How to write an article

Silvio Peroni

silvio.peroni@unibo.it – https://orcid.org/0000-0003-0530-4305 – @essepuntato

Open Science (A.Y. 2023/2024)
Second Cycle Degree in Digital Humanities and Digital Knowledge
Alma Mater Studiorum - Università di Bologna

DIPARTIMENTO DI FILOLOGIA CLASSICA E ITALIANISTICA

First, action items about the received reviews

You should have received the reviews done by the other group about your Data Management Plan (DMP) and your protocol

Action item: you must update your DMP and protocol according to the review received, and you must provide two response letters to the reviewers (one for the DMP and another for the protocol), where you explain either how you have addressed their comments or the justification for not having addressed them (the latter should be very robust, though)

The rebuttal letter must be published on Zenodo, should explicitly link and mention (even in the metadata) the reviews received, and the DOI should be provided as usually in the course repository

How to write an article: the abstract

First, start from the abstract – better if devised in a [structured form](#), as suggested in the first lecture

Focus on all the aspect of the research, even those that have not been addressed yet (e.g. the outcomes of an analysis), and try to provide an (purely intuitive) view on them

The abstract is a living document: you should update it often according to the results you gather weekly about your study

Action item: update the abstract you wrote with more precise and additional information derived from the study you have conducted so far (which includes also the information collected in the DMP and in the protocol)

How to write an article: the outline

Create a detailed outline of the article and discuss it with your peers – each *a-d* subsection should be described in one paragraph, presenting what you want to introduce there (an [example here](#))

1. Introduction
    a. Why is your research important?
    b. What is known about the topic?
    c. What are your hypotheses / research questions?
    d. What are your objectives?
2. Materials and Methods
    a. What materials did you use?
    b. Who were the subjects of your study?
    c. What was the design of your research?
    d. What procedure did you follow?
3. Results
    a. What are your most significant results?
    b. What are your supporting results?
4. Discussion and Conclusions
    a. What are the studies major findings?
    b. What is the significance/implication of the results?

Kallestinova, E. D. (2011). How to write your first research paper. The Yale Journal of Biology and Medicine, 84(3), 181–190. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3178846/

How to write an article: the material and methods

Be meticulous and accurate in describing the Materials and Methods

You have all your notes and protocol and, thus, it should not be problematic for you to describe the experimental design and procedures

Materials and Methods	
a.	What materials did you use?
b.	Who were the subjects of your study?
c.	What was the design of your research?
d.	What procedure did you follow?

Be as explicit as possible by providing enough detail and references, e.g. to the protocol itself and to any other relevant material

Remember that the purpose of this section is to allow other researchers to evaluate and repeat your work

Kallestinova, E. D. (2011). How to write your first research paper. The Yale Journal of Biology and Medicine, 84(3), 181–190. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3178846/

How to write an article: the results

Be clear, concise, and objective in describing your Results

Results
a. What are your most significant results?
b. What are your supporting results?

Your Results should be organized into different segments or subsections where each one presents the purpose of the experiment, your experimental approach, data including text and visuals (tables, figures, schematics, algorithms, and formulas), and data commentary

Data commentary includes a summary of the data presented in the visuals and an explanation of the most significant findings, highlighting the most important points

Exclude data interpretation, leaving it for the Discussion section

How to write an article: discussion

Present the principles, relationships, and generalizations in a concise and convincing tone

Discussion and Conclusions
a. What are the studies major findings?
b. What is the significance/implication of the results?

Introduce the study's major findings, explaining their meaning and importance and, when possible, consider also alternative explanations of the findings

Compare and contrast your findings with those of other published results, explain any discrepancies and unexpected findings, and state the limitations, weaknesses, and assumptions of your study

Finally, summarize the answers to the research questions and indicate the importance of the work by stating applications, recommendations, and implications

How to write an article: introduction

Interest your reader in the Introduction
section by signalling all its elements
and stating the novelty of the work

Establish a research territory: show that the general research
area is important, central, interesting, and problematic in some way

Find a niche: indicate a gap in the previous research, or extend previous knowledge in some way

Occupy the niche:

1. outline purposes or state the nature of the present research
2. list research questions or hypotheses
3. announce principle findings
4. state the value of the present research
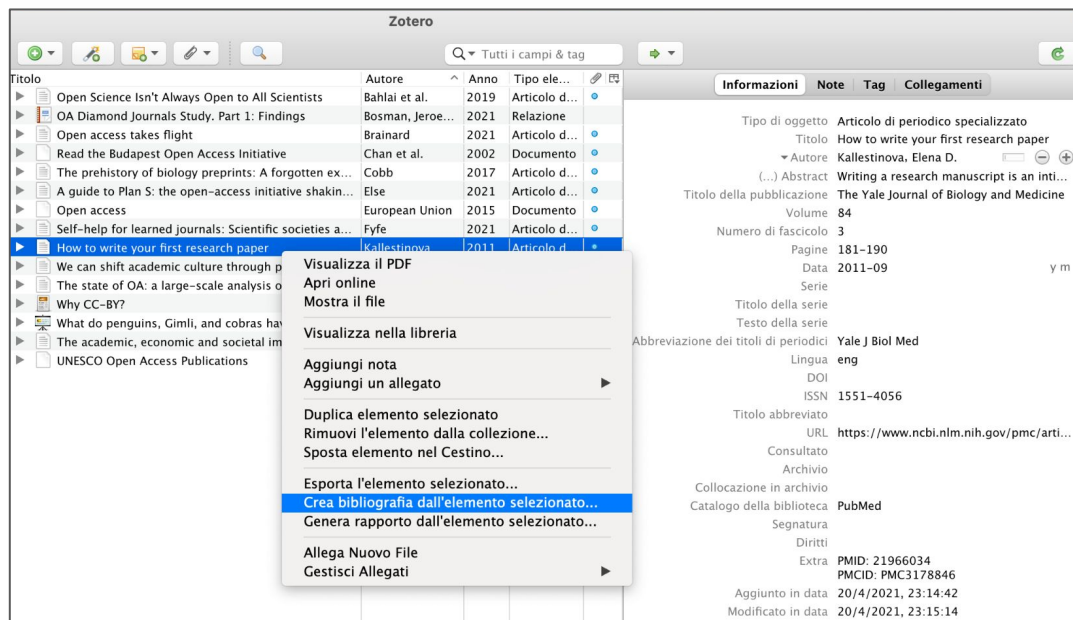5. indicate the structure of the research paper

Introduction
a.   Why is your research important?
b.   What is known about the topic?
c.   What are your hypotheses / research questions?
d.   What are your objectives?

Kallestinova, E. D. (2011). How to write your first research paper. The Yale Journal of Biology and Medicine, 84(3), 181–190. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3178846/

Referencing other works

Reference appropriately the other works by using a standard referencing style, e.g. APA 7th edition

You can use [Zotero](#) as a tool to help you collect, organize, cite, and share research

Action item about the article

Write your article presenting in full the study addressed for the course

You must publish your final article on Zenodo

It should be submitted in Zenodo two days before the final workshop, i.e. by the 25th May, and the DOI must be shared on the GitHub repository of the course

I will provide you a checklist with all the material you should present before the workshop of the 27th of May

End

How to write an article

Silvio Peroni

silvio.peroni@unibo.it – https://orcid.org/0000-0003-0530-4305 – @essepuntato

Open Science (A.Y. 2023/2024)
Second Cycle Degree in Digital Humanities and Digital Knowledge
Alma Mater Studiorum - Università di Bologna

DIPARTIMENTO DI FILOLOGIA CLASSICA E ITALIANISTICA