



Graduate Research Advanced Skills Program (GRASP)

Research Proposal Series

Literature Review – Searching (Health Sciences)

Vanessa Varis
Health Sciences Faculty Librarian
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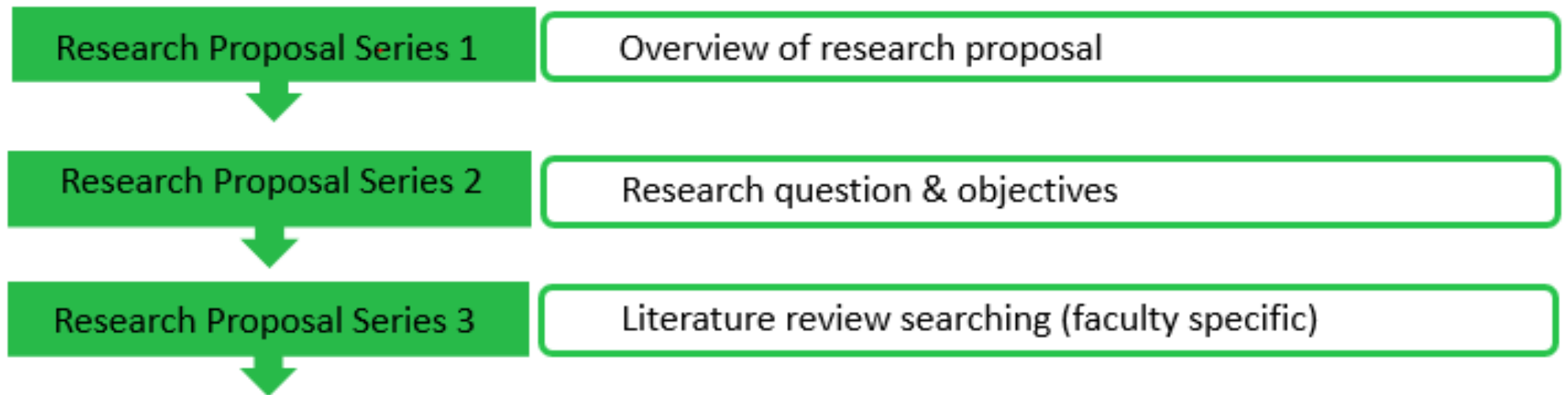


I acknowledge the traditional owners of the land on which Curtin Perth is located, the Whadjuk people of the Nyungar Nation.

I pay my respects to their Elders past and present, and recognise that this Country has been a place of teaching, research and learning for tens of thousands of years.



GRASP Research Proposal Series





This session will enable you to:

- **Learn** more about the literature review process
- Better **assess** which **databases** will be of most use to you
- **Plan** a database search and consider specific **techniques** to help find **relevant** material
- Find additional **help** and **support**



Literature review

As part of **research proposal for Milestone One** requirements:

- Literature review – demonstrate your knowledge of the relevant literature
 - “make adequate and intelligent reference to other works”
 - “sufficient knowledge of the literature”
- Methods and methodology
 - “methodology and methods suitable for the proposed study”

As a **precursor** to a more involved study or review, such as systematic review

As a **research project in itself** - as a peer-reviewed publication in a journal, or as a report from a research funded project



Planning a literature review

Begin with a clear **research question**, or set of questions

- Consider inclusion/exclusion criteria, limits

Determine **type of information** to include and **sources** to search

- Everything, peer reviewed only, grey literature, etc.

Develop a **search strategy**

- Iterative process

Find full text of articles

Manage and document **search results**



Sage Research Methods Online

[Sage Research Methods online](#) – designed to help create research projects and understand the methods behind them. It provides step by step guides to quantitative and qualitative data analysis as well as useful case studies of methods applications, and definitions of research methods.

Project Planner:

Provides useful steps to plan your research project and includes a section on reviewing the literature: <https://methods.sagepub.com/project-planner/reviewing-the-literature>

Help videos:

- [How to use Sage Research Methods](#)
- [Using Sage Research Methods to do a Literature Review](#)
- [Other Help videos](#) including how to use the Research Methods Map

Don't forget!

Quick filters

[Clear filters](#)

All content

Content available to me



Types of databases

- A database is a searchable electronic index of published resources
- Database **content** can include articles and research from journals and newspapers, ebooks, multimedia, standards, statistics, conference papers, theses, datasets, tests & measures...
- Can be **multidisciplinary** (eg. Proquest) or **discipline specific** (eg. Medline)
- Can be **full text** or **abstract only**, or a combination of both

Selecting a database



Library-subscribed databases:

databases.library.curtin.edu.au

Subject specific databases

A screenshot of a web interface for selecting databases. It features two dropdown menus stacked vertically. The top dropdown menu is labeled 'All subjects' and has a small downward arrow on its right side. The bottom dropdown menu is labeled 'All databases' and also has a small downward arrow on its right side. The entire interface is enclosed in a light gray border.

