and program.² Appreciate funding organisation/s.

References

This section makes easy to get the full-length literature mentioned in the article. It minimizes plagiarism by crediting the work of other authors. List every reference cited in the text. Avoid including the web sources; if included, then find the original source and cite it directly. Preferably number of references may be 50 to 100.²

Illustrations: Concept Maps

It is used in review paper to make portray of the topic. It demonstrates the relationships among research question, theories, concepts and models. Boxes are arranged with names in two-dimensional space. Use arrow symbols to show the specifications and relationship among boxes.²

Conclusion

In this paper, general guidelines and importance of review

article were discussed. After reviewing the literature it was found that the review article should follow the guidelines to make the article best and comprehensive. It is concluded that every section of review has its own importance.

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Conflict of Interest: None

References

1. Nair MK et al. An Introduction to Research Methodology. 1st ED. Kerala University of Health Sciences. Thrissur; 2017.
2. Mayer P. http://www.plantscience.ethz.ch/education/Masters/courses/Scientific_Writing. Zurich-Basel Plant Science Center; 2009.
3. Grant MJ, Booth A. A typology of reviews: an analysis of 14 review types and associated methodologies. *Health Inf Libr J* 2009; 26(2): 91-108. Available from: <https://onlinelibrary.wiley.com/doi/full/10.1111/j.1471-1842.2009.00848.x> [PubMed/ Google Scholar].
4. Batovski DA. How to write a review article. *AU Journal of Technology* 2008; 11: 2-3. Available from: http://www.journal.au.edu/au_techno/2008/apr08/journal114_howto.pdf.
5. Torrance RJ. Writing integrative literature reviews: guidelines and examples. *Human Resource Development Review* 2005; 4(3): 356-367. Available from: <https://journals.sagepub.com/doi/10.1177/1534484305278283> [Google Scholar].
6. Lichtfouse E. Scientific Writing for Impact Factor Journals. Nova Science Publishers. New York; 2013. Available from: <https://novapublishers.com/shop/scientific-writing-for-impact-factor-journals/>.
7. Hundley VA, Avan BI, Ahmed H, Graham WJ. For the Birth Kit Working Group. Clean birth kits to improve birth practices: development and testing of a country level decision support tool. *The journal BMC Pregnancy & Childbirth* 2012; 12: 158. Available from: <https://bmcpregnancychildbirth.biomedcentral.com/articles/10.1186/1471-2393-12-158> [PubMed/ Google Scholar].
8. Hundley V, Teijlingen E van, Simkhada P. Academic authorship: who, why and in what order? *Health Renaissance, Authorship* 2013; 11(2): 98-101. [Google Scholar].
9. Bjorn Gustavii. How to Write and Illustrate. 2nd ED. Cambridge University Press. New York; 2003. Available from: <http://www.cjig.cn/UploadFile/HOW%20TO%20WRITE%20AND%20ILLUSTRATE%20A%20SCIENTIFIC>.

pdf.

10. Hartley J. New ways of making academic articles easier to read. *International Journal of Clinical and Health Psychology* 2012; 12(1): 143-160. Available from: <https://www.redalyc.org/pdf/337/33723038010.pdf> [Google Scholar].
11. Davis, Joann K, Dunagan D. M. *Scientific Papers and Presentations*. 3rd ED. Academic Press. United states; 2013. Available from: <https://www.elsevier.com/books/scientific-papers-and-presentations/davis/978-0-12-384727-0>.
12. Alexandrov AV, Hennerici MG. Writing Good Abstracts. *Cerebrovasc Dis* 2007; 23(4): 256-259. [PubMed/ Google Scholar].
13. Pitkin RM, Branagan MA. Can the accuracy of abstracts be improved by providing specific instructions? A randomized controlled trial. *JAMA* 1998; 280(3): 267-269. Available from: <https://jamanetwork.com/journals/jama/fullarticle/187740> [PubMed/ Google Scholar].
14. Bem DJ. Writing a review article for *Psychological Bulletin*. *Psychological Bulletin* 1995; 118 (2): 172-177. Available from: <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.538.72&rep=rep1&type=pdf>. [Google Scholar].
15. Anonymous. Writing a Conclusion. The University of Newcastle. Australia. 2016. Available from: https://www.newcastle.edu.au/__data/assets/pdf_file/0009/333765/LD-Conclusions-LH.pdf.