



## **How to Perform Your Own Search**

Special thanks to John Humphrey,  
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### **How to search up a SUBJECT you are interested in**

#### **Subject headings**

A subject heading search, also known as a controlled vocabulary search, will search for articles on a given subject rather than by looking for keywords within the text, i.e. an article will be tagged and indexed in a database as being about certain subjects. It is these subjects that are searched for.

Not all databases use the same subject heading catalog:

- Pubmed uses MeSH (medical encyclopedia of subject headings)
- CINAHL uses CINAHL Subject Headings
- Embase uses Emtree

Pros:

- Subject heading searches are easy to run
- All articles produced should all be about the subject you have selected
- In theory, you should receive more pertinent, albeit fewer, results than a keyword search.

Cons:

- Subject heading searches will not always produce the most recent literature a database has to offer
  - Because of the high volume of medical literature coming out every week, some databases are several months behind at indexing articles. Until articles are indexed they will not show up on a subject heading search. However, a keyword search will pick up articles as soon as they are uploaded to the database
  - Only the bigger databases offer the utility of a subject heading search. All other databases will need to be keyword searched



## **It's time to use your own KEYWORDS....**

Keyword searches will look through the text of an article for whatever word/s you have specified.

Pros:

- A keyword search will bring back up to the minute articles as they are uploaded to the database.
- A keyword search will invariably bring back results than a subject heading search.
- A keyword search allows for the use of Boolean Operators, field searches, phrases, et cetera giving the searcher far more control over the search than an automated subject heading search.

Cons:

- More results to sift through.
- Many of these results can be less relevant than a subject heading search.

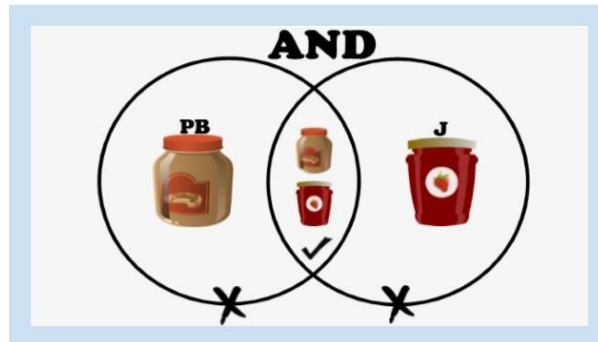
## **BUT now you have to tackle the Boolean Operators**

There are three Boolean Operators: AND, OR, & NOT.

### **AND**

The AND Boolean Operator will reduce the amount of results a search yields as it forces the database to be more specific. For example, here the database will only return results that feature both the terms "peanut butter" AND "jelly".

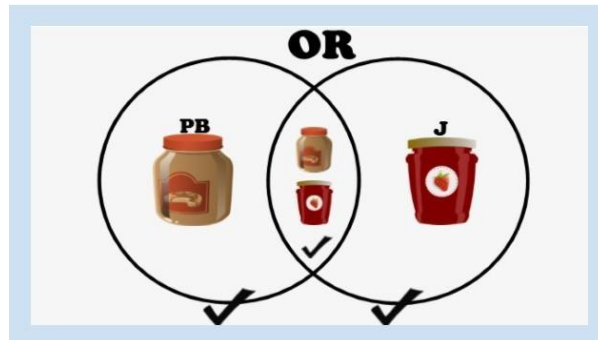
TIP\* If you have too many results to wade through...try adding an additional search concept with AND to get a smaller, more specific, batch of results.



## OR

OR is used for adding synonyms or alternate words to your search. By adding more synonyms to each concept you should get more results. A good rule of thumb is that OR is always more.

Here you can see that the database will bring back all articles that have either the phrase "peanut butter," or the word "jelly," or both.

