Library Instruction for PTOT 514 Research Methodology

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Learning Objectives

• Planning literature searches
• Searching PubMed and other physical and occupational therapy databases
A Model of the Research Process

1. Identify the Research Question
2. Design the Study
3. Methods
4. Data Analysis
5. Communication

Review of Literature

1. **Identify a Research Question**
2. **Conduct Literature Searches**
3. **Critical Appraisal**
4. **Design the Study**

The process is cyclical, with feedback loops between steps.
Planning Literature Searches

• Many medical articles are published every year.

• Information is transmitted so fast via the Internet. Lots of articles are published on the Web before print.
Planning Literature Searches

• Identify a research question or topic that interests you
• Clearly define your topic
• Choose appropriate concepts and search terms that represent your topic
• Determine the best resources for your search
Planning Literature Searches

- Conduct keyword search or advanced search
- Review the search results
- Repeat your search as needed
Developing Search Strategies

Research Topic:
Find articles about rehabilitation programs for patients with stroke
Developing Search Strategies

- **Determine** the concept(s)

<table>
<thead>
<tr>
<th>Concept A</th>
<th>Concept B</th>
</tr>
</thead>
<tbody>
<tr>
<td>rehabilitation</td>
<td>stroke</td>
</tr>
</tbody>
</table>
Developing Search Strategies

**Boolean Operator: AND**

- **contain both terms**

  rehabilitation AND stroke

Narrow down the search
Developing Search Strategies

- **Boolean Operator: OR**

  "rehabilitation OR intervention"

**Broaden the search**

Contains any of two terms
Boolean Operators: NOT

Eliminate the records you don’t want

adults NOT children

Narrow down the search
Developing Search Strategies

- **Truncation**
  - Truncation is used when searching for suffix variations, e.g. therap* retrieves therapy, therapies, therapist, and therapists

- **Quotation marks**
  - Search the exact phrase, e.g. “intervention program”

- **Search strings**
  - (rehabilitation program **OR** intervention program) **AND** stroke
PTOT Databases

- PubMed: Medicine, allied health, and more
- CINAHL with Full Text: Nursing and allied Health
- OT Search: Occupational therapy
- OT Seeker: Evidence-based OT practice
- PEDro: Physiotherapy evidence-based practice
- SPORTDiscus with Full Text: Sports & sports medicine
- PsycINFO: Psychology and psychiatry
Introduction to PubMed

• PubMed is one of the largest and most heavily used medical bibliographic databases in the world.
• It was developed by the National Library of Medicine (NLM).
Introduction to PubMed

- **Scope**: Medicine, PTOT, and more
- **Coverage**: 1948 to the present
- **Source**: Over 5,000 biomedical journals and more than 18 million citations
- **Type of Articles**: case reports, randomized controlled trials, clinical guidelines, etc.
Click on the Idaho Health Sciences Library link.
PubMed Search Screen

To get started with PubMed, enter one or more search terms.

Search terms may be topics, authors or journals.

NLM/NCBI H1N1 Flu Resources:
- Newest 2009 H1N1 Flu Outbreak Sequences
- Citations recently added to PubMed
- MedlinePlus (consumer health information)
- Enviro-Health Links

The NIH Public Access Policy May Affect You

Does NIH fund your work?

Then your manuscript must be made available in PubMed Central

How?
If you publish in one of these journals, they will take care of the whole process.
Why is MeSH Important?

- **Subject Search**
  - Medical subject headings: a thesaurus in a hierarchical structure
  - Controlled terms that describe the content of the article are used for searching citations.
Why is MeSH important?

- Improves **precision** by defining the scope of terms while searching e.g. stroke-cerebrovascular accident
- Increases **recall** by retrieving documents they employ different terms for the same concept.
- MeSH Database
MeSH is the U.S. National Library of Medicine’s controlled vocabulary used for indexing articles for MEDLINE/PubMed. MeSH terminology provides a consistent way to retrieve information that may use different terminology for the same concepts.

- Use the MeSH database to find Medical Subject Heading Terms and build a search strategy.

MeSH database tutorials:

- Searching with the MeSH Database
  Quick Tour
- Combining MeSH Terms
  Quick Tour
- Applying Subheadings and other features of the MeSH Database
  Quick Tour
1: Stroke

A group of pathological conditions characterized by sudden, non-convulsive loss of neurological function due to BRAIN ISCHEMIA or INTRACRANIAL HEMORRHAGES. Stroke is classified by the type of tissue NECROSIS, such as the anatomic location, vasculature involved, etiology, age of the affected individual, and hemorrhagic vs. non-hemorrhagic nature. (From Adams et al., Principles of Neurology, 6th ed, pp777-810)

Year introduced: 2008 (2000)

2: Stroke Volume

The amount of BLOOD pumped out of the HEART per beat not to be confused with cardiac output (volume/time).

Year introduced: 1986 (1979)

3: National Institute of Neurological Disorders and Stroke

Component of the NATIONAL INSTITUTES OF HEALTH. It supports and conducts research, both basic and clinical, on the normal and diseases nervous system. It was established in 1950.

