Writing Manuscript

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Why we should publish our manuscripts?

- Memenuhi Tri Darma Perguruan Tinggi
- Tuntutan LPPM
- Penilaian Angka Kredit
- Memperoleh Pengakuan

Ensuring that research is publishable

- Some Questions That Editors and Peer Reviewers Consider
  - ✓ Does the research address an important unanswered question?
  - ✓ Are the methods appropriate?
  - ✓ Have ethical standards been met?
  - ✓ Are the results well enough documented?
  - ✓ Are the conclusions reasonable?
  - ✓ Is the paper well written?

- Some Other Factors Affecting Publishability
  - ✓ Appropriateness for the journal chosen
  - ✓ Consistency with the journal's instructions
  - ✓ Macro aspects of the writing (organization, etc)
  - ✓ Micro aspects of the writing (word choice, grammar, spelling, punctuation, etc)

Choosing a Suitable Journal

- ❑Identifying a Target Journal
- ✓Decide early (before drafting the paper). Do not write the paper and then look for a journal. Look for journals that have published work similar to yours.
- ✓Consider journals that have published work you cite.

- ❑Some Factors to Consider
- ✓Audience
- ✓Prestige
- ✓Impact
- ✓Access
- ✓Publication time
- ✓Technical quality
- ✓Likelihood of acceptance

Using the Journal's Instructions

- Read the instructions to authors before starting to prepare your paper.
- Consult the instructions while preparing your paper.
- Check the instructions again before submitting your paper.

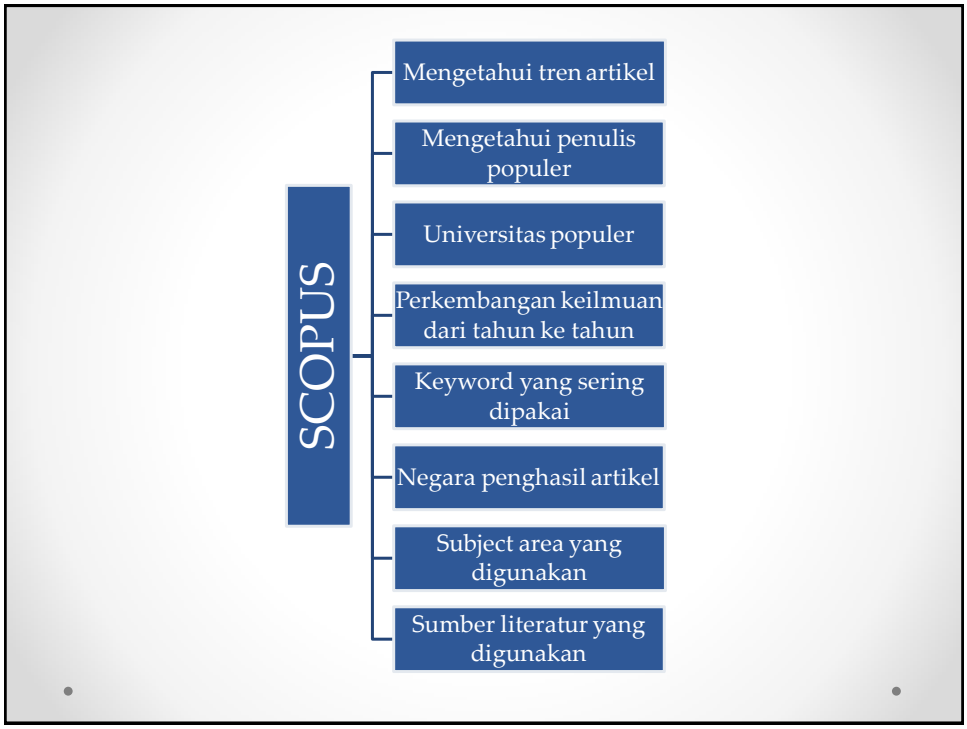
Some Questions the Instructions May Answer

- What categories of article does the journal publish?
- What is the maximum length of articles?
- Does the journal include abstracts? If so, what is the maximum length?
- What sections should the article include? What are the guidelines for each?
- What guidelines for writing style should be followed?

Some Questions (cont)

- How many figures and tables are allowed? What are the requirements for them?
- In what format should references appear? Is there a maximum number of references?
- In what electronic format should the paper be prepared?
- How should the paper be submitted?

Utilizing :
- Google (Scholar)
- Scopus



Preparing a Manuscript

Format:

- Title
- Authors
- Abstract
- **Introduction**
- **Methods**
- **Results**
- **Discussion → Conclusions**
- Acknowledgments
- References

Title

- The fewest possible words that adequately indicate the contents of the paper
- Important in literature searching
- Should not include extra words, such as "A Study of" or "Observations on"
- Should be specific enough
- Generally should not include abbreviations

Authors

- Those with important intellectual contributions to the work
- Often listed from greatest contributions to least
- In some fields, head of research group often is listed last
- In some fields, listed alphabetically

Abstract

- An important part of the paper
  - Relatively widely read
  - Used to decide whether to read the rest of the paper
  - Gives editors, reviewers, others a first impression
- Briefly summarizes the paper
- Should be organized like the paper (a mini-IMRAD format)
- In some fields, there are structured abstracts (with standardized headings).