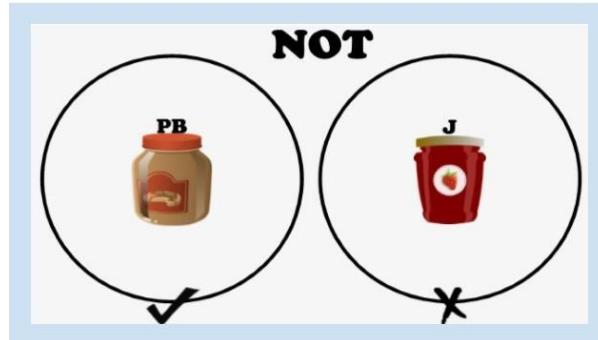


## NOT

The NOT Boolean Operator will purposefully exclude articles containing the specified search term/s.

NOT can be used to narrow down the desired meaning of a term that has different connotative meanings.

Use the NOT Boolean Operator with care. You might lose the perfect article because it randomly mentioned the term you excluded.



Here you can see that the database will bring back articles about "peanut butter"-- but if that article mentions jelly anywhere in the text, even randomly, the database will exclude that article from the results.

## Adding PHRASES makes a big difference!

Anything over one word is technically a phrase. Phrases should be placed inside quotation marks. The reason for this is that databases are dumb. They do not understand that multiple words are part of the same phrase unless you tell them.

For example, if you typed "peanut butter and jelly day" without quotation marks the database would bring back every article with the word 'peanut' in it, every article with the word 'butter' in it, and so on...

In the example below, you can see that the phrase 'peanut butter and jelly day' was not placed in quotations and Google scholar brought back 27,100 results of which most were not pertinent.



In the second picture the phrase was placed in quotations and only 23 results came back—all were pertinent.



A word of caution with regard to phrases: when you put a phrase into quotations the database will search for what's inside the quotations and ONLY what is inside the quotations.

For example, a search for aspirin vs Tylenol will fail to bring back articles where the author phrased this differently, e.g. Tylenol vs Aspirin, or Aspirin versus Tylenol.

Phrases are highly specific. If you use a phrase in a search be sure to consider all the different variations and make sure you include them in your search too!

\*Note: Some databases will not accept quotation marks. These databases will assume that everything placed between two Boolean OR statements is a phrase, e.g. Tylenol vs Ibuprofen OR Ibuprofen vs Tylenol

## **You also have to remember to add your LIMITERS**

Larger databases allow users to 'limit' their search by certain criteria, hence their name limiters. Limiters are incredibly helpful and are usually found under the main search box or on the left hand side of the screen.

Advantages:

- Allows users to narrow down search results by various criteria, useful limiters include.
  - Date range--impose a date range on the articles you want such as the last ten years.
  - Articles in English language--exclude articles in languages you may not understand.
  - Peer reviewed--make sure the articles you are reading are scholarly.
  - Study type--specify if you want systematic reviews only or randomized controlled trials et cetera

Disadvantages:

- Limiters vary from database to database
- Using too many limiters or poorly chosen limiters may bring back few results or poor quality results



I do not recommend using the full text limiter! Yes you will get immediate access to full text articles but it prevents you from seeing citations that might prove to be the perfect article for you. Your library will be delighted to try and get the full text of any article you might need.

## **Now, let's work on trying on getting those FIELD SEARCHES**

Fields are allocated spaces within an electronic article that are set up to store a specific type of information, e.g. the author field will be where author names are stored. The title field is where the title of the article will be stored.

Field searching allows you to tell a database exactly where you want to look for your keywords. By default, databases are set to 'all fields' meaning that your keyword search will check everywhere within an article's text for your specified keywords.

