

Grey Literature Searching Guide

This guide provides advice on searching grey literature sources for a systematic review.

Grey Literature Sources

Grey Literature is research that has not been published commercially and is published outside of traditional academic sources (E.g. Books & Journals). Examples of grey literature are: statistics, government reports, conference proceedings, theses, clinical guidelines & clinical trials registers. Grey Literature can be an important source for finding the latest research findings and the most current statistics and data.

You can find a guide to grey literature sources via the Systematic Review Toolkit. Go to: Systematic Review Toolkit → Plan Searches and Select Databases → see the section on grey literature for a link to a comprehensive listing.

Depending on your research topic, it may not always necessary to search the grey literature. If you do search it, tailor the depth and breadth of searching to your project. Postgraduate coursework students conducting a capstone research project may need to be selective to fit grey literature searching within the semester timetable, whereas higher degree research students and researchers should aim to be more comprehensive.

Many grey literature sources are not easy to search. They are not like research literature databases, so you can't create a detailed and structured search strategy. You may instead need to experiment with a variety of search strings, and potentially run a series of searches in each source.

Google and Google Scholar

Use some caution when searching Google and Google Scholar. Google in particular is affected by multiple algorithms that can change search outcomes based on your personal location, preferences and search history. Searches in Google are not reproducible, unlike searches in research literature databases. Filters in Google and Google Scholar are limited.

To generate search strings in Google or Google Scholar, you are recommended to use the 'Search Tips' guide from the Ready for Health Research module (<http://bit.ly/READY4RESEARCH>).

Additional Tips for Searching in Google:

- All Boolean operators must be in upper case
- You cannot truncate terms in Google – Google automatically searches for any extensions of your search term (provided the search term is a complete word)
- When creating nested search strings, nest all concept groups combined with OR within separate parentheses (e.g. site:gov (snacks OR “fast food”) AND (nutrition OR obesity))
- The * operator in Google is a single word wildcard and can replace up to 1 word (e.g. sugar * beverage).
- The AROUND(#) operator allows you to specify the proximity between search terms (e.g. sugar AROUND(3) beverage). Only use proximity operators in short search strings.
- Google cannot process long search strings – it is recommended to generate a series of different shorter search strings on your topic and run them independently.
- See also <https://www.webnotes.com/how-to-use-shortcuts-and-symbols-in-google-search/>

Site/Domain Searching in Google and Google Scholar

You may need to develop search strings for selected domains. Those domains may be for a specific country or countries, government domains (by country), educational domains (by country) or domains for specific websites/organisations.

Domains:

- Internet top level domains: https://en.wikipedia.org/wiki/List_of_Internet_top-level_domains
- Country code top level domains: <https://www.disabled-world.com/disability/accessibility/websitedesign/domain-extensions.php#cca>
- Australian first, second and third level domains: <https://en.wikipedia.org/wiki/.au>
- .edu educational domains by country: [https://en.wikipedia.org/wiki/.edu_\(second-level_domain\)](https://en.wikipedia.org/wiki/.edu_(second-level_domain))
- .ac educational domains by country: [https://en.wikipedia.org/wiki/.ac_\(second-level_domain\)](https://en.wikipedia.org/wiki/.ac_(second-level_domain))
- .gov government domains by state or country: <https://en.wikipedia.org/wiki/.gov>

Site/Domain Search Tips:

- To restrict to a particular domain (e.g. Australian educational domains), type *site:domain* in front of your search string (e.g. *site:edu.au*).
- You may need to run the same search multiple times across multiple domains, such as educational domains for different countries (e.g. *site:edu*, *site:edu.au*, *site:ac.uk*, etc.).

You should use authoritative sources to select countries. Country selections may be based on geography, economics or language. Alternatively, selections may be based on a specific phenomenon (e.g. numbers of international students, consumption of western diets, indigenous populations, etc.). When consulting resources to justify your country selections, select authoritative sources that demonstrate a clear link to your rationale for your country selections, whether it is a country listing (e.g. World Bank listings for economic status) or based on findings in the published research literature.

Where searches are limited to broad US domains (such as .gov or .edu) the numbers of results may be so great that it renders the search unfeasible. In these instances, you may wish to limit your search to Google Scholar, which will still yield theses, research literature that may not be indexed in your selected databases and educational reports relevant to your search by domain and country.

You may choose to search only specific websites. You should justify your selections based on appropriate criteria.

MedNar

MedNar will only search US health and medical sources, and is therefore not an alternative to Google.

Mednar Filters:

It is recommended to use the 'top results' as your result. On the left side of screen, you will see filters. If you wish, you may refine by 'Topic', however you may need to explore a variety of topic areas.

When you submit a search you will also be provided the option to include 'additional results' – accept this option when the dialogue box appears. Ignore the patents tab.

MedNar Search Tips:

- Like Google, the results change slightly with each search, even when submitting the same search string multiple times.
- If you use simple nested search strings using Boolean operators in Google, these search strings can be reused in MedNar (however Google domain and proximity searches cannot be reused in MedNar).
- MedNar searches can 'reportedly' use truncation with the asterisk (*), however users have reported a reduction in result numbers when applying it – truncation may be unreliable.
- To export records to EndNote, select all results on a page (do this for all pages in your search result). Then go to the folder top right of screen. Here you will see export options. Select 'Download as a text file in RIS format' to export to EndNote.

Clinical Trials Registers

If you are exploring a clinical question and include randomised controlled trials (RCT) in your eligibility criteria, you will also need to search in trials registers. Here you can find trials that are either currently underway or completed and not published. You may also find links to published studies that may not have been retrieved by your searches. You may be able to contact researchers and ask permission to access their research data for inclusion.

On the Grey Literature resources page linked from the Systematic Review Toolkit, you will find links to various Australian and International clinical trials registers. Use this to identify sources if you decide to include unpublished and in-process clinical trials in your review.

Additional trials registers to consider include ANZCTR and the EU Clinical Trials Register.

You can download import filters to export results to EndNote for some registers.

Filters can be found here: <https://endnote.com/downloads/filters/>

More information on using import filters can be found here:

<https://libguides.library.usyd.edu.au/endnote/collectreferences>

Clinical Guidelines

Some questions in health and medicine may focus on evaluating the supporting evidence for, or production of clinical practice guidelines.

If clinical practice guidelines are a source of evidence important to your review, you can search among a series of practice guideline sources including:

- Australian National Health and Medical Research Council: Clinical Practice Guidelines: <https://www.clinicalguidelines.gov.au/>
- Canadian Medical Association – Infobase: Clinical Practice Guidelines: <https://joulecma.ca/cpg/homepage>
- Guidelines (UK): <https://www.guidelines.co.uk/> and <https://www.nice.org.uk/>
- New Zealand Guidelines Group: <https://www.guidelinecentral.com/summaries/organizations/new-zealand-guidelines-group/>

Point of Care tools (e.g. DynaMed, UpToDate, PEN) are other useful sources of international guidelines.

Theses

On the Grey Literature resources page linked from the Systematic Review Toolkit, you will find links to 'finding a thesis'. Use this page to identify relevant national and international sources of theses.

Trove is a useful source when searching for theses within Australia.

Trove is available here: <https://trove.nla.gov.au/>

Instructions for searching can be found here: <https://trove.nla.gov.au/help/searching>

Government Reports

On the Grey Literature resources page linked from the Systematic Review Toolkit, you will find links to general grey literature searching resources.

Sources such as Grey Matters, WHOLIS and OpenGrey can be useful sources for searching government reports (in addition to domain searches in Google).

You can also find a Library subject guide on Australian Government Documents which provides access to important sources of national government documents.