Scientific Writing II

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How to Cite Sources in Scientific Writing

• No footnotes or endnotes in scientific writing.
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• All citations occur in the text in parenthetical format, with the author(s) last name and year of publication.
For example (e.g.,)

Parsons (1996) found that naked mole rats dig six times faster in desert soils than dung beetles do.
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Parsons (1996) found that naked mole rats dig six times faster in desert soils than dung beetles do.

Naked mole rats dig six times faster in desert soils than dung beetles do (Parsons 1996).
List your sources

• List any sources you cite in the text in the Literature Cited section (aka References or Citations)
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• Only include the references that you cite.
Multiple authors

• Two authors
  – use both last names with and or & between them (e.g., Parsons and Long 1996 or Parsons & Long 1996)
Multiple authors

• Two authors
  – use both last names with and or & between them (e.g., Parsons and Long 1996 or Parsons & Long 1996)

• More than two
  – use the first author's last name, followed by et al. (e.g. Parsons et al. 1996).
  – Et al. is Latin for "and others".
  – The complete list of authors will appear in the full citation at the end of your paper.
Literature Cited section

• Your Literature Cited should appear in alphabetical order by first author, and by year if there are multiple sources by the same author(s).
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• Italicize journal and book titles, but not the titles of individual articles in journals or edited (multi-authored) books.
Citing Journal Articles

Citing Journal Articles


Citing Books

Citing Chapters in Edited Volumes

Citing Chapters in Edited Volumes


Types of literature

• Primary (peer-reviewed)
  – Authors write about the work they performed
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• Primary (peer-reviewed)
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• Secondary (peer-reviewed and/or editor reviewed)
  – Authors write about work someone else performed
  – Review Articles
  – Opinion Articles
  – Perspective Articles
Types of literature

• Tertiary (commissioned)
  – Authors write about work from secondary sources only
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• Tertiary (commissioned)
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• Gray (internally reviewed)
  – Conference proceedings
  – Government documents/publications
  – Market research
  – Online documents
  – Technical reports
  – Working papers
Types of literature

• WHICH types of literature are reliable sources and why?
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• “Professional looking” does not mean it is reliable
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• It is a good idea to look at secondary sources for an understanding of and introduction to literature.
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• It is a good idea to look at secondary sources for an understanding of and introduction to literature.

• Do not rely only on secondary sources, though!
Avoid Gray Literature

• Worthwhile findings will be published by authors in primary literature.
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• Gray literature is not peer-reviewed
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• Gray literature is hard to find and not indexed in academic libraries.
Peer review

• This is a strict quality-control process.
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• Only accepted method for research validation.
Peer review – How it works

• A group of scientists completes a study and writes it up in the form of an article.
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• They submit it to a journal for publication.
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• The journal's editors send the article to several other scientists who work in the same field (i.e., the "peers" of peer review).
Peer review – How it works

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• The authors may then revise their article and resubmit it for consideration.
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  – acknowledge and build upon other work in the field
  – rely on logical reasoning and well-designed studies
  – back up claims with evidence
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Where do I find most of my resources?

• Google Scholar