AHS 7000: TOOLS FOR SEARCHING THE LITERATURE

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OVERVIEW

• Libraries website
• Developing a research question
• Searching strategies
• Database selection
• Organizing information
• Open access and data management
WEBSITE ACCESS

- Use **UMnet ID** for library account, additional OSS search results, requests/Document Delivery, remote access to all online resources

- Use **UM student card** for physical borrowing/printing
Have you used the Libraries website for research in the past? If so, how? Was it helpful?
WEBSITE RESOURCES AND TOOLS

- **One Stop Search**
  - Basic or advanced option (limits for articles, books/eBooks, etc.)
  - “My Favorites” (available with sign-in) – saved OSS items/searches

- E-journals (A-Z or search by subject with Browzine)
- Search Citation (finds a specific citation – formerly “Citation Linker”)
WEBSITE RESOURCES AND TOOLS

- **Databases A-Z**
- **Subject Guides** (Graduate Student Resources, etc.)
- **Help Hub** > Graduate Students
- **Document Delivery** (access 2 ways):
  - Libraries homepage > Graduate Students > Document Delivery
  - Sign in to OSS > Select item title > Request
SEARCHING PROCESS

- Develop a question
- Apply PICO/identify key terms
- Consider related terms or synonyms for your topic
- Apply database-relevant searching strategies and limits
RESEARCH TOPIC

You are investigating approaches that might decrease clients’ depressive symptoms. You are particularly interested in physical activity and the outcomes achieved for people with posttraumatic stress disorder.
PICO/CONCEPT MAP

• Population
• Intervention
• Comparison
• Outcome

“What are my key terms?”
You are investigating approaches that might decrease clients’ depressive symptoms. You are particularly interested in physical activity and the outcomes achieved for people with posttraumatic stress disorder.
Q: Among individuals with posttraumatic stress disorder, does physical activity lead to a decrease in symptoms of depression?
Q: Among individuals with posttraumatic stress disorder, does physical activity lead to a decrease in symptoms of depression?

**Population**
- posttraumatic stress disorder
- post-traumatic stress disorder

**Intervention**
- physical activity
- exercise
- fitness

**Outcome**
- depression
- depressive symptoms
SEARCHING STRATEGIES

Truncation

• prevent* = prevent, prevents, prevention, preventative
• educat* = educate, educating, education, educated
• step* = step, steps, stepping, stepped 😊
• step* = Stephan, Stephanie, Stephen X
• step* = “steps to success” X
SEARCHING STRATEGIES

Quotation Marks

• “older adult*”
• “quality of life”
• “Parkinson’s disease”
SEARCHING STRATEGIES

Boolean Operators

• AND
  • Useful for connecting your key terms
  • Narrows results

• “vitamin D” AND “bone density”
• “cardiovascular disease” AND prevent*
SEARCHING STRATEGIES

Boolean Operators

• OR
  • Useful when incorporating synonyms or words with various spellings
  • Increases your search results

• Behavior OR behaviour
  • (Depression OR anxiety) AND...
SEARCHING STRATEGIES

Boolean Operators

• NOT
  • Useful for removing unnecessary terms

  • step* = step, steps, stepping, stepped 😊
  • step* = Stephan, Stephanie, Stephen ✗
  • step* = “steps to success” ✗
SEARCHING STRATEGIES

Boolean Operators

• NOT
  • Useful for removing unnecessary terms

• Step* NOT (“steps to success” OR Stephanie OR Stephen OR Stephan)

• (“older adult*” NOT (child* OR teen* OR “young adult*”)) AND...
SEARCHING STRATEGIES

Subject Headings

- Reduces complications with synonyms, alternative spellings, acronyms
  - i.e. one heading for ALS, Lou Gehrig’s Disease and Amyotrophic Lateral Sclerosis
- Can create opportunity to focus results further
- Available in most databases (using “Advanced Search”); or by selecting MeSH from the dropdown menu in PubMed

- **Keep in mind:** indexing takes time; subject headings may not be attached to most recent publications in your field
Physical activity which is usually regular and done with the intention of improving or maintaining PHYSICAL FITNESS or HEALTH. Contrast with PHYSICAL EXERTION which is concerned largely with the physiologic and metabolic response to energy expenditure. Year introduced: 1999

Tapering-off physical activity from vigorous to light, to gradually return the body to pre-exercise condition and metabolic state. Year introduced: 2014

Medial Tibial Stress Syndrome
SKELETAL MUSCLE pain and tenderness along the posteromedial TIBIA resulting from exercise such as running and other physical activity. Year introduced: 2011

Usual level of physical activity that is less than 30 minutes of moderate-intensity activity on most days of the week. Year introduced: 2010
MeSH terms are also located at the bottom of an article’s record:

<table>
<thead>
<tr>
<th>Publication type, MeSH terms</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Publication type</strong></td>
</tr>
<tr>
<td><strong>MeSH terms</strong></td>
</tr>
</tbody>
</table>

* Symbol indicates that the article focuses heavily on that topic (also known as “MAJR MeSH”)

Option for you to select “MAJR” and sub-categories (i.e. “Aging/physiology” instead of “Aging”) when searching in MeSH
Subject Headings Activity:
Use PubMed’s MeSH or a database of your choice to look up the subject heading for a term related to your research interests.

What did you find?
PICO/CONCEPT MAP

Q: Among individuals with posttraumatic stress disorder, does physical activity lead to a decrease in symptoms of depression?

