

# UNDERSTANDING THE DIFFERENT TYPES OF PEER-REVIEWED ARTICLES

Dr.N.Samuel Babu, V.Durga Bhavani and K.Rupa Anusha,

*Assistant Professors-in-English*  
*Department of Science & Humanities (S&H)*  
*Holy Mary Institute of Technology & Science*  
*Bogaram, Hyderabad, Telangana State-500 301*  
Corresponding author: [samdacomfort@gmail.com](mailto:samdacomfort@gmail.com)  
Mobile: +91 9849524111

## ABSTRACT

*Research is a studious, meticulous and systematic inquiry process designed to explore and unravel specific subjects or issues with precision. A research paper is a part of academic writing. Peer review is a process that scholarly journal publishers employ to ensure the articles they publish represent the best scholarship currently available. Journals often contain studies and experiments. The current article delineates the various types of research articles disseminate novel and significant information within an academic discipline or professional field. Further, a research paper presents an original thesis, or purpose statement, about a topic and develops that thesis with information gathered from a variety of sources. The peer-reviewed articles that are focused include: review articles; original research articles; book chapters; book reviews; conference abstracts; short communication; case studies; position papers etc., along with its significance, types and key components of each is presented succinctly. Google Scholar and Ai-based tools will aid the young scholars in producing a robust and a productive peer-reviewed scientific articles.*

**Key Words:** *Peer-reviewed articles; review articles; original research articles; book chapters; book reviews; conference abstracts; short communication; case studies; position papers.*

## 1.0 Introduction

Academia is a vast and diverse world. The pursuit of knowledge is a goal common to all human beings. “All progress is born of enquiry”, opined Hudson Maxim. Kothari CR (2004) further articulates, “Increased amounts of research make progress possible”. Thus, research is primarily an enterprise of knowledge construction. Since there are different ways of conducting research, various types of research articles are in vogue.

A research paper is a part of academic writing where there is a gathering of information from different sources. It is a multistep process. As it is an academic writing it provides analysis, interpretation, and argument based on in-depth independent research. Writing a research paper requires a strong knowledge of the topic to make an original contribution to the scientific community. Mostly the scientific discovery is published in peer reviewed journals.

Research journals are documentation platforms where only researches and research related matters are published. On the other hand, a research paper explores and evaluates previously and newly gathered information on a topic, then offers evidence for an argument. It follows academic writing standards. Research papers are also integral to scientific fields, among others, as the most reliable way to share knowledge.

Research papers are a bit different than other types of papers, like personal essays or lab reports. Thus, to put it appropriately, a research paper presents an original thesis, or purpose statement, about a topic and develops that thesis with information gathered from a variety of sources.

Many young researchers find it extremely difficult to write research articles, and few receive specific training in the art of presenting their research work in written format. Yet, publication is often vital to obtain academic qualifications, for career advancement, to obtain funding, or for all these reasons.

### 1.1 Benefits

1. Research articles gives an idea how to document research, cite sources appropriately, format an academic paper, maintain an academic tone etc.,
2. Encourages inter-disciplinary opportunities.
3. Enhances knowledge and fuels scientific curiosity.
4. Creates a rich repository of relevant references.
5. Articles submitted to journals usually appear in print sooner than books or book chapters.
6. Articles published in peer reviewed journals are likely to remain a very important means of distributing research findings for the foreseeable future.
7. Builds professional relationships and stronger networks.

### 1.2 Types of research articles

A research article is divided into seven types of papers argues KM Atikur Rahman (2021) But, there's a huge variety of different types of articles – some unique to individual journals – so it's important to explore options carefully. While it would be impossible to cover every single article type here, below you'll find a guide to the most common research articles and outputs you could consider submitting for publication.

#### 1.2.1 Review article (s)

A review article is like a summary and evaluation of another professional or expert's work. It may also be referred to as a literature review that includes an outline of the most recent research on the subject, or a critical review that focuses on a specific article with smaller scope. They are often written by experts in a particular discipline after an invitation from the editors of a journal. Reviews commonly cite approximately 100 primary research articles. This type of article provides an overview of a particular topic and summarizes existing research. It includes an introduction, literature review, conclusion, and references.

Review articles are divided into two categories as narrative, and systematic reviews. Narrative reviews are written in an easily readable format, and allow consideration of the subject matter within a large spectrum. However in a systematic review, a very detailed, and comprehensive literature surveying is performed on the selected topic.

