

Chapter Four

Introduction to Aspects Involved in Research Article Publication



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Abstract

There are few variations between research project or thesis write-up and writing of articles to be published in journals. These variations stem out from the formats for the two categories of write-ups. While the former would have a format determined by institutions to which the project report; writing of research articles for publishing in a journal requires that the acceptable formats given by the authorities of the journal must be religiously adhered in order to get them published. Most authors face numerous times of article rejections getting their research articles published in peer-reviewed journals because they have not acquainted themselves with acts of writing for publication; and also imbibe techniques and tenets that lead to successful article publication in journals. This paper examines the elements required in articles been prepared for publication.

Keywords

Research Article, Publication, Peer-Reviewed Journals, Formats

4.1 Introduction

There are many aspects involved in research articles publications and these serve as elements that should be considered whenever one wants to publish an article. However, it should be noted that journals vary considerably in scope and format. As such, not all these aspects or elements can be included in an article. These are thus, general requirements that should be tackled among which some would be needed in the write-up of articles to be published in various journals. An author's knowledge on all these aspects involved in research publication is important but the need for their inclusion in an article write up is contingent on the format or requirement of journal the article is to be published.

The manuscript thus elucidates and explains things to be considered on all the following aspects involved in Research Article Publication.

4.2 Title of Paper (Article)

The first item on a research paper is the title of the paper. A research paper (article) title should reflect the paper. It should be as short as possible; not convoluted to get one's audience confused. It is recommended that the important words in the title should be capitalized, but this also depends on the journal type.

The title of a research paper is the name by which a paper is to be called. It is the name that would be indexed for archival purposes. It therefore suggests that a research paper must depict their names. The article title is supposed to be in bold fonts but this also depends on journals guidelines and formats.

4.3 Authorship and Affiliations

The second item seen on research papers are the authors and co-authors names

and their respective institutions that they are affiliated to. Other journals require the title of the authors to be stated as well. In addition to this is the contact of the corresponding author. How the names of authors and co-authors are to be written should be specified in the guidelines of the journal or seen in papers in the journal's archive. All those whose names appear on the paper are expected to make divers contributions to the writing of the paper. It is thus expected that, each of the authors have a good knowledge of the content of the paper.

4.4 Abstract

The abstract is a summary of the work and serves as a teaser which should whet the audience appetite to read the entire paper. It differs from what is called executive summary. The latter gives summary of a document or manuscript chapter by chapter. The abstract should give a brief background to the study summary of the methodology employed – sampling size and technique, experimental design, salient result, recommendations and conclusion. It should however be noted that, each journal has specific number of words to be accepted. Authors are to adhere to the number of words prescribed per a journal's guideline. One mistake authors often make in writing an abstract is the use of paragraphs. Abstract are not supposed to be paragraphed.

4.5 Keywords

Keywords are the most important and technical used words / jargons that run through the research paper. The maximum number of words allowed as keywords depend on each journal.

4.6 Introduction of an Article

The introduction to the paper should give a background information to the write-up of the articles; identifying gaps that existed in the subject area and the need to address those gaps. These are to be followed logically to allow easy comprehension of the ideas for which the paper is being written. The introduction should rekindle the interest of the audience.

4.6.1 Problem Statement

Problem statement in research may not necessarily refer to a problem. It is a technical jargon used to denote the main gap to be addressed. As a statement, it should be specific. It should target the main and sub-problems which are not at variance with each other (related). It should not only state an observation. When it does, it is regarded as a weak problem statement. Rather, it should be a statement that compares and contrasts an observation.

Authors are to note that the problem statement should not be lengthy or convoluted as to confuse.

4.6.2 Hypothesis

Hypothesis is a scientific guess hazard or a statement made by a researcher at the start of a research with the aim of proving whether it is supposed to be rejected or otherwise (failed to be rejected). It is in two forms; the null hypothesis and alternate hypothesis. The null hypothesis is the generally accepted statement and its converse the alternate hypothesis, the claim of the researcher. It can be stated or expressed verbally and mathematically as done below.

E.g. the study put forth the following hypothesis:

Null hypothesis (H_0): There is a relationship between student-lecturer ratio and student performance.

Alternate hypothesis (H_1): There is no relationship between student-lecturer ratio and student performance.

Mathematically expressed as:

$$H_0: \text{Rel (S - L and SP): } 1 \leq r \leq 1$$

$$H_1: \text{Rel (S -L and SP)} = 0$$

Where r = correlation coefficient

S - L = Student Lecturer ratio

SP = Student Performance

Whenever a hypothesis is put forward, the study must be designed in such a way that data can be collected appropriately to test the hypothesis. It should however, be noted that it is not every journal that requires a sub-heading for hypothesis in papers published in them.

