

GUIDE TO DOING A LITERATURE REVIEW

Finding relevant previous research

1. Ask whichever professor lectured on a topic closest to your interest and/or scour the assigned reading for the name of a key article, key researchers working on your topic, which databases to search, what key terms to use.
2. Armed with this info, go to the following URL:
<http://www.libraries.rutgers.edu/rul/indexes/findarticles.shtml>
3. Go to the link that says “Indexes and Databases”
<http://www.libraries.rutgers.edu/rul/indexes/indexes.shtml>
4. For most of you, some of the most relevant databases will be:
PsycInfo:
http://www.libraries.rutgers.edu/rul/indexes/search_guides/psycinfo.shtml
Linguistics and Language Behavior Abstracts:
http://www.libraries.rutgers.edu/rul/indexes/search_guides/llba.shtml
Philosopher’s Index:
http://www.libraries.rutgers.edu/rul/indexes/search_guides/philosophers_index.shtml
Medline:
http://www.libraries.rutgers.edu/rul/indexes/search_guides/medline.shtml
Applied Science and Technology Reviews:
http://www.libraries.rutgers.edu/rul/indexes/search_guides/applied_science.shtml
5. Once you choose your database, login in by hitting the CONNECT button. You will be prompted to provide keywords or phrases.
6. The default search is a Keyword search. If “Map terms onto subject headings is “clicked”, your terms will be used to find matching subject headings, a strategy that sometimes is useful when you are just beginning. If you ‘unclick’ the “Map Terms onto Subject Headings”, the program will match any reference in the database that includes all of those terms somewhere in the title, abstract, author, journal title, and subject headings.
7. If you want to search for a particular author, click the author icon, and then provide the last name of the author and the author’s first initial.
8. If you get too many hits, you can use the “LIMIT” function to limit your search to particular years, articles with abstracts, review articles, age groups, population groups (e.g., animals vs. humans), publication type etc. For example, if you merely search for “autism” on PsycInfo, you will get 9312 hits ... far too many to even read the abstracts of. But let’s say I am interested in animal models of autism, and only want articles written in English, with an abstract. By limiting my search to English, abstract and animal, I get a semi-manageable 104 hits.
9. Another strategy for when you get too many hits is to use the COMBINE function to combine the results of two or more searches. For example, on PsychInfo, combining the searches for “autism” with “genetics” yields a hefty 390 hits. Combining “autism”, “genetics” and “twin” will pick out the articles that have all 3 words, in this case a manageable 41 hits.
10. A third strategy if you really get too many hits is to put your search terms in quotations marks in which case only those articles which contain the words **in that order** are found. For example “genetics of autism” yields 16 hits.
11. Reviews and meta-analyses can provide a good overview of research that has been done, and are a good starting point for reading.

12. If you get too few or no hits, the first thing to check is that you have spelled all of your words correctly. The second thing to do is to get rid of quotation marks if you have used them. The third thing to do is to eliminate terms. The fourth thing to do is to try a different database. If none of these things work, go back to your advisor!
13. Once you have found a reference for something that appears in a journal, see if Rutgers has an electronic version of the journal by going to the following URL: http://www.libraries.rutgers.edu/rul/rr_gateway/ejournals/ejournals.shtml
Most of the time you will be interested in electronic journals, not electronic government journals.
14. Even if the RU Library does not have the electronic version of the journal, they may have a hard copy version of the journal. You can check this by going to: http://www.libraries.rutgers.edu/rul/how_do_i/subscribes.shtml
15. Google searches are also sometimes useful, particularly once you have figured out who the key researchers are in an area. Try googling these authors' names to find their homepages which often contain preprints of unpublished work.

A good summary of databases available to Rutgers students can be found at the following URL and its links: http://wire.rutgers.edu/research_finding_library.html

Choosing what research to include in your literature review:

What should I cite (in approximate order from best to worst):

1. Original research articles that appear in peer reviewed journals are best.
2. Research reviews published in peer-reviewed journals are next. Reviews and meta-analyses can provide a good overview of research that has been done, and are a good starting point
3. Depending on the field and the conference, conference proceedings are sometimes considered legitimate, and rate just below journal articles. It is always legitimate to cite a very recent conference abstract or proceeding (e.g., something that appeared in the past 12 months). However, you should do a search to make sure the research has not been published. Contact the corresponding author to see if there is a longer paper available
4. Scholarly books (or chapters in edited volumes) by noted authorities are next. Recognize, however, that books are not peer-reviewed, and often contain the author's opinions and interpretation of results intermixed with "the facts"

What should I **avoid** citing (in approximate order from worst to best):

1. Articles that appear in newspapers and in popular magazines (e.g., Time magazine, Scientific American) should be avoided at all costs.
2. Articles or summaries that appear on websites only are the second worst. (There are some exceptions such as articles that appear in peer-reviewed electronic journals, for example.)
3. Commentaries or editorials on peer-reviewed journal articles. Cite the original article instead! (If the editorial makes a point about a flaw/strength of a paper that is not mentioned in the original study, it is legitimate to cite the editorial.)
4. General encyclopedias or dictionaries.
5. Unpublished manuscripts. This depends somewhat on the field, and exceptions are made for doctoral dissertations.

Other do's and don'ts of literature reviews

1. Always quote the original source. In other words, avoid saying "According to Smith (2004), Jones (1995) found that girls go through puberty before boys". Exceptions can be made if the original article is published in another language, is unavailable etc.
2. Avoid quotes (particularly long quotes), but when you do quote, give the page number. Quotes should be reserved for cases in which you want to report exactly what an author says. One case where quotes might be appropriate is when you are quoting an author's interpretation of his/her results. Another case is if you are trying to hang the author with his own words. For example:

According to Brown (2002, p. 389) "Control and experimental groups didn't differ in age or weight or any other important variable." However, examination of Table X reveals that subjects in the control group were more likely to be male than subjects in the experimental group and some studies have shown that males have worse outcomes than females (e.g., Black, 2004).

3. If many people have made the same discovery, there are at least 3 options. First, you can cite everyone. Second, you can cite the first person who made the discovery and make it clear that this is why the person is cited. Third, you can cite a review paper. For example, (see Smith 2004, and references therein).
4. When there is disagreement about a result (or an interpretation of a result), acknowledge the disagreement, cite at least one or two papers on each side. Ideally, you should explain why the disagreement exists.
5. Try to synthesize the results of all of the studies.
6. Try to motivate why you are doing your study by showing how your study differs from existing studies. What hole does your study fill?
7. Don't plagiarize! See http://wire.rutgers.edu/research_plagiarism.html