Field searches are helpful:

- You can get more pertinent articles by restricting your keyword search to the 'title' field. If the author has included your keywords in the title then there is a great chance that the article will be apropos to you.
- You are looking for a specific author (author field).
- You want to find a specific article but can only remember a word or two of the title (title field).
- You want to pinpoint a particular subject (subject field).
- You want articles that specifically mention your keywords in their abstract (abstract field).
- You are looking something up by its ISBN number (ISBN field)

## **Once you have gathered it all, let's bring it down a notch**

Strategies to narrow down the number of results in a keyword search:

- Add another concept using the 'AND' Boolean Operator. This will exponentially reduce the number of results you get back while making those results far more pertinent.
- Reduce the number of synonyms you are using.
- Try a field search. For example, run a title field search. Here the database will only look for your keywords in the title of an article. If the keywords you are looking for appear in the title, then the chances of that article being pertinent to you are high.



- Use the 'NOT' Boolean Operator to select words that you do not wish to appear anywhere in the article.
- Check your Limiters, for example
  - set a date range or reduce your date range
  - limit your results to a specific language
  - limit your results by article type, e.g. randomized controlled trials or systematic reviews

### **Strategies to broaden up the number of results in a keyword search**

- 'OR' is always more. add more synonyms to your search string.
- Reduce the number of concepts in your search string by eliminating 'AND' Boolean Operators.
- Phrases are very specific. Reduce or replace phrases with single keywords if possible.
- Check your Limiters, for example
  - extend your date range
  - limit your results to a specific language

**NOW YOU ARE READY FOR YOUR SEARCH!**



## Databases

The following is a short list of “free” available databases:

- [Directory of Open Access Journals \(DOAJ\)](#)  
Open access, peer-reviewed journals in all subjects.
- [PubMed](#)  
Citation search for journal articles in health and life sciences. Links to full text and catalog search for availability.
- [Trip Medical Database](#)  
Evidence-based clinical research, images, videos, patient information leaflets, educational courses and news to support clinicians in their practice and/or care. Limited to use while on campus only.
- [Centers for Disease Control](#)  
CDC increases the health security of our nation. As the nation’s health protection agency, CDC saves lives and protects people from health threats. To accomplish our mission, CDC conducts critical science and provides health information that protects our nation against expensive and dangerous health threats, and responds when these arise.
- [Health Information in Multiple Languages](#)  
Browse health information in multiple languages, arranged by language. You can also browse this information by health topic.
- [Hep2go](#)  
HEP2go.com is for rehabilitation professionals such as physical therapists, PTA's, occupational therapists, COTA's, athletic trainers, chiropractors, orthopedic doctors, sports doctors and more to create home exercise programs for patients and or clients.
- [Medline Plus](#)  
MedlinePlus is a service of the National Library of Medicine (NLM), the world's largest medical library, which is part of the National Institutes of Health (NIH). Our mission is to present high-quality, relevant health and wellness information that is trusted, easy to understand, and free of advertising, in both English and Spanish. Anywhere, anytime, on any device—for free.
- [PEDro](#)  
The Physiotherapy Evidence Database (or ‘PEDro’ for short) provides physiotherapists around the world with easy access to high-quality clinical





research so they can practise and teach effectively. PEDro is a well-established, robust and trusted site that provides access to over 51,000 randomised controlled trials, systematic reviews and evidence-based clinical practice guidelines relevant to physiotherapy.

- PEW Research Center  
Pew Research Center is a nonpartisan fact tank that informs the public about the issues, attitudes and trends shaping the world. We conduct public opinion polling, demographic research, content analysis and other data-driven social science research. We do not take policy positions.
- Predatory Publishers  
This is a list of possibly predatory journals. The kernel for this list was extracted from the archive of Beall's list at [web.archive.org](http://web.archive.org). It will be updated as new information or suggested edits are submitted or found by the maintainers of this site.
- Refseek  
Refseek is a "web search engine for students and researchers that aims to make academic information easily accessible to everyone," by focusing on open source and other cost-free online content of academic interest and quality, "including web pages, books, encyclopedias, journals, and newspapers.
- Worldcat  
WorldCat.org lets you search the collections of libraries in your community and thousands more around the world.
- World Health Organization  
WHO's primary role is to direct international health within the United Nations' system and to lead partners in global health responses.