Writing a Journal Article

Let’s assume you’ve done some research that appears to be suitable for reporting in a journal. Every paper should start with a discussion of a scientific problem or question. What is the knowledge gap in the literature? Why does it matter? (Why is it significant?)

We may work from a clearly stated hypothesis – “The butler did it” – and develop a “null hypotheses” in the classic scientific method. Or we may start from a narrow research question. In either case, we have a research design which generates results. Each result should be tied to a conclusion. This helps avoid irrelevant (superfluous) data. Then we discuss conclusions. Do they answer the hypothesis/research question?

I. The Outline

Generally, the first thing you will do is prepare a detailed outline of what you wish to include in the paper, and then you will write it up.

Summers (2001) lists four main reasons why articles are rejected by leading academic journals:

1. The research does not make a sufficiently large contribution to the "body of knowledge" (i.e., to the literature) in a specific discipline. The study is purely descriptive or merely replicates previous research without adding anything new.
2. The conceptual framework (i.e., the literature review) is not well developed. It lacks precise definitions of the core constructs and compelling theoretical motivation for the stated hypotheses.
3. The methodology used in the study is seriously flawed (e.g., the sample is too small or the reliability and validity of the measures used are questionable).
4. The author's writing style is disorganized and the article is not structured properly.


II. The Writing

This guide will focus on the fourth reason – the writing.

Four or more drafts of a paper may be necessary. Perry et al. (2003) suggests the following:

1. The first draft should be written quickly without worrying too much about the details of referencing and style. Get ideas down on paper (sometimes the hardest part is the start).
2. The second draft is about structure or getting the flow right. Sections may be moved around. (Outlines are to ensure you don’t forget anything, they aren’t strict organizing structures).
3. The focus of the third draft is on style or “getting it to read right.” This may require intensive editing to shorten the article and improve readability.
4. The fourth and final draft is the most detailed and focuses on technical issues such as referencing, headings, the numbering of tables and figures, ensuring all the references listed in the text are included in the list of references (and vice-versa), and a final check of spelling and grammar.
III. The Parts of the Article

A. A Sections Guide for Submissions

There is no one best way to organize your paper. The above is one framework. Also, some writing styles may require all of these sections (APA) while others do not (MLA). Be sure the check which format (APA) and which version (6, 7, etc.) the journal you are submitting your article to prefers.

<table>
<thead>
<tr>
<th>Section [Length]</th>
<th>Purpose</th>
<th>Verb Tense</th>
<th>Elements</th>
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| Abstract [200-250 words] | Mini-version of the paper     | Simple-past – refers to work done | • Principal objectives  
|                       |                                |                                | • Methods used                                              |
|                       |                                |                                | • Principal results                                        |
|                       |                                |                                | • Main Conclusions                                         |
| Introduction [500-1,000 words] | Provides rationale for the study | Present – refers to established knowledge in the literature | • Nature & scope of the problem  
|                       |                                |                                | • Review of relevant literature                            |
| Literature Review [1,000-2,000 words] |                                |                                | • Hypothesis                                               |
|                       |                                |                                | • Approach (and justification for this approach           |
|                       |                                |                                | • Principal results                                        |
|                       |                                |                                | • Main conclusions                                         |
| Method & Materials [500-1,000 words] | Describes what was done – experiment, model, or field study | Simple past – refers to work done | • Description of materials                                 |
|                       | • Sampling                     |                                | • Description of procedure in logical order               |
|                       | • Data Collection              |                                | • Sufficient detail so that procedure can be reproduced |
|                       | • Measurement                  |                                |                                                           |
| Results [500-1,500 words] | Presents the data, the facts – what you found, calculated, discovered, observed | Simple past – refers to what was found, observed         | • Your results                                              |
|                       | • Analysis                     |                                | • Your observations during experiments/fieldwork         |
|                       | • Sampling                     |                                | • Your observations about the results (e.g., compare/contrast between experiments) |
|                       | • Data Collection              |                                | • Results of calculations using the data, such as rates or error |
|                       | • Measurement                  |                                |                                                           |
| Discussion [1,000-1,500 words] | • Shows the relationships among the facts | Present – emphasis on established knowledge, present results | • Trends, relationships, generalizations shown by the results |
|                       | • Evaluation                   |                                | • Any exceptions, outlying data (and why)                |
|                       | • Shows the relationships among the facts |                                | • How your results agree disagree with previous studies, and why |
|                       | • Puts results in context of previous research |                                |                                                           |
| Conclusions | Summarizes your principal findings | Present – emphasis on what should now be accepted as established knowledge | • Conclusions should relate back to the introduction, the hypothesis |
|                       |                                |                                | • Summary of evidence supporting each conclusion          |
|                       |                                |                                | • Implications, the significance of your results or any practical applications |
| Title [8-15 words] | Draws readers’ interest |                                |                                                           |
B. Tips and Suggestions

