

Writing a Research Paper

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RESEARCH/SCIENTIFIC PAPER: MEANING

“a written and published report describing original research results”

[Day, Robert. (1983). *How to Write and Publish a Scientific Paper*. Philadelphia, P.A: ISI Press.

PURPOSES OF WRITING A RESEARCH PAPER

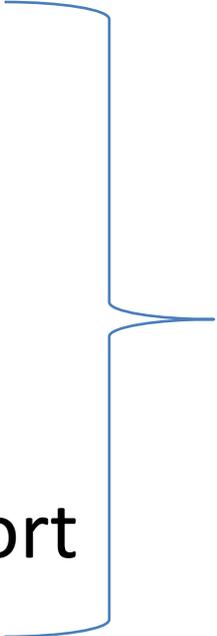
- To understand
- To remember
- To gain perspective

Booth et al. (1995)

[Booth et al. (op cit.) argue that writing for others is more demanding than writing for oneself, but it can also contribute to obtaining a better understanding of one's own ideas and results].

- Dissemination of research findings and results
- Getting feedback from academic community

PURPOSES OF WRITING A RESEARCH PAPER

- Scientific communication [O'Connor (1995)]
 - Having results worth reporting
 - Wanting to progress in scientific thought
 - Reaching a broad audience
 - Improving chances of promotion
 - Unethical to conduct a study and not report findings
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Peat et al. (2002)

THREE MAIN COMPONENTS

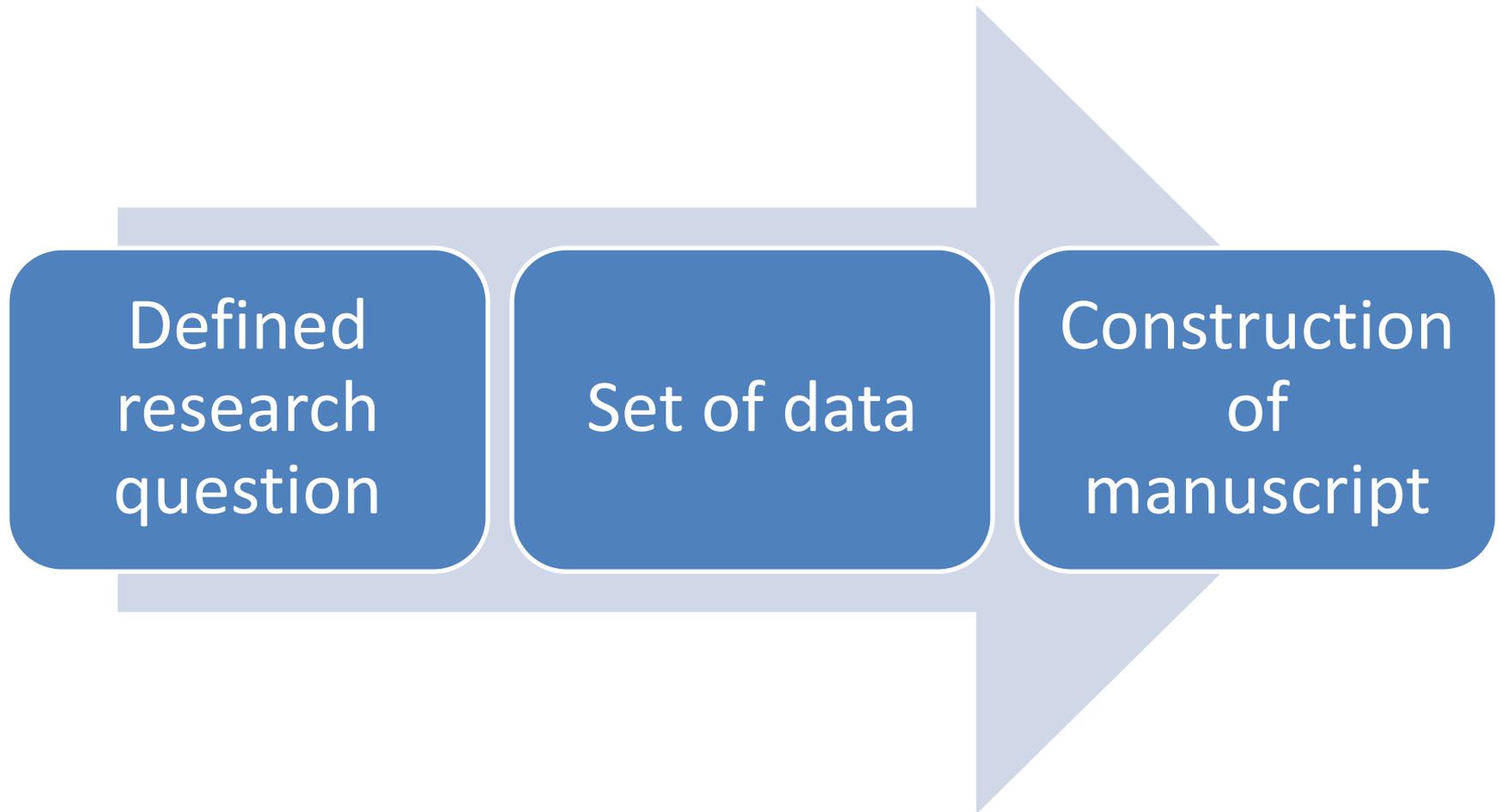
THE OVERALL IDEA

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graph TD; A[THE OVERALL IDEA] --> B[EXECUTION OF THE WORK]; B --> C[PRESENTATION OF THE WORK];
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EXECUTION OF THE
WORK

PRESENTATION OF
THE WORK

Scientific research to manuscript



Structure of the Manuscript

- Title Page
- Abstract
- Introduction
- Methods
- Theoretical Framework
- Results and Discussion
- Conclusions
- Acknowledgements
- References
- Tables and Captions
- Figures and Captions

Fisher et al. <https://www.liebertpub.com/media/pdf/English-Research-Article-Writing-Guide.pdf>. Accessed on 19.8.2016

TITLE

Title should be simple, attractive and accurate in describing the thesis statement as well as author's affiliations. Provide about five key words. Provide complete contact information

ABSTRACT

One must always begin with a couple of sentences focusing on what the study is about. It should be short and precise, an independent document. It should start with the objective of the paper, followed by the method used and ending with discussion and conclusions.

