Literature Reviews

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What is a Literature Review?

The answers you seek may be found at the library.
Literature Reviews

- Understand topic
- Develop Ideas
- Demonstrate Knowledge
- Relationships and links between existing ideas and research

https://youtu.be/t2d7y_r65HU
Studies that build or respond to major works

- Research Published on Topic
- Developing and connecting ideas.
- Selective or Comprehensive Reviews
Where to start searching?

http://libguides.du.edu/litreview

- Google Scholar, Summon, Library Catalog

- Interdisciplinary Databases (Academic Business Search Complete, Web of Science, ProQuest Central)

- Subject Databases (ERIC, PsycINFO, PubMed, IEEE, etc.)
Google Scholar


*Stand on the shoulders of giants*
Web of Science

- Forward & backward in time
- Start with keyword or given article
- Citation counts of publications
PubMed

- PubMed comprises more than 25 million citations for biomedical literature from MEDLINE, life science journals, and online books. Citations may include links to full-text content from PubMed Central and publisher web sites.


- [My NCBI Collections](http://www.ncbi.nlm.nih.gov/pubmed/?otool=unmlib) – save searches and get alerts on new literature
Reports are in-depth studies of a focused topic.

Research Article report on the results of one or more studies or experiments, written by the person(s) who conducted the research. This is considered one type of primary source. Look in the title or abstract for words like study, research, measure, subjects, data, effects, survey, or statistical which might indicate empirical research.

Clinical trial is any research study that prospectively assigns human participants or groups of humans to one or more health-related interventions to evaluate the effects on health outcomes.

Systematic reviews cover a broad set of articles that build consensus on biomedical topics and find citations related to topics. Summarizes the findings of others studies or experiments; attempts to identify trends or draw broader conclusions. Scholarly in nature but not a primary source or research article, however its references to other articles will include primary sources or research articles.

A meta-analysis is a mathematical synthesis of the results of two or more primary studies that addressed the same hypothesis in the same way.
What is Grey Literature?

Gray literature is information that is not published in mainstream formats, i.e. journals or monographs. It is not typically indexed in databases and can therefore be challenging to find. Traditionally, gray literature includes:

- Technical reports
- Dissertations & theses
- Patents
- Some conference proceedings
- Many other publications such as preprints, white papers, internal newsletters
Why is grey Literature important?

- **Depth and Breadth:** A thesis may contain data that is never included in the journal article that is ultimately published using its findings. In other cases, a broader view may be what is wanted, in which case a government factsheet or institutional newsletter targeted to a lay audience may meet the searcher's need. It is also important to note that, due to various forms of publication bias, including positive results bias and time lag bias, studies with negative results are far more likely to be found in gray literature than in mainstream publications.

- **Timeliness:** Results of studies may appear in gray literature 12 to 18 months before being published via traditional channels.

- **Flexibility:** Rather than waiting years for the publication of a revised edition, authors, editors, and Web content creators can update information when needed, a factor that reinforces the timeliness of gray literature.

- **Accessibility:** Although governments and industries often restrict the readership of certain types of gray literature (classified or proprietary information, for example), there is also a great abundance of gray literature that is freely available to all, either in print or on the Web.
Searching for Grey Literature

- Start broad, then narrow your focus as appropriate.
- Try limiting your search to .org or .gov domains.
- Try limiting your search to [PDF] format, conference proceedings, or dissertations.
- Ask: *Who Cares?*
  - Advocacy groups
  - Agencies -- government and private
  - Industry/manufacturer
  - Trade/professional associations
Tips for Lit Review

- Collect, Read, critically evaluate, analyze, and organize relevant information on topic
- Follow citation trail (cited by, related articles)
- Describe and summarize each article
- Highlight Key concepts and papers
- Compare and contrast papers
- Discover Relationships between papers
- Identify major themes and concepts, critical gaps, and disagreements
Critical Reading Questions

Questions to ask when reading and interpreting scholarly articles:

- What is the source (journal) of the article?
- Was the article peer reviewed?
- Who are the authors and what are their affiliations?
- What is the main subject of the study?
- What was the problem(s) investigated?
- What is the purpose of the rationale for the study?
- Who or what constituted the sample of population?
- What was the design of the study?
- What are the statistical analyses used?
- What are the results?
- Are the results clear?
- Did the results answer the identified questions?
- Do the results seem valid?
- Are the interpretations of the results consistent with design and analysis?
- Are the results consistent with findings from similar studies?
- What do the results mean to medicine and health care, to health care workers and patients?
- Can the results be applied to your practice or research?
Your Review

- Includes your own thoughts and ideas
- Reviews existing literature
- Discusses major themes and concepts on topic
- Identify gaps or disagreements
- Bibliography or citation of sources
Questions?

- Visit the Research Center to set up an appointment with me!
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