[A](#) [B](#) [C](#) [D](#) [E](#) [F](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#)

Multidisciplinary

- ProQuest – includes health & medicine
- Scopus, Web of Science – also good for citation searching
- Informit – Australian material, includes health collection

Medicine/health specific

- Medline, Embase, PsycINFO, Global Health, JBIEBP – available on the Ovid platform
- CINAHL, SportDiscus – available on the EBSCO platform

Selecting a database



Freely available databases:



Includes the Cochrane Database of Systematic Reviews & the Cochrane Central Register of Controlled Trials (CENTRAL)



[MEDLINE, PubMed, and PMC \(PubMed Central\): How are they different?](#)



Grey literature sources – Trove (Australian library collections), clinical trials registries, clinical guidelines repositories, and more ..



Research question

Formulate a clear question, or set of questions

- Can use PICO (Patient, Intervention, Comparison, Outcome) framework for quantitative
- Can use PICo (Population, Interest, Context) framework for qualitative

A clear question guides the research process

- Informs the search strategy
- Can be complex and consist of sub-questions
- Must be able to be segmented into searchable components

The question, or aim, may change during the process



Translating the research question

Sample topic

What is the feasibility of using wearable technology to measure screen time in children aged 4 – 10?



Concept grid

What are the major themes or concepts in the topic?

What is the feasibility of using wearable technology to measure screen time in children aged 4 – 10?

Concept 1	Concept 2	Concept 3
Wearable technology	Screen time	Children



Concept grid

What alternative terms or spellings can you use?

Wearable technology	Screen time	Children
Wearable technology	Screen time	Child
Wearable camera	Television or TV	Toddler
Wearable sensor	Computer	Preschooler
	Ipad	
	Tablet	



Developing the search strategy

Searching is an iterative process

Consider:

- Search operators
- Fields to search
- Search limits
- Include subject headings?

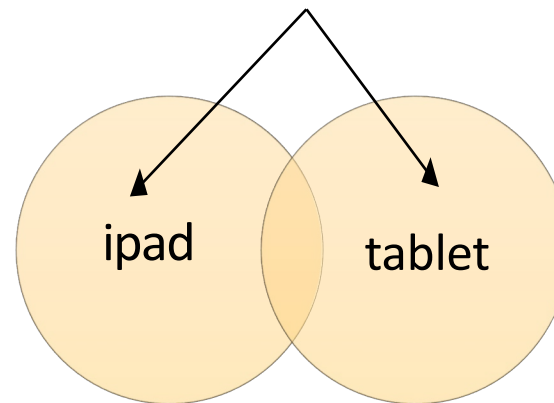


Boolean operators

OR = 'either/or'

Use between *similar terms* - Broadens your search

ipad **OR** tablet



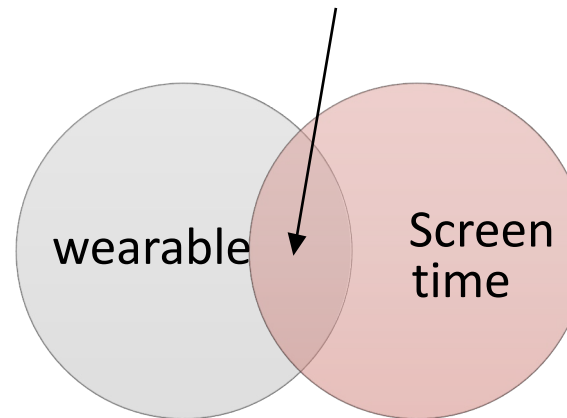


Boolean operators

AND = 'as well as'

Use between **different concepts** - Narrows your search

wearable **AND** screen time





Truncation

child* = child, child**ren**, child**hood**

Wearable technology	Screen time	Children
wearable technology	“screen time”	child*
wearable camera	television* or TV	toddler*
wearable sensor	computer*	preschool*
	ipad*	“pre-school*”
wearable*	tablet*	



Additional search tips

Phrase searching

“screen time”

Wildcard (? or #)

immuni?ation = immunisation, immunization

Proximity searching (ADJ or NEAR)

wear* **ADJ3** technolog*



Search limits

Apply any limits at the **end of the search**. Limits might include:

- **Time periods**, eg. last 10 years
- **Language**, eg. English only
- **Publication type**, eg. , Systematic Review, Clinical Trial, etc
- NOTE on limiting to “**Full Text**”

Search strategy



What is the feasibility of using wearable technology to measure screen time in children aged 4 – 10?

wearable*

AND

“screen time” **OR** computer* **OR** television*

AND

child* **OR** toddler*



Proquest

The ProQuest platform hosts a great amount of multidisciplinary content including scholarly and non-scholarly journals, books, multimedia, theses, newspapers and more. **Large full-text content.**