There are three principal kinds of review articles:

- i) Literature review – It provides detailed information about a published work that includes the methodology, research questions, and results of the published works on a specific topic.
- ii) Systematic review – It Identifies and analyses criteria that answer specific research questions, thereby synthesizing findings qualitatively or quantitatively.
- iii) Meta-analysis – This type of article in research combines and reports multiple scientific studies to compare their results and addresses some common research questions.

A review article contains the following key elements:

1. The question(s) to be dealt with
2. Methods used to find out, and select the best quality researches so as to respond to these questions.
3. To synthesize available, but quite different researches.

### Key components of a review article

Typically, especially in STEM subjects, these articles will include Abstract, Introduction, Methods, Results, Discussion, and Conclusion sections. However, you should always check the instructions for authors of your chosen journal to see whether it specifies how your article should be structured. If you're planning to write an original research article.

### 1.2.2 Original Article(s)

Original research articles or empirical research articles are the most common type of journal article. They're detailed studies reporting new work and are classified as primary literature. You may find them referred to as original articles, research articles, research, or even just articles, depending on the journal.

There are various types of original articles depending on the research approach, methodology, and focus. Below are some of the most common types of original articles:

1. Empirical Research Articles
2. Case Reports/Case Studies
3. Case Series
4. Clinical Trials
5. Survey-Based Research Articles
6. Qualitative Research Articles
7. Cohort Studies
8. Case-Control Studies
9. Cross-Sectional Studies
10. Experimental Studies
11. Longitudinal Studies
12. Pilot Studies
13. Observational Studies
14. Mixed-Methods Research.

Key Components of Original Research Articles:

1. **Originality:** The study must contribute new knowledge or perspectives to the field.
2. **Clear Research Question:** The research question or hypothesis must be well-defined and guide the article.
3. **Reproducibility:** Methods must be detailed enough to allow other researchers to replicate the study.
4. **Data-Driven Results:** The results must be based on data gathered through systematic methods.
5. **Critical Interpretation:** The discussion should interpret findings critically, not just report them.

### 1.2.3 Book chapter (s)

A book chapter review critically analyses a specific chapter of a book, often evaluating its content, themes, methodology, and relevance within the context of the book or a broader academic field. Book chapter reviews are common in academic circles, and they follow a structured format to ensure thorough analysis.

Standard Structure of a book chapter

1. Introduction
2. Summary of the Chapter
3. Critical Analysis
4. Conclusion and Evaluation.

There are different **types of book chapter reviews** depending on the review's purpose, scope, and approach.

Common types include:

1. **Descriptive Review**
2. Critical Review
3. Comparative Review
4. Thematic Review

Key components include::

1. Content Evaluation
2. Argumentation and Evidence
3. Methodology and Structure
4. Theoretical Framework
5. Contribution and Relevance
6. Style and Presentation.

### 1.2.4 Book review

A book review is a critical analysis of a book that includes a summary of its content, a critical assessment of its strengths and weaknesses, and an evaluation of its overall contribution. The types of reviews vary depending on the review's depth and focus, from descriptive to critical, comparative, thematic, and annotated reviews. A well-rounded review combines analysis, clarity, and insight into the book's broader significance.

### 1.2.5 Conference abstracts

Conference material supplements record research around a common thread, as presented at a workshop or conference, for the scientific record. They can include the following types of articles:

- Poster extracts
- Conference abstracts
- Presentation extracts

### 1.2.6. Short communications/note

Short communications also known as rapid or brief communications are brief reports from an original study. This type of research article has a strict length/word count limit and some experimental data may not be included. This manuscript provides a quick and brief explanation of original research work and encourages further studies on a topic.

Short communication articles are papers that communicate brief reports of data from original research. Subsequently, editors believe this article will be interesting to many researchers. So, the submitted article likely stimulates further research in the field.

### Significance of Short Communication

- i) Rapid Dissemination of Research: Since short communications are brief, they allow researchers to quickly share new and relevant findings with the scientific community, fostering faster progress.
- ii) Encourages Transparency: Publishing preliminary results or negative findings prevents research duplication and enhances transparency, a key principle in scientific research.
- iii) Focus on Novelty: Short communications highlight novel or significant findings that might otherwise go unnoticed in longer papers, thus promoting early attention to potential breakthroughs.
- iv) Contribution to the Body of Knowledge: These concise papers often provide essential insights that contribute to ongoing research and open avenues for future studies.
- v) Cost-Effective: In journals with page limits or funding restrictions, short communications are a cost-effective way to publish important findings without the need for extensive, fully developed studies.
- vi) Useful for Early-Career Researchers: Short communications are often easier for early-career researchers to publish, helping them to establish their presence in the scientific community.

