

Database Search Tips and Techniques

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Search

Range of sources to identify studies

Greenhalgh H, T, Peacock R. Effectiveness and efficiency of search methods in systematic reviews of complex evidence: audit of primary sources. *BMJ* 2005 Nov5;331(7524):1064-5

Published literature

- Electronic bibliographic databases

- Citation chasing

- Handsearching

Unpublished literature (grey)

- All of the above

- Additional sources

- Handsearching

- Contacts with researchers



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Search stages

Development of strategy - iterative

- ✓ Choice of search terms
- ✓ Combinations
- ✓ Limits

Adapting search in chosen sources

- ✓ Adjusting subject headings
- ✓ Editing syntax
- ✓ Revising limits



Search Process:

What is the full range of keywords, phrases and subject headings that capture a concept thoroughly?



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Search Process:

How should keywords, phrases and subject headings be combined to capture concepts logically?

AND,
OR,
ADJACENCY



Subject heading

Subject field

Definition

Explode
Qualifiers

Keyword

Title & abstract
fields

Synonyms
Spellings

Truncation

SUBJECT HEADINGS

- Controlled vocabulary
- Searches descriptor or subject field
- Increases relevance
- Indexing is at most specific level
- Explode includes more specific items in Tree
- Subheading qualify
- Indexers are only human eg Calves (about legs) indexed with Cattle/



TOOLS for Subject Headings

- *Scope notes* – definition and search notes
- *Entry terms* – useful for finding synonyms
- *Date introduced* – history of when used
- *Tree structure* – more information
- *Explode* – gather more specific terms
- *Focus* – arbitrary importance of concept
- *Subheadings* - qualifiers



KEYWORDS

- Not standard
- Searches many fields, usually title and abstract
- Use truncation (parts of words) or phrases
- Degree of irrelevancy
- Need to include synonyms, variant word endings (plurals, adjectives), variant spelling (US/UK)
- Useful when 0 subject heading or RECENT literature



TOOLS for Keywords

Truncation *

Wildcards ?, #, *

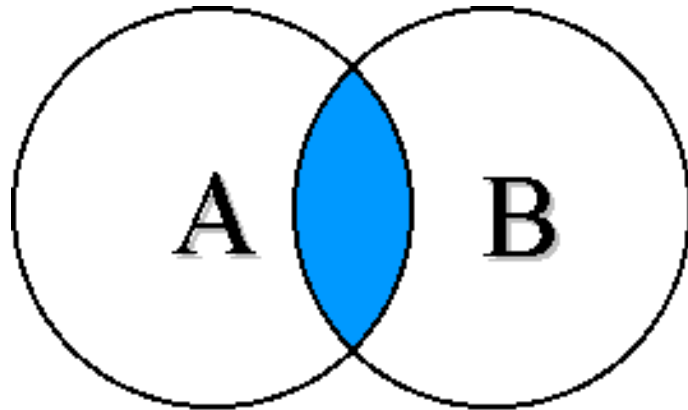
Adjacency, near, within

Phrase " "

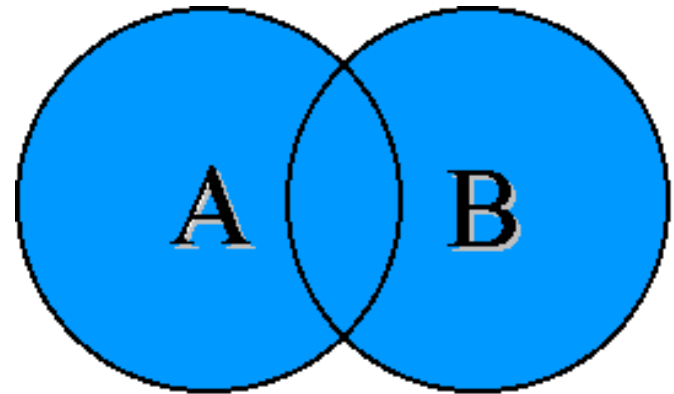


PUTTING IT ALL TOGETHER

AND



OR

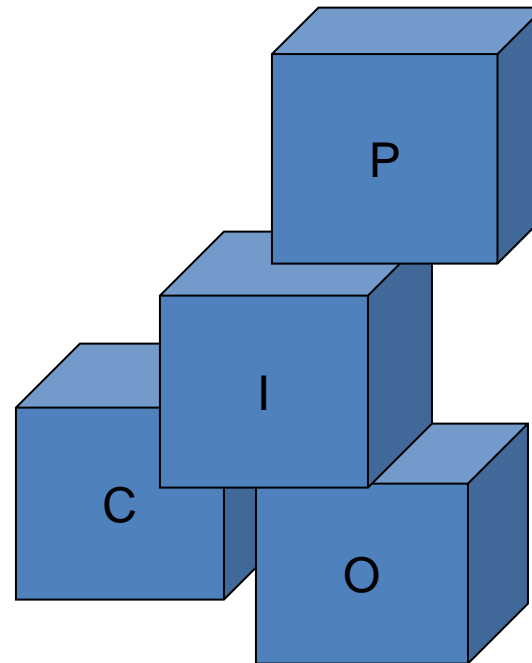


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BUILDING BLOCKS

[PICO Worksheet](#)



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Among (P) does (I) or (C) effect
(O)?



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**Among children with acquired
brain injuries does the use of wii
improve balance?**



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Analysed

P = Children with acquired brain injuries

I = Wii

C = traditional rehab

O = improved balance



TUTORIALS ON SEARCHING TECHNIQUES

[Medline Ovidsp](#)

[Pubmed](#)

[Web of Science](#)



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