Example keyword search

Advanced Search

Command Line

Thesaurus

Field codes

Search tips

wearable*

AND



"screen time" OR computer* OR television*

AND



child* OR toddler*



Proquest search tips

Search fields:

Anywhere ▼

VS

Anywhere except full text – NOFT ▼

Make use of LIMITS, eg:

Source type

Include	Exclude	Source type
<input type="checkbox"/>	<input type="checkbox"/>	Scholarly Journals
<input type="checkbox"/>	<input type="checkbox"/>	Newspapers
<input type="checkbox"/>	<input type="checkbox"/>	Wire Feeds
<input type="checkbox"/>	<input type="checkbox"/>	Dissertations & Theses
<input type="checkbox"/>	<input type="checkbox"/>	Trade Journals



Medline

Bibliographic database by the U.S. National Library of Medicine containing > 28 million references to journal articles in life sciences with a concentration on biomedicine. **Combination full-text/abstract.**

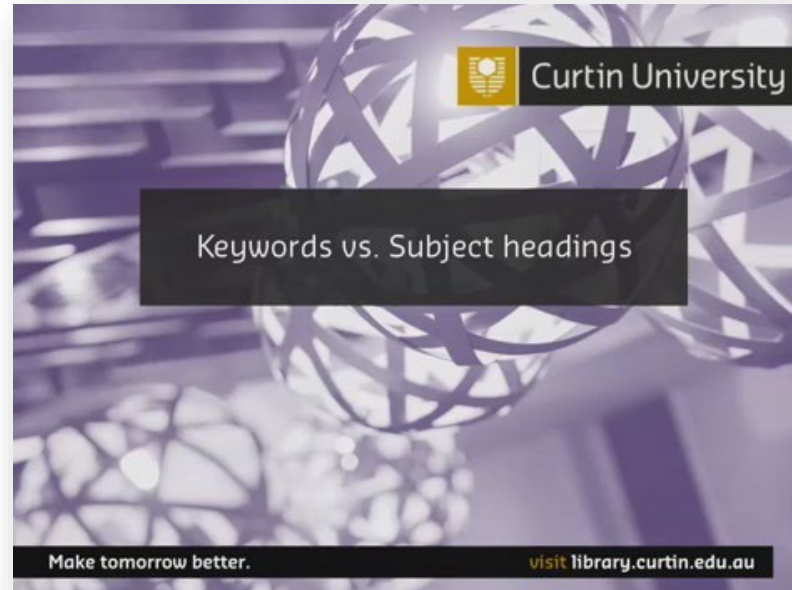
In Advanced Search, the **default keyword search** is a multi-purpose (mp) search:

# ▲	Searches	Example keyword search
1	(wearable* and ("screen time" or computer* or television*) and (child* or toddler*)).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	

Keywords vs Subject Headings



Curtin University



<https://youtu.be/bNIG4qLuhJA> (3.30m)

Medline - MeSH



Medline records are indexed with **Medical Subject Headings (MeSH)**, applied by staff at the NLM.

Unique Identifier: 31122998

Title: **Feasibility of wearable cameras to assess screen time** and **time** spent restrained in children aged 3 **to** 5 years: a study protocol.

Source: BMJ Open. 9(5):e028265, 2019 05 22.

Record Owner: From MEDLINE, a database of the U.S. National Library of Medicine.

Status: MEDLINE

Authors: [Downing_KL](#); [Janssen_X](#); [Reilly_JJ](#)

MeSH Subject Headings: [Child Restraint Systems](#)
[Child, Preschool](#)
[Feasibility Studies](#)
[Humans](#)
[Infant Equipment](#)
[*Restraint, Physical](#)
[*Screen Time](#)
[*Sedentary Behavior](#)
[*Video Recording](#)
[*Wearable Electronic Devices](#)



Medline - MeSH

	Wearable technology	Screen time	Children
<i>Keywords</i>	wearable*	“screen time” television* computer*	child* toddler*
<i>MeSH subject headings</i>	Wearable Electronic Devices/	Screen Time/	Child/ Child, Preschool/



Medline - MeSH

MeSH headings can be included in the strategy for a more comprehensive search:

# ▲	Searches	Example keyword & subject heading search
1	wearable*.mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	
2	Wearable Electronic Devices/	
3	1 or 2	
4	("screen time" or television* or computer*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	
5	Screen Time/	
6	4 or 5	
7	(child* or toddler*).mp. [mp=title, abstract, original title, name of substance word, subject heading word, floating sub-heading word, keyword heading word, organism supplementary concept word, protocol supplementary concept word, rare disease supplementary concept word, unique identifier, synonyms]	
8	Child/ or Child, Preschool/	
9	7 or 8	
10	3 and 6 and 9	

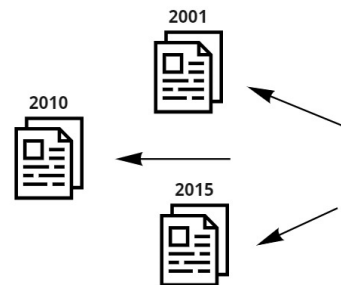


Citation searching

A way of finding relevant research in a field by looking at what an article has referenced, and also who has since used that article as a reference.