Year introduced: 2009

4: Heat Stroke

A condition caused by the failure of body to dissipate heat in an excessively hot environment or during PHYSICAL EXERTION in a hot environment. Contrast to HEAT EXHAUSTION, the body temperature in heat stroke patient is dangerously high with red, hot skin accompanied by DELUSIONS, CONVULSIONS, or COMA. It can be a life-threatening emergency and is most common in infants and the elderly.
CINAHL with Full Text

• CINAHL (Cumulative Index of Nursing and Allied Health Literature) with Full Text covers nursing & allied health journals.
• CINAHL with Full Text provides full text for more than 600 journals back to 1981.
• It covers 49 OT journals and 108 PT journals.
PsycINFO

• *PsycINFO* contains about 2.5 million citations and summaries of scholarly journal articles, book chapters, and dissertations.

• The journal coverage spans from 1887 to present.
Click on the Idaho Health Sciences Library link.
OT Search

• Coverage
  – Occupational therapy and related subjects, including rehabilitation, education, psychiatry, psychology, and health care administration.
  – Includes citations to journal articles, books, proceedings, reports, dissertations, and theses.
  – 1911-present
Welcome to OTseeker

OTseeker is a database that contains abstracts of systematic reviews and randomised controlled trials relevant to occupational therapy. Trials have been critically appraised and rated to assist you to evaluate their validity and interpretability. These ratings will help you to judge the quality and usefulness of trials for informing clinical interventions. In one database, OTseeker provides you with fast and easy access to trials from a wide range of sources.
Introduction to SPORTDiscus with Full Text

• This database provides full text for more than 440 journals, dating back to 1985.
• It covers all areas of sports & sports medicine literature.
Welcome to PEDro, an initiative of the Centre for Evidence-Based Physiotherapy (CEBP).

PEDro is the Physiotherapy Evidence Database. It has been developed to give rapid access to bibliographic details and abstracts of randomised controlled trials, systematic reviews and evidence-based clinical practice guidelines in physiotherapy. Most trials on the database have been rated for quality to help you quickly discriminate between trials which are likely to be valid and interpretable and those which are not.

You can search the PEDro database by clicking on the Search button above.

Download:

PEDro EndNote Filter
PEDro Information Leaflet

You are visitor number 2131066 to this site since 01/10/99
The database was last updated on Monday 2 June 2008 (this includes records added or amended since 5 May 2008).
The next update is planned for Monday 30 June 2008. The total number of records on the database is 12,844
Scholarly and Non-Scholarly Journals

- **Scholarly**
  - **Length**
    - Long and in-depth analysis of topics
  - **Language/Audience**
    - Full of technical jargon
    - Written for researchers, professors or students in the academic field
  - **Format/Structure**
    - Follows some specific structure: abstract, introduction, methodology, results, discussion, conclusion, and references

- **Non-scholarly**
  - **Length**
    - Fairly short
  - **Language/Audience**
    - Written in non-technical language for non-expert readers
  - **Format/Structure**
    - Does not follow a specific format
Scholarly and Non-Scholarly Journals

- **Scholarly**
  - **Authors**
    - Expert in a particular field: a scholar or researcher with noted credentials
  - **Editors**
    - Articles are reviewed by members of an editorial board who are experts in the field
  - **References**
    - Sources are cited with bibliographies documenting the research thoroughly
  - **Advertising**
    - Limited ads, special services or products in a specific field

- **Non-scholarly**
  - **Authors**
    - Reporter or any writer. Name and credentials are not indicated.
  - **Editors**
    - Not reviewed by experts, but by magazine staff members
  - **References**
    - Not provided
  - **Advertising**
    - Many general consumer ads

Source: [http://www.isu.edu/library/help/journalmag.htm](http://www.isu.edu/library/help/journalmag.htm)
A-to-Z Journal List

- Lists all journals available through the ISU Library, including those from full-text databases. Searching can be done by title, subject, and index.
- How to use the A-to-Z Journal List
A-to-Z Journal List
This is the A-to-Z Journal list webpage.

A.A. Milne

- Book Collection: Nonfiction 2005 - 2005
- MasterFILE Premier 2005 - 2005
- Middle Search Plus 2005 - 2005
- Primary Search 2005 - 2005

Publisher: Great Neck Publishing

Subject: Auxiliary Sciences of History -- Biography -- Biography as an art or literary form

AAACN viewpoint

- CINAHL with Full Text (EBSCO Publishing) 2004 to present
- ProQuest Central 2001 to present

Publisher: American Academy of Ambulatory Care Nursing

Subject: Medicine -- Nursing

AAAS Science Books
This link indicates that this journal is available online. Click on the link which takes you to the full text online articles.
Login to the Library online resources off campus using ISU Email username and password.

Username: [ ]
(do not include @isu.edu)
Password: [ ]
(password is case sensitive)
Scholarly and Non-scholarly Journals

• How do you know if an article was published in a peer-reviewed journal?
American Journal of Occupational Therapy

ISSN: 0272-9490
Title: American Journal of Occupational Therapy
Published by: American Occupational Therapy Association, Inc.
Country: United States
Status: Active
Start Year: 1947
Frequency: 6 times a year
Volume Ends: Nov-Dec
Document Type: Journal; Academic/Scholarly
Refereed: Yes
Abstracted/Indexed: Yes
Media: Print
Alternate Edition ISSN: 1943-7676
Size: Standard
Language: Text in English
Interlibrary Loan Request

• What would you do if the Library does not own an article you need?
• Submit an Interlibrary Loan request
To submit your interlibrary loan request, click on the Request button.
Questions?