4.6.3 Research Questions

Research questions are raised once gaps have been identified in a study. The import of the questions raised is to help the researcher so that in finding answers to these questions would lead eventually to bridging the identified gaps. It thus prompts and guides the researcher in the pursuit of the study to achieve the objectives of the study or research. The questions must be asked chronologically. Research questions may not be a sub-heading for many journals.

4.6.4 Objective of the Study

The objectives of a study are what the study target to achieve. There could be a main objective and outline of specific objectives.

The objectives are supposed to be action oriented and therefore each of the objectives must be positioned as such. They are to be preceded by the preposition ‘to’ as below.

The study seeks to achieve the following specific objectives:

1. To determine.
2. To explore.
3. To measure.
4. To quantify.

4.6.5 Significance / Justification of the Study

The significance justification of the study normally deals with the need or the import of undertaking the study. These needs can be supported in literature by citing the relevance of the study in supporting or providing or making available literature to expand the frontiers of knowledge.

In the selection of players for a tournament, players are allowed to compete for position in what mostly is referred to as “justifiers”. Likewise, this portion justifies why the research needs or ought to be conducted by indicating the relevant impact it is likely to make.

4.6.6 Theoretical Framework

Theoretical framework refers to the framework of theories that are related to

the study. This is the part of the paper where the various theories that relates and underpins the study/ topic are well articulated and discussed. This actually forms part of the literature review but some journals require that they are given subheading in their papers. The theoretical framework of the study helps link the various related theories with the study being undertaken in order that the study is founded on a sound scientific basis for the purpose of contextualizing findings appropriately.

4.6.7 Conceptual Framework

It is derived from the word concept and concept is idea that is vague to everyone apart from the originator of the idea. For the concept to be understood by everyone or audience, a link or an indicator should be established to convert the concept to variable which then can be measured and how the variable measured become known to the audience. The act of doing this is what is referred to as developing the conceptual framework of a study. For example, taking the concept 'wealth'.

Wealth could be interpreted differently and for the author to make himself understood, he / she needs to develop a link between wealth and what he / she meant by wealth. Thus one can refer to wealth as the number of properties, amount of money or number of cattle one possesses and thus proceed further to illustrate how these can be measured.

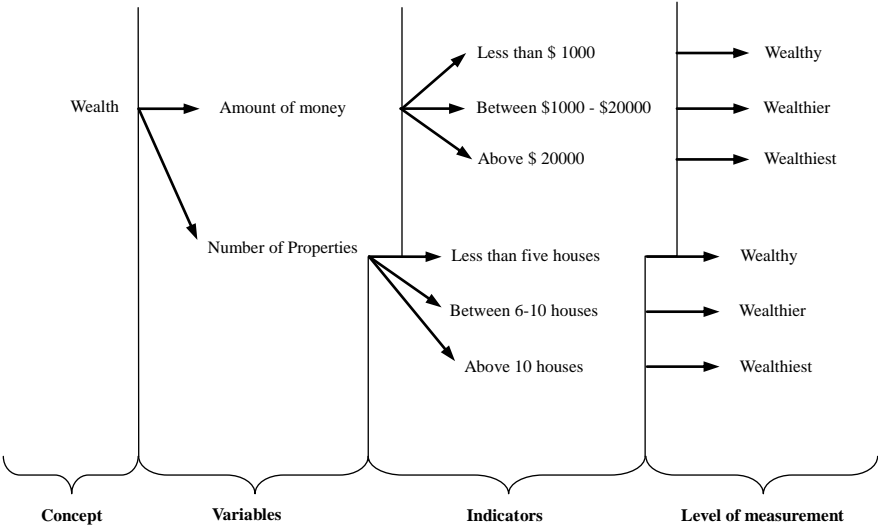


Diagram 1: Illustration of Concept.

Wealth is a concept which can be measured in many ways. Once a researcher wants to work on such a concept, it behooves the researcher to indicate how he or she intends the concept to be measured, or else, it would remain vague. The concept of wealth can be reduced to variables such Amount of money, and Number of properties. These two variables are linked to the concept ‘wealth’ with indicators in order to reduce it to variables as seen in the diagram. These indicators thus would enable the variables to be measured into wealthy, wealthier and wealthiest.

4.7 Methodology

It is one of the most important part of the paper and the author must make sure he does due diligence to this particular portion of the paper. When anything goes wrong here, it eventually affects the quality of the information as well as the accuracy of the findings churned out from the study. This part of the paper should clearly give the audience how the whole study was carried out. It should cover the

sampling size (if sampling size was done), and the sampling technique adopted or otherwise if it is experimental, then the experimental design used stating clearly the conditions under which the study was conducted.