Structured Abstract

Subheadings I
- Background
- Objective
- Setting
- Design
- Methods
- Main results
- Conclusions

Subheadings II
- Background
- Objective
- Methods
- Results / Findings
- Conclusions

Subheadings III
- Aims
- Setting
- Methods
- Intervention
- Results
- Conclusions

Purposes of the Introduction

- To provide background
  - In order to help readers understand the paper
  - In order to help readers appreciate the importance of the research
- To identify the question(s) the research addressed

Length of Introduction

- Articles in some fields tend to have short introductions (a few paragraphs or less)
- Articles in some other fields tend to have long introductions or to also include related sections (for example, literature review, theoretical framework)

Gearing the Introduction to the Audience

- Papers in relatively general journals: Introduction must provide basic background information.
- Papers in specialized journals in your field: Introduction can assume that readers have more knowledge about the field.

Structure of the Introduction

- Introduction typically should be funnel-shaped, moving from general to specific
- A common structure:
  - Information on importance of topic
  - Highlights of relevant previous research
  - Identification of unanswered question(s)
  - Approach you used to seek the answer(s)
  - (In some fields) your main findings

Purposes of the Methods Section

- To allow others to replicate what you did
  - In order to test it
  - In order to do further research
- To allow others to evaluate what you did
  - To determine whether the conclusions seem valid
  - To determine whether the findings seem applicable to other situations

Methods: Basic Information to Include

- In most cases, overview of study design
- Identification of (if applicable)
  - Equipment, organisms, reagents, etc., used (and sources thereof)
  - Populations (samples amount)
  - Statistical methods, fabrication, preparation

Methods: Amount of Detail to Use

- For well-known methods: name of method, citation of reference
- For methods previously described but not well known: brief description of method, citation of reference
- For methods that you yourself devise: relatively detailed description

Methods: The Words and More

- Should be written in past tense
- In some journals, may include subheads (which can help readers)
- May include tables and figures
  for example:
  - Flowcharts
  - Diagrams of apparatus
  - Tables of experimental conditions

The Results Section

- The core of the paper
- Often includes tables, figures, or both
- Should summarize findings rather than providing data in great detail
- Should present results but not comment on them
- (Note: Some journals combine the Results and the Discussion.)

Verb Tense for the Results Section: Past Tense

Examples:

- A total of 417 of the customers replied.
- _____ increased, but _____ decreased.
- The average temperature was _____.
- Three of the dogs died.
- This difference was not statistically significant.

Results Sections of Papers with Tables or Figures

- How much should the information in the text overlap that in the tables and figures?
  - Not extensive overlap
  - In general, text should present only the main points from the tables and figures
  - Perhaps also include a few of the most important data
- Remember to mention each table or figure.

Mentioning Tables and Figures: Some Writing Advice

- In citing tables and figures, emphasize the finding, not the table or figure.
  - *Not so good*: Table 3 shows that researchers who attended the workshop published twice as many papers per year.
  - *Better*: Researchers who attended the workshop published twice as many papers per year (Table 3).

Tables: A Few Suggestions

- Use tables only if text will not suffice.
- Design tables to be understandable without the text.
- If a paper includes a series of tables, use the same format for each.
- Be sure to follow the instructions to authors.

Figures: A Few Suggestions

- Use figures (graphs, diagrams, maps, photographs, etc.) only if they will help convey your information.
- Avoid including too much information in one figure.
- Make sure any lettering will be large enough.
- Follow the journal's instructions.

Discussion

- One of the more difficult parts to write, because have more choice of what to say
- Often should begin with a brief summary of the main findings
- Should answer the question(s) stated in the introduction
- Sometimes is followed by a conclusions section

The Discussion: Some Possible Content

- Strengths of the study
  - For example: superior methods, extensive data
- Limitations of the study
  - For example: small sample size, incomplete data, possible sources of bias, problems with experimental procedures
  - Better to mention limitations than for peer reviewers and readers to think that you are unaware of them
  - If the limitations seem unlikely to affect the conclusions, can explain why

The Discussion: Possible Content (cont)

- Relationship to findings of other research
  for example:
  - Similarities to previous findings (your own, others', or both)
  - Differences from previous findings
  - Possible reasons for similarities and differences

The Discussion: Possible Content (cont)

- Applications and implications
  for example:
  - Possible uses of the findings (in business, public policy, agriculture, medicine, etc)
  - Relationship of the findings to theories or models:
    - Do the findings support them?
    - Do they refute them?
    - Do they suggest modifications?

The Discussion: Possible Content (cont)

- Other research needed
  for example:
  - To address questions still unanswered
  - To address new questions raised by the findings

The Discussion: Structure

- Typically should move from specific to general (opposite of introduction)
- Beware of excessive length

Acknowledgments

- The place to thank people who contributed to the research but whose contributions don't qualify them for authorship
- Obtain permission before listing people
- Sometimes also the place to mention sources of financial support

Functions of References

- To give credit to others for their work
- To add credibility to your work by showing that you used valid information sources
- To help show how your work relates to previous work
- To help readers find further information

References: Importance of Accuracy

- Studies show that many references are inaccurate.
- For references to fulfill their functions, they must be accurate. Therefore
  - Make sure that you accurately state what the cited material says.
  - Make sure that all information in the citation (for example, author list, article title, journal title, volume, year, pages) is accurate.

Another Reason Your References Should Be Accurate

Often, authors whose work you cite will be chosen as your peer reviewers. Inaccurate references to their work will not impress them favorably.

Before Submitting Your Paper

- Make sure the abstract is consistent with the rest of your paper.
- Revise, revise, revise the paper.
- Show the paper to other people, and revise it some more.
- Re-check the journal's instructions to authors.