Population
- posttraumatic stress disorder
- post-traumatic stress disorder

Intervention
- physical activity
- exercise
- fitness

Outcome
- depression
- depressive symptoms
Q: Among individuals with posttraumatic stress disorder, does physical activity lead to a decrease in symptoms of depression?

Population
"posttraumatic stress disorder"
"post-traumatic stress disorder"

Intervention
"physical activity"
OR
exercise
OR
fitness

Outcome
depressi*

#1
#2
#3
Q: Among individuals with posttraumatic stress disorder, does physical activity lead to a decrease in symptoms of depression?
Q: Among individuals with posttraumatic stress disorder, does physical activity lead to a decrease in symptoms of depression?

(“posttraumatic stress disorder” OR “post-traumatic stress disorder”) AND (“physical activity” OR exercise OR fitness) AND depressi*
SEARCHING STRATEGIES

1. “posttraumatic stress disorder”
2. “post-traumatic stress disorder”
3. 1 OR 2
4. “physical activity”
5. Exercise
6. Fitness
7. 4 OR 5 OR 6
8. Depressi*
9. 3 AND 7 AND 8

Also note:
• Date searched
• Database used
• Number of results
• Database limits
DATABASE SELECTION

• Will likely require multiple resources
• Specialized vs. multidisciplinary
• Google Scholar
• Subject Guides for suggestions
• Consider method of sorting (for results), subject headings, and limits to be used
<table>
<thead>
<tr>
<th>DATABASE</th>
<th>COVERAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>CINAHL</td>
<td>Clinical, theory, most nursing coverage and allied health</td>
</tr>
<tr>
<td>PubMed</td>
<td>Clinical focus, good coverage</td>
</tr>
<tr>
<td>Scopus</td>
<td>Multidisciplinary</td>
</tr>
<tr>
<td>PsycInfo</td>
<td>Mental health, psychiatry, psychology</td>
</tr>
<tr>
<td>ERIC</td>
<td>Education</td>
</tr>
<tr>
<td>SportDiscus</td>
<td>Sport/sport medicine</td>
</tr>
<tr>
<td>Sociological Abstracts</td>
<td>sociology</td>
</tr>
<tr>
<td>Cochrane Library</td>
<td>Systematic Reviews</td>
</tr>
<tr>
<td>Joanna Briggs Institute</td>
<td>Systematic Reviews, best practice</td>
</tr>
</tbody>
</table>
EMPLOYING YOUR SEARCH STRING

- Combine keywords and subject headings
- Add database limits (i.e. date, language, etc.)
- Iterative process – you may need to make adjustments to the search based on your results
- Stay organized – keep track of databases searched (when?), limits, keywords, subject headings, etc.
MANAGE RESULTS

Save your search string
- Create alerts to prevent re-searching (this may require setting up a free account with database provider)

Save or export your citations
- Use a folder system in a database or OSS’s “My Favorites”
- Option to export as RIS/import into citation management system
ORGANIZING INFORMATION

• Zotero
• Mendeley
• EndNote

• RefWorks subscription no longer active
  • Migrate resources before end of September

• Citation Management Software Subject Guide
  • Comparison charts

• Fall workshops available for Mendeley and EndNote via Researcher Workshops Series
Tri-Council Requirement (Tri-Agency Policy, 2015)

Two Types:
- Gold OA
  - publishing in an OA journal (openly accessible)
  - UManitoba discounts available and growing (listed on Libraries’ OA Guide)
- Green OA
  - publishing in a subscription-based journal and self-archiving your work in a repository

Additional OA resources include:
- SHERPA/Romeo (info on self-archiving policies)
- DOAJ (directory of quality, open access, peer-reviewed journals in various fields of study)
DATA MANAGEMENT

• Benefits of a DMP:
  • Helps you find data when needed
  • Share data with collaborators
  • Protect data from loss
  • Reuse data in future studies

• Tri-Agency released Data Management Policy (draft)
DATA MANAGEMENT

• **Data Storage and Security:**
  • Use the “3-2-1 backup rule”
    • 3 copies
    • 2 different locations (onsite and off)
    • Keep them in more than 1 medium

• **Data Documentation:**
  • Include additional information needed to understand and reuse your data (i.e. variable name/meaning, precision of data, units used, etc.)
DATA MANAGEMENT

• **Sharing Data:**
  • Sharing data (as part of your DMP) will depend on:
    • Grant stipulation
    • Journal’s policy
    • Data types you generate

• Data can be shared in repositories such as Dataverse
  • [Dataverse Researcher Guide](#) available via Libraries
  • Dataverse workshop available Winter 2019 via Researcher Workshops Series (April 18)
  • Also: Basic DMP session (Feb 14) and Filling out a DMP (Feb 21)
DATA MANAGEMENT

• **Online tools for generating DMPs:**
  • DMP Assistant: [https://portagenetwork.ca](https://portagenetwork.ca)
    • Free to create an account
    • Provides a template (with questions) and examples
    • Collaborators can work on the same DMP
    • Export options include pdf, csv, html, text, docx, xml, etc.
    • English and French
WORKSHOP OPPORTUNITIES

• GradSteps
  • Aggregate Statistics
  • Visualizing Data Using Maps and Charts
  • Keeping Current, Keeping Alert

• Researcher Workshops Series
  • Managing Your Research Identity Using ORCID
  • Statistics Canada Surveys (microdata)
  • Introduction to EndNote
Services Desk
• Dafoe@umanitoba.ca
• 204-474-9844

“Ask Us” virtual chat
• Umanitoba.ca/libraries

Subject Specialists
• sarah.clark@umanitoba.ca
• 204-228-9189