Many databases allow you to follow citations, including **Scopus**, **Web of Science**, and **Google Scholar**.

Backward citation searching
Older publications



Forward citation searching
Newer publications

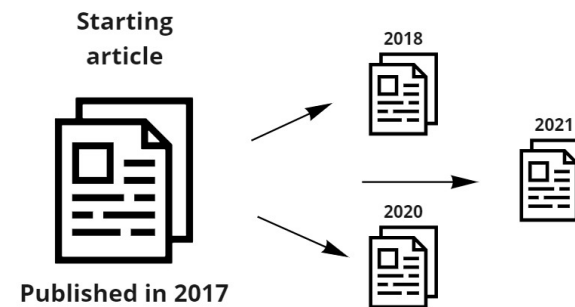


Image: <https://guides.library.unisa.edu.au/GreyLiterature/CitationSearching>

Citation searching



Scopus

Document title	Authors	Source	Year	Citations
Article • Open access Feasibility of wearable cameras to assess screen time and time spent restrained in children aged 3 to 5 years: A study protocol	Downing, K.L., Janssen, X., Reilly, J.J.	BMJ Open, 9(5), e028265	2019	3

[Show abstract](#) [Find it](#) [Related documents](#)

Google Scholar

Feasibility of wearable cameras to assess screen time and time spent restrained in children aged 3 to 5 years: a study protocol

[KL Downing](#), [X Janssen](#), [JJ Reilly](#)

BMJ open, 2019 · [bmjopen.bmj.com](#)

Introduction

Wearable cameras may help overcome the limitations of existing tools to measure young children's sedentary behaviour, but their use introduces a range of ethical challenges. The primary aim of this study is to determine the feasibility of using wearable cameras to measure the two aspects of sedentary behaviour currently included in evidence-based guidelines (ie, screen time and time spent restrained). If shown to be feasible, a

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Grey literature

Can be both **published and unpublished** research, produced by government, academia, business and industry, **not controlled by commercial publishers**

Examples include: theses, govt/company reports, conference papers, manuals, handbooks, trial registers, etc

Can be a good source of up-to-date literature for **newer areas of research**

In some areas (eg. social sciences, govt policy), a large amount of the evidence is communicated through grey literature



Grey literature - Theses

<http://library.curtin.edu.au/find-resources/theses/>

Find theses written by master and doctorate students from Curtin and around the world:

- [Curtin theses \(print and digital\) in the library catalogue](#)
- [espace](#): Curtin's institutional repository containing the research output of Curtin.
- [Trove](#): The National Library. Includes Australian theses in digital and print form.
- [OAlster](#): Search the world for a thesis on your subject using Advanced Search and Content Type "thesis"
- [Networked Digital Library of Theses and Dissertations](#)
- [ProQuest Dissertations and Theses](#)
- [WorldCat](#): Find items in libraries near you.
- [British Library – EThOS e-theses online service](#): UK theses. Requires free registration to access.



Literature mapping

Tools for mapping scholarly literature

[Connected Papers](#)

Uses similarity to identify related papers based on one paper that you have already identified

[Inciteful](#)

Builds a network of papers from citations and allows you to enter two papers and it will give you an interactive visualization showing you how they are connected

[ResearchRabbit](#)

Creates citation maps as well as networks of recommended articles based on user provided collections of articles

[LitMaps](#)

Creates interactive literature maps of collections of articles that make up different research topics.



Finding full text

- “Find It” button



- [Document delivery](#)

If Curtin doesn't have it, we will attempt to source it from another library

- [Recommend an item](#)

Suggest a new item for purchase

- [Borrowing from other libraries](#)



Information management

Document your search strategy

- Keep a record of search terms and databases used
- Save it on the database you are searching

Manage search results

- Export from databases to EndNote
- Store pdfs – where?



Save searches & create alerts

First - create a database/platform login

Save searches to save time

Use **Alerts** to keep current on your research topic

- References to **articles on a topic** or **subject** search
- **Contents pages** of recent journal issues
- **Citations** to specific articles or authors



Where to find help

[Research Toolkit](#)

[Health Resources guide](#)

[Systematic Literature Reviews guide](#)

[Systematic & Scoping Reviews guide](#)

[GRASP webpage](#)

Email: LibraryResearchSupport@curtin.edu.au