In addition, this part should include how the data was collected (the particular type of instrument used either via questionnaire and interview guide in the case of survey and type of instrument used for measuring in the case of experimental data. The statistical application used in analyzing and summarizing data should be well documented. The methodology should be well written to enhance the understanding of the audience. It should also show where appropriately how hypothesis are to be tested and the conclusion made.

4.8 Results and Discussion

4.8.1 Results

This part of the paper in some case depending on a journal is combined with the discussion. However, when the heading stands as only result, it means the presentation of the results using statistical tools like tables and charts to summarize them. The tables and charts must be well labelled. It should be noted that, the researcher should use one statistical tool, either a table or chart to summarize result of a dataset collated, not both. When the dataset collated contains more variable it is appropriate to use a table since when chart are used it becomes a bit complicated and difficult to understand. The tables and charts also must be placed and labelled according to the requirements of the journal the article or paper is to be submitted. Usually the labelled of tables are written above them while chart of figures are written underneath them. Inner gridlines in tables and the borderlines of figures or charts must be avoided but these again depend on the type of journal.

4.8.2 Discussion

Many at time, authors make the mistake of thinking that discussion is just stating the percentage in terms of responses given in a survey or the inferential statistics churn out from data processed or analysed. Discussion goes way beyond just stating this values and leaving them like that. In any case, that would lead to mere repetition of values already presented as results and would make the discussion the same as the results. In the discussion, meanings are given to values or trends or patterns the results tend to show. Reasons are to be given to anomalies and explanations for deviations. This is where findings or results are to be contextualized. Contextualizing findings means supporting or disagreeing with result cited in literature. Therefore, a good discussion can be done only if literature review is well done.

4.9 Conclusion and Recommendation

4.9.1 Conclusion

The conclusion of the paper is to be likened to an executive summary highlighting on every bit of the introduction, methodology, result, and discussion. It should be the same as the abstract. Normally, abstracts are the last bits of the paper to be written and so extracted rather from the conclusion of papers. Usually conclusions on papers are supposed to be tied well so as to make the papers complete. Authors are not to make statements that have not been found in the study. If unsure, use appropriate words such ‘may’ ‘could’ ‘might’ etc.

4.9.2 Recommendation

Once one sets to tackle and address specific issues, other issues or problems emerge and if the research does not remain focus on solving the targeted issues, he/

she is likely to be led astray by the other attendant issues, thus leading to failed research projects. It is good that despite the attendant problems that emerge in solving the main problem be noted alongside so that suggestions made in the form of recommendations by the author at the end of the paper. Recommendations also include how the findings are supposed to be utilized appropriately.

4.9.3 Acknowledgement

This is where all those who assisted in kind or cash as well as laboratories or research sponsoring institution or persons are acknowledged for the immense support. Apart from the authors, anyone who assisted can be acknowledged here.

4.9.4 References

Referencing in research article writing borders on in-text referencing and listing of references which is also known as bibliography. Apart from these, there are several reference styles such as APA, CMS, AP etc. Most journals either accept articles submitted using the specified referencing style or a modification of the specific known style clearly stated in the author's guideline for article submission.

In-text referencing

In-text referencing involves how to handle citations within the main text of a manuscript or article. With regards to in-text referencing, there are two main ways of handling them. Either citing authors using an active or passive voice.

Active voice

With the active voice, the lead (first) author's surname and the year of publication of the work cited are put in parenthesis at the end of the statements made.

Example 1: Student performance is affected by Lecturer-Student ratio; resources available to students; lecturers knowledge of the subject area taught (Sundong and Opoku, 2013).

Example 2: The weight of two boxes of A4 sheets is equal to the weight of a standard cement block (Blockewaah, 2013).

Passive voice

In this case, author's name and year of publication of the article precedes the work or statement cited. It denotes a reported speech. Examples of these are given below:

Example 1: Sundong and Opoku (2013) reported that student performance is affected by lecturer –student ration; resources available to students; lecturer's knowledge in the subject area taught.

Example 2: According to Blockewaah (2013) the weight of two boxes of A4 sheets is equal to the weight of a standard cement block.

4.9.5 Preparing of List of References / Bibliography

The list of references / bibliography refers to the list of all cited works used in the articles. They are normally listed in alphabetical order or numerically, according to the order in which they appear in the manuscript. How the list of referencing is done depends on the journal type and the referencing style that should be used.

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