Planning your systematic review

# Introduction

In order to conduct a robust systematic review, you need to be sure how your information resources work.

* How familiar are you with the range of search resources at your disposal?
* How familiar are you with the tools within your chosen resources?
* Are you sure you have the right tools for the job?
* Are you sure you know the rules for [Boolean](https://medium.com/specialist-library-support/advanced-search-making-use-of-boolean-operators-edcc0ab034c8) to ensure they work correctly?

Have a look at your [subject guide](https://www.library.manchester.ac.uk/search-resources/subject-guides/) if you are unfamiliar with the range of resources available for your research area. This gathers the most commonly used resources for each subject on one page. You may also want to look at other subject pages if your research area spans across multiple disciplines.

# How I get started?

Initial early scoping searches may influence the future directions of your research. Scoping searches help you discover what’s out there and which search terms are likely to yield results that are useful to you, and which may have to modify. After your initial searches you may wish to revisit and tweak your parameters.

Write down all the points you need to consider:

* Look at the scope of your study. What’s your main focus/plan/goal?
* What could you compromise on?
* What’s been done before in your research area?
* What about gaps in research? How could you address these?

# Constructing searches

One you’ve established your research scope, remit and parameters, think about your search terms and jot them down.

If you are lost for words use the MeSH trees, thesaurus and other subject headings options available in the database platforms.

Then roughly divide your terms into groups of:

* Words that you must have.
* Words you don’t mind having.
* Words you definitely do not want.

At this stage nothing is set in stone; it gives the flexibility for further investigation.

Think about words that could have other meanings, depending on the context, e.g. Hearing aids NOT aids.

Think about words that could encompass areas you do not want to search and thus you may wish to exclude. For example, you may want to search for depression or low mood but not postnatal depression.

# Early searches

Initial early searches may begin to influence the future directions of your research. This could be due to a number of factors including a lack of relevant information, or even no information if the research area you are investigating is very new.

This is partly expected at a PhD level; the whole point of PhD research is to present something new and unique. It should be noted that it is not always possible to totally replicate a previous search (especially from years ago) even if the database is still hosted by the same platform. MeSH terms can change over time and new ones used which can affect the number of search results you retrieve in your search.

**💡 Tip**: Though systematic reviews are quite rigid in format, they can include both qualitative and quantitative data. If several data types are included in the review it is known as a mixed method systematic review.

# Revisit your search parameters

After your initial searches you may wish to revisit and modify your search parameters. Write down all the points you need to consider such as:

* What’s your main focus/plan/goal?
* Scope of study
* Similar studies (same parameters)
* What’s been done before?

Also consider:

* Age of previous studies
* Gaps in research? (Arid time period or a ‘trendy’ research period)
* The use of meta-analysis? (several studies consulted to produce one overview or summary of results)

# Retrieving too few results?

If initial preliminary searches yield few results, go back to basics. Work out if there is room to compromise in your search strategies. Think about the following:

* Is there another way into your topic?
* Does your topic cover several disciplines?
* Is it just of interest to your profession?
* What resources would your profession use?
* What resources would other professions use?

Focus on one part (component) of your research and read around this area. Look at what this component relates to, especially if this component (phenomenon/definition) is new.

Look at other parts of your research in isolation as well and adopt the steps outlined above.

When you have looked at each of your components separately think about how you can begin to integrate them. You may need to tweak areas as required. Don’t forget it is the end results (i.e., the articles/papers etc.) that have to be compared like-for-like e.g. that have the same focus, context and parameters, not necessarily the same search terms.

# Planning your route and staying on track

Before embarking too far down your research path, you should have had several discussions with your supervisor over the agreed direction of your study. Often researchers feel a little overwhelmed with the task in front of them and some are unsure how or where to start. There are some suggested links at the end of this document that may help you with this.

**💡 Tip**: It is also worth looking at the [CASP website](http://www.casp-uk.net/) which contains useful tools and checklists that help you evaluate the articles you find.

The [CASP website](http://www.casp-uk.net/) has a useful range of free downloadable resources which can help you structure your research strategy and help you shape your research criteria. The [CASP Checklists](https://casp-uk.net/casp-tools-checklists/) can help you determine which studies to focus on and which match the criteria you have laid out for your systematic review.

It should be noted that there is no definitive method of collating your reading and notes. Some people keep annotated notes within the records they have collected on specific database platforms (by creating an account on platforms such as Ovid). Some people annotate references collected in their reference libraries such as Endnote.

You can create your own simple [Information Inventory](https://subjects.library.manchester.ac.uk/ld.php?content_id=7824675). These can be used in conjunction with essay plans.

# Conclusion

* Keep your research title in mind.
* Carry out some scope searches and determine the range of search terms at this stage.
* Look at each component of the search and ensure each component is given due consideration when conducting the searches.
* Evaluate your results as you go along. Take a look at our online guide to [evaluating sources of information](https://www.education.library.manchester.ac.uk/mle/evaluating-sources/#/) for further support.
* If the results are not reflecting a particular part of your research or if you are losing focus speak to your supervisor.
* Beware of databases leading you down paths of research you are not interested in, keep focused on what you are interested in.

# Summary

Think about the scope of your research. Think about the range of your search terms. Think about the resources you need to use. Review and evaluate your results as you go along. Consult your supervisor sooner rather than later if problems arise.