SPX371

Searching the literature

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What this presentation covers

- Searching principles and tips
- Scholarly Searching
  - Find the best sources
- Peer Review process
Search Process Summary

1. Task analysis
   What is it really about? Can you reword it to express the actual topic and task?
   PICO or PICo can help with this (see later slides)

2. A search grid can help organize your thinking

<table>
<thead>
<tr>
<th>Concept A</th>
<th>Concept B</th>
<th>Concept C</th>
</tr>
</thead>
<tbody>
<tr>
<td>cats</td>
<td>walking</td>
<td>health</td>
</tr>
<tr>
<td>dogs</td>
<td>running</td>
<td>happiness</td>
</tr>
</tbody>
</table>

3. Choose appropriate database for your subject area
   Often need more than one
   NB. Google Scholar is good but lacks help tools and advanced features for research
Databases with sport content

– start with these databases: some have full-text articles and also act like an INDEX
...all have “link out” methods to get full text articles

- ProQuest or/Academic search Elite
- Google Scholar
- Web of Science
- Scopus
- PubMed
- Australian Sport Database (AUSPORT)
- SportDiscus (via EBSCO)
- PsycInfo
- Cochrane Library
How do I know if a journal is PEER REVIEWED?

• Some databases have a “Peer reviewed” or “Academic” limit (EBSCO and Proquest databases)
• Web of Science and Scopus content mostly PR
• Cochrane Library documents are all PR
• Ulrichsweb database — gives PR information for each title
Topic analysis: What is the PICO method?

PICO is a method of forming a research question in a clear defined way that then allow the creation of logical effective search strategy

PICO stands for:

• Patient/Population - Who or What?
• Intervention - intervention, treatment or therapy
• Comparison - alternative intervention or placebo or none
• Outcome - What is your desired outcome?
Your research question

Try to formulate a clear research question that will lead to a clear search strategy

A poor research question: “Is gardening good therapy?”
Think about why this is not a good research question.

Better: “Does regular gardening lead to higher levels of perceived wellbeing in persons with acquired brain damage than regular aerobic exercise?”

This can be analysed with PICO:
P: Persons with ABD
I: Regular gardening
C: Regular aerobic exercise
O: Improved wellbeing
Producing these search terms...

It can be useful to lay your search term out in a table using PICO as your starting point...these can become your search terms

<table>
<thead>
<tr>
<th>P</th>
<th>I</th>
<th>C</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquired brain damage</td>
<td>Gardening</td>
<td>Aerobic exercise</td>
<td>Wellbeing</td>
</tr>
<tr>
<td>Traumatic brain injury (more?)</td>
<td>Horticultural therapy (more?)</td>
<td>(more?)</td>
<td>(more?)</td>
</tr>
</tbody>
</table>
Very Qualitative Questions - PICO

PICO is useful for quantitative and many qualitative topics, but for some very qualitative topics it help to use a variation called PICO

Qualitative and textual reviews: use PICO instead

P- Person / Population

I- Phenomenon of Interest

C- Context

— Re-focus to phenomena of Interest, not intervention,
— and Context not comparator

The phenomena of Interest relates to a defined event, activity, experience or process

Context is the setting or distinct characteristics
• What are coaches' experiences of providing training to para athletes in Australia?

Source: Aromataris 2012
Search Strategies

• Choose appropriate databases (you may need more than one!)
• Carefully construct your search strategy
• Keep a Search History (databases will keep a history for each session)- login to more permanently keep search strategies and results
• Critically evaluate your results!
Searching

• All databases use the same syntax...

• **AND** = Combine different concepts
  • e.g. Hand and injury

• **OR** = Add similar concepts e.g. cat or dog

• **NOT** = Exclude concepts e.g. bones not ulna
Example: Our PICo search in SportsDiscus
Advanced Search Techniques

• Truncation (*) and Wildcard (?)
• Useful for word variant searching
  (Symbols may vary between resources)
  E.g. wom?n; fluid* (for fluid, fluids, fluidics..)
  (For Google, use ~ e.g. ~fluid)
  • (check out the help / search tips on the database you are using)
Advanced Search Techniques (continued)

• Thesaurus --directs you to correct subject terms (like PubMed’s MeSH system). Usually more accurate than keyword searching

• (Not available in every database)

• Use database features like “Limits” to target your search

• Specialized databases (PubMed, SportDiscus) may have special tools for health searching

Want to master PubMed searching using the MeSH controlled vocabulary?:
Watch this wonderful short tutorial: https://www.youtube.com/watch?v=uyF8uQY9wys
I really want the article but can’t get the full text!

Try a Google Search

- [www.google.com](http://www.google.com) (not Google Scholar)
- Search for the title of your ARTICLE in parentheses, e.g. “understanding your cat”

You will get links to others’ references, but you may also just get the article. (Persistence and Patience sometimes pays)
Evaluate! - Is it evidence-based?

- Who wrote it? (authority?)
- Date (outdated?)
- Subject coverage (relevant?)
- Bias (not impartial?)
- Format (research or popular?)
- Referenced (sources documented?)
- Where is the source -- eg. Academic / peer reviewed journal, or is it a trade magazine?
- What is the source -- Primary, Secondary, Tertiary --- evidence-based?

Much more information in our Evaluation Guide
http://libguides.usc.edu.au/help-evaluating
Getting Help

• Ask a Librarian:

In Person at the Information Desk
By Telephone 5430 2803
Email Infodesk@usc.edu.au

Or ‘Ask A Librarian’ online

Use the LibGuide: libguides.usc.edu.au/sport