INTRODUCTIONS

1. Establish a territory, that is, identify your research topic (the broad theme)
2. Identify a niche, that is, identify some issue within that research topic that demands attention (why does anyone care? what gaps in the literature?)
3. Occupy that niche; that is, show how you are going to address that issue. (research question/hypothesis, context, units of analysis)

Generally, research article introductions end by:
- Outlining the purpose of one’s research,
- Announcing its existence,
- Announcing the findings of the present research, and/or
- Previewing the structure of the research article.

All that to say:
- How will you ‘sell’ your general research area to your editor, referees and readers? By stating its importance or by establishing an evocative contrast?
- How will you situate your own research in relation to earlier critical literature?
- How will you announce your own research questions or procedures?

More suggestions
- Write the opening paragraph in plain English, no technical jargon.
- Don’t jump straight into the problem or theory; introduce the reader step-by-step into a formal statement of the research problem.
- Use examples to illustrate unfamiliar concepts or terms.
- Use a catchy opening statement, preferably about the behavior of people or organizations.
  (Bem, D. J. (2003). Writing the empirical journal article. Cited in Kotze.)

RESEARCH OBJECTIVES

- Presented in a bulleted list, in the action verb format (e.g., To determine, To investigate, To evaluate, To compare, To analyze, To describe, To identify)
- Listed in order of importance, or from most general to most specific
- A set of ”promises” the author promises to undertake for the reader
- Each narrow to a specific issue
- Each logically flow from the hypothesis, problem statement or research question

CONCLUSIONS

1. Summarize what you have achieved in the article
2. Evaluate what you have achieved in the article (e.g. by stating its implications or limitations)
3. Anticipate and defuse possible counter-claims
4. Give suggestions for future research.
TABLES AND FIGURES

Stick to the “golden rule” – If you can say it in a sentence or paragraph, do so (do not use a table or figure). Use tables to present detailed findings. Reserve figures for the really important stuff that has to be portrayed visually. Do not repeat the same information in a table and in a figure. The information in a table or figure merely corroborates or supplements the narrative, and should therefore always be summarized and discussed in the text.

Correct Verb Tense - Five Easy Rules:
1. Simple present to describe scientific knowledge, in other words previously published findings.
2. Simple past to attribute scientific findings to a particular researcher or group.
3. Simple past to describe what you did.
4. Simple present to refer to tables, figures, and data within the paper, and to derive equations.
5. Use simple future to describe what you will do.

Kotze's Guidelines
Much of the information on this page is derived from Kotze’s Guidelines on writing a first quantitative academic article, available online at:
http://web.up.ac.za/sitefiles/file/40/753/writing_an_academic_journal_article.pdf

Resources to help with your writing:
1) https://owl.english.purdue.edu/owl/resource/560/01/ (APA style guide)
2) https://owl.english.purdue.edu/owl/resource/747/01/ (MLA style guide)
3) http://www.easybib.com/ (Citation maker – MLA Free, APA available)
4) https://play.google.com/store/apps/details?id=com.easybib.easybibandroid&hl=en (Android App for above Citation maker)
6) iws.collin.edu/krideout/MLA%20Template.doc (Word template for MLA)