INTRODUCTION

It should include:

- a short review of literature on research topic
- Specific topic under study
- Issues/questions to be addressed in the paper
- Statement of hypothesis if any
- Methodology used
- Summary and significance of the study for larger field of study

METHODS

In this section, all methods and techniques used for sampling, collection of data, analysis and interpretation of data, measurement techniques used, etc., should be clearly specified. This is most important to make the study authentic and replicative. One may also specify the kinds of data used in the study, i.e. primary or secondary; qualitative or quantitative, etc.

Theoretical Framework

The importance of a research study lies in the theoretical contribution it makes to the existing literature in the broader field. It is very important therefore to develop a theoretical framework in which the study is designed, which must be taken up again in the end, in discussion and conclusions. Clear statements endorsing or refuting specific theoretical formulations on the basis of results prove to be extremely fruitful.

Results & Discussion

This section includes the description of data and its interpretation. All tables and figures should appear here, along with their discussion. In case some hypotheses have been proposed in the beginning, a discussion on these must be made in this part, in the light of relevant data, with clearly mentioned results. Each of the objectives should be addressed separately. Beginning with the overview to the work, summarize the most important findings, accepting or rejecting the hypotheses. Findings should be compared with those in earlier studies. Finally, theoretical contribution of the study must be clearly discussed.

CONCLUSIONS

Starting with a brief introduction of the work, briefly discuss the results. Most significant results should be mentioned here, followed by the limitations of the study, if any. Finally, the contribution of this study to the larger body of knowledge in the specific area must be discussed. One may also mention here the issues this research study throws out for future research.

ACKNOWLEDGEMENTS

Make a brief statement, acknowledging the contribution of all the participants, i.e. individuals as well as organizations/groups, approached by you during the research study. Also acknowledge the inputs given by consultants, colleagues, etc., not included as authors. Finally, state all the agencies which have supplied funds for the research work as per the guidelines of the respective funding agencies.

REFERENCES

All references cited in the manuscript should be included. These must include all the key sources in the field. Including specific references just to cite particular authors or journals must be avoided. For referencing, the format mandated by the journal to which you are submitting your manuscript, should be adopted. There are software packages available for the purpose.

TABLES AND TABLE CAPTIONS

There are two options. One, tables may be inserted within the text, along with the interpretation.

Alternately, tables may be presented in a separate section after the References. Each table must be captioned in bold, followed by a brief description of the content and impact of data. Data in the table should be clearly presented, easily interpretable by the reviewer. Each table/figure must be referred to in the text, in the results and discussion section.

FIGURES AND CAPTIONS

Just as in the case of tables, figures too may be presented in a separate section after the references. These must be clear and easy to interpret. Each figure should be adequately captioned and referred to in the manuscript. In case, there are graphs or bar charts in color, the color should be carefully chosen so as to present a clear view.

AUTHORSHIP AND ORIGINALITY

- To avoid plagiarism, ensure the authenticity of all data and text used in the manuscript. All prior works must be referred properly, with proper citation.
- There must be complete agreement regarding authorship and order of authorship among all the authors.
- Using any text or data without citation must be avoided at all costs.

LANGUAGE AND EDITING

It is not sufficient to depend solely upon spellcheck. The manuscript must be edited properly for language, figures, tables and referencing before submission to the journal/book. Punctuation should be carefully done. Utmost care must be taken to ensure that the manuscript is prepared according to the specific guidelines mandated by the specific journal to which the paper is to be submitted.

Writing a Qualitative Research Paper

- Clearly mention the social/cultural setting of data
[Contextualizing]
- Power structures & Gender relations in situations in which in-depth interviews were conducted, must be specified in discourse analysis
- Sufficiency of Data and Coverage of analysis
[due to the flexible approach, sample size is never pre-fixed. Hence sufficient data be ensured to draw valid inferences]

Writing a Qualitative Research Paper

- Transparency and Replicability of Analysis

[all techniques/methods be specified clearly so that another researcher can substantiate/challenge it, it decreases the arbitrariness involved]

- Presenting Raw Data

[Narratives, case histories and expressions recorded in field be preserved and presented in the paper as much as possible, for enhancing the authenticity of data]

ESSENTIALS OF A GOOD RESEARCH PAPER

- It must be a valid publication [published in the right place, i.e. in a peer reviewed journal etc.]
- It must contain the “first disclosure of results with sufficient information to enable peers, i) to assess inferences, ii) to verify results and iii) to evaluate intellectual processes” (Council of Biology Editors, 1968, pp.1-2, cited in Day, 1983, p.2).
- Manuscript should be properly edited for grammatical errors, captions and correctness of data in tables and figures.
- It must have relevance with the previous work in the same area of research, in terms of theoretical framework.

REFERENCES

- American University, Academic Support Centre, *Writing Lab*, Online article, updated 2009
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- Day, R.A. (1983). *Scientific Papers and Presentations*. San Diego, CA: Academic Press.
- Derntl, M. (2014). *Basics of research paper writing and publishing*. International Journal Technology Enhanced Learning, 6 (2).

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- O'Connor, M. (1995). *Writing Successfully in Science*. London: Chapman & Hall.