### Types of Short Communication

1. Preliminary Findings:
2. Methodological Innovations
3. Case Reports
4. Technical Notes:

### 1.2.7. Case Studies

The case study article reports specific instances of interesting phenomena. A goal of Case Studies is to make other researchers aware of the possibility that a specific phenomenon might occur. This type of article describes a single case study in detail. It includes an introduction, case description, discussion, and references.

### Significance of Case Studies

1. In-Depth Understanding
2. Real-World Application
3. Exploration of Rare Phenomena:
4. Generation of New Theories
5. Illustrative Examples:
6. Flexibility in Research:
7. Holistic Perspective:

### Types of Case Studies

1. Explanatory Case Studies

2. Descriptive Case Studies
3. Exploratory Case Studies
4. Intrinsic Case Studies
5. Instrumental Case Studies
6. Multiple or Collective Case Studies
7. Comparative Case Studies.

### 1.2.8 Position paper(s)

A position paper is a type of article that represents the writer's or an entity's opinion on a given topic. It is also called position piece or brief items, and you may write it in the simple format of a letter to the editor. Position papers are more common in the field of law and politics.

A position paper helps the writer argue for the validity of their ideas and opinions. For this reason, groups and organizations use it to publicize a set of beliefs or opinions on a given matter. Naturally, one needs to be careful while choosing the arguments in this paper and developing them.

### 1.3.0 Conclusion

An effective research report, according to Livingstone (2012) has the following four characteristics:

- 1) Focus: an effective report emphasizes the important information;
- 2) Accuracy: an effective report does not mislead the reader.;
- 3) Clarity: an effective report does not confuse the reader;
- 4) Conciseness: an effective report does not waste the reader's time .

Further, Zhang W (2014) offers ten golden rules for writing research papers viz.,  
1: Make design a driving force; 2. Less is more ; 3. Pick the right audience; 4. Be logical; 5. Be thorough and make it complete; 6. Be concise ; 7. Be artistic; 8. Be your own judge; 9. Test the water in your own backyard and 10. Build a virtual team of collaborators.

Moreover, *Google Scholar* is a freely accessible web search that indexes the full text of scholarly literature across an array of publishing formats and disciplines. Additionally, AI- based tools like plagiarism checkers; grammar checkers as well as title-page and citation generators aid the scholars in producing a robust peer-reviewed articles.

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### References

- [1]. Collins JA, Fauser B. (2005) Balancing the strengths of systematic and narrative reviews. *Hum Reprod Update*.11:103–4.
- [2]. Green BN, Johnson CD, Adams A. Writing narrative literature reviews for peer-reviewed journals: secrets of the trade. *J Sports Chiropract Rehabil*. 2001;15:5–19
- [3]. Kothari CR (2004). **Research methodology: Methods and Techniques**. New Age International.
- [4]. Islam, Md AU and Samsudin, Sofiah (2020) Characteristics, Importance and Objectives of Research: An Overview of the Indispensable of Ethical Research. *International Journal of Scientific and Research Publications (IJSRP)*.Vol.10, Issue.5,pp.331-335.
- [5].Rahman Atikur (2021) How many types of research articles? Retrieved from <https://www.researchgate.net/publication/349198216>
- [6]. Rockford Sansom (2019) “Doing Research”: Understanding the Different Types of Peer-Reviewed Articles, *Voice and Speech Review*, 13:3, 259-264

- [7]. Shrestha, Laxmi; Joshi, Bishal and Kumar, Anand (2022) Writing A Research Paper: A Guide. *Journal of Universal College of Medical Sciences*. 9(01):76-81.
- [8]. Ray Roseles (2023) How to write a Research paper, retrieved from <https://www.aresearchguide.com/1steps.html>
- [9]. Samuel A. Livingston (2012) **How to Write an Effective Research Report**. Educational Testing Service.p.1.
- [10]. Zhang W (2014) Ten Simple Rules for Writing Research Papers. *PLoS Comput Biol* 10(1).

