

Advanced Research Skills: Conducting Literature and Systematic Reviews

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Title Page

This is where you can write your introduction.

Module 0 - How to use this Module

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I.

2. Module Topics, Outcomes and Goals

Learning Outcomes

By the end of this module you will:

1. Identify the research components you need to cover in your review.
2. Distinguish between the different characteristics of reviews so you can make an informed decision in identifying the appropriate review that will meet your scholarly requirements.
3. Describe how your chosen review method enriches the scholarly conversation and how it contributes to changes in scholarly perspective over time.
4. Recognize the limitations of your chosen review method and be able to articulate the role that it plays in scholarly communications.
5. Locate existing reviews.

Topics

[Hyper link/anchor to each part]

Survey: Review your Goals

This survey will help you outline your goals and objectives for the module. Your email address is collected only in order to send you a copy of your responses to help you reflect on and achieve your aims. Your individual responses will not be reviewed by others. This survey is an optional part of the module.

[Survey: Your Goals](#) [Edit survey]

3. Definitions of Academic Reviews

Types of Reviews and Why you use them

Academic reviews such as literature reviews and systematic reviews are aimed at assembling, critically evaluating and reviewing existing research on a central topic or research question. Some differences between the various types of reviews include the method for determining what research to include or exclude, the extent or scope of the review, and the duration of time required to complete the process. All reviews share the aim of collating and examining evidence, data, or research from a variety of resources into a new publication to address a central question or focus on a specific topic.

Literature Review

What is a Literature Review?

A **literature review** is an integrative summary of published research on a specific topic. The literature review seeks to synthesize what is already known about the topic, and sometimes, explicitly state what is not known, or not well understood. It can be the foundation for an original study, or it can be a standalone entity e.g. published article, depending on the needs or goals of the writer.

Why are they Important?

Literature reviews help authors and readers build their knowledge about a specific topic by synthesizing research on the subject. Literature reviews use published research to provide context to the topic and may expose debates within the field, gaps in the research, or provide a summary and analysis of research to date on the topic.

Systematic reviews

What are Systematic Reviews?

Systematic reviews bring together information from a range of sources to answer a specific research question. They differ from a traditional literature review or narrative review, in that they aim to review the research in an unbiased, rigorous and systematic way so that it can be used to support evidence-based practice.

There are **variations of systematic reviews** that you can use to analyze large amounts of literature. We define the different types in more detail below.

Definitions for Systematic Review include:

“A systematic review attempts to collate all empirical evidence that fits pre-specified eligibility criteria in order to answer a specific research question. The key characteristics of a systematic review are: a clearly defined question with inclusion & exclusion criteria; rigorous & systematic search of the literature; critical appraisal of included studies; data extraction and management; analysis & interpretation of results; and report for publication.” — [Duke University Medical Center Library & Archives](#)

“A literature review that is designed to locate, appraise and synthesize the best available evidence relating to a specific

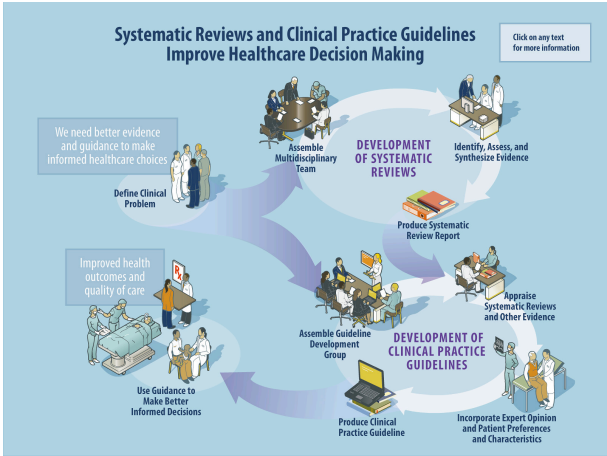
research question in order to provide informative and evidence-based answers. Systematic reviews follow well-defined and transparent steps and always require the following: definition of the question or problem, identification and critical appraisal of the available evidence, synthesis of the findings and the drawing of relevant conclusions” (Bolan et al., 2014 p.2).

Important Considerations about Systematic Reviews

A systematic review can take **at least a year to complete** and is usually **conducted by a team**. However, if you are not working in a team, or do not have a significant amount of time to complete your review, you can still apply the methods used in systematic reviews to your own research project. Keep in mind that as one of the main goals of a systematic review is to try and eliminate potential bias, working independently can be viewed negatively. If you must work independently, you should identify this limitation at the time of publication.

Why are Systematic Reviews important?

A systematic review can generally give us the most dependable answer to a specific research question, and it can identify gaps in our knowledge that require further research. It also communicates the strength of the available evidence and the quality of included studies. This indicates how much confidence practitioners, service users, managers, policy makers, and the popular media should have in the results (Gough & Richardson, 2018).



Systematic Reviews and Clinical Practice Guidelines improve healthcare decision making.

The various steps involved in systematic reviews and clinical practice guidelines in healthcare decision making are presented in the table below:

Step	Stage
<p>1. Define clinical problem*</p> <p>*Notes:</p> <ul style="list-style-type: none"> a. We need better evidence and guidance to make informed healthcare choices. b. You can either move onto Step 2 or Step 5 from here. 	
<p>2. Assemble a multidisciplinary team</p>	
<p>3. Identify, assess, and synthesize evidence</p>	Development of systematic reviews
<p>4. Produce systematic review report</p>	

<p>5. Assemble guideline development group**</p> <p>**Note:</p> <p>a. If you are coming from Step 4, you can skip this step.</p>	<p>Development of clinical practice guidelines</p>
<p>6. Appraise systematic reviews and other evidence</p>	
<p>7. Incorporate expert opinion and patient preferences and characteristics</p>	
<p>8. Produce clinical practice guideline</p>	
<p>9. Use guidance to make better informed decisions***</p> <p>***Note:</p> <p>a. Improved health outcomes and quality of care</p>	

Types of Systematic Reviews

There are many varieties of systematic reviews – [a typology of systematic reviews](#) may be helpful in determining the type of review best suited to your research. Some commonly found types of systematic reviews beyond the standard approach include:



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<https://pressbooks.library.ryerson.ca/graduatereviews/?p=65#h5p-9>



An interactive H5P element has been excluded from this version of the text. You can view it online here:

<https://pressbooks.library.ryerson.ca/graduatereviews/?p=65#h5p-10>

Picking Your Review

Determining the scope of your project is a very important step to take early on in the process. Understanding the wide variety of review types that exist can help you decide which one is best suited to the scope of your project. For example, if you want to do a systematic review, but will likely be working with mainly **qualitative** studies, you may want to consider a **qualitative evidence synthesis**. Or, if you are an independent researcher without the strength of a support team, you will likely be better off utilizing the flexibility of a **critical review** or a literature review, neither of which demand comprehensive or exhaustive searching, and have varying levels of appraisal, and options with regards to analysis.

What Type of Review is right for you?

[SystematicReview_DecisionTreeMethodologies_v3](#)

This is where you can add appendices or other back matter.