NURS541
Setting Yourself up for Success
Dr Alix Hayden
Workshop objectives

By the end of this workshop, attendees will be able to
   Identify a systematic search in the Concept Block format
   Create a researchable question using a question framework - review
   Develop inclusion/exclusion criteria
   Find and analyze seed/known papers for keywords and subject headings
   Define subject headings and keywords and understand the differences between them
Typical steps of a knowledge synthesis project

1. Determine the review question
2. Create the protocol/plan
3. Data collection
4. Study selection
5. Data extraction
6. Critical appraisal
7. Synthesize (narrative or meta-analysis)
8. Write manuscript (using reporting standards)
**Research Question:**
What is the effect of cannabis use during pregnancy on postpartum depression?

**Database(s):** Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily 1946 to May 08, 2020

**Search Strategy:**

<table>
<thead>
<tr>
<th># Searches</th>
<th>Search Terms</th>
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<tbody>
<tr>
<td>1</td>
<td>Pregnancy/</td>
</tr>
<tr>
<td>2</td>
<td>exp PREGNANT WOMEN/</td>
</tr>
<tr>
<td>3</td>
<td>exp Postpartum Period/</td>
</tr>
<tr>
<td>4</td>
<td>(peripartum or peri-partum or intrapartum or intra-partum or antepartum or ante-partum or puerperium or puerperal or perinatal or peri-natal or prenatal or pre-natal or postpartum or post-partum or postnatal or post-natal).tw,kf.</td>
</tr>
<tr>
<td>5</td>
<td>1 or 2 or 3 or 4</td>
</tr>
<tr>
<td>6</td>
<td>exp Cannabis/</td>
</tr>
<tr>
<td>7</td>
<td>exp Marijuana Abuse/</td>
</tr>
<tr>
<td>8</td>
<td>exp Marijuana Smoking/</td>
</tr>
<tr>
<td>9</td>
<td>(marijuana or marihuana or cannabis or hashish or weed or hemp or dagga or ganja).tw,kf.</td>
</tr>
<tr>
<td>10</td>
<td>6 or 7 or 8 or 9</td>
</tr>
<tr>
<td>11</td>
<td>5 and 10</td>
</tr>
<tr>
<td>12</td>
<td>limit 11 to english language</td>
</tr>
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</table>
### Database(s): Ovid MEDLINE(R) and Epub Ahead of Print, In-Process & Other Non-Indexed Citations and Daily 1946 to May 08, 2020

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<table>
<thead>
<tr>
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<tbody>
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<td>1</td>
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<tr>
<td>2</td>
<td>exp PREGNANT WOMEN/</td>
</tr>
<tr>
<td>3</td>
<td>exp Postpartum Period/</td>
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<td>5</td>
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<td>exp Cannabis/</td>
</tr>
<tr>
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<td>exp Marijuana Smoking/</td>
</tr>
<tr>
<td>9</td>
<td>(marijuana or marihuana or cannabis or hashish or weed or hemp or dagga or ganja).tw,kf.</td>
</tr>
<tr>
<td>10</td>
<td>6 or 7 or 8 or 9</td>
</tr>
<tr>
<td>11</td>
<td>5 and 10</td>
</tr>
<tr>
<td>12</td>
<td>limit 11 to english language</td>
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</table>

### Database(s): APA PsycINFO 1806 to May Week 1 2020

#### Search Strategy:

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<tr>
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</tr>
<tr>
<td>2</td>
<td>exp PERINATAL PERIOD/</td>
</tr>
<tr>
<td>3</td>
<td>exp POSTNATAL PERIOD/</td>
</tr>
<tr>
<td>4</td>
<td>exp Expectant Mothers/</td>
</tr>
<tr>
<td>5</td>
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</tr>
<tr>
<td>6</td>
<td>1 or 2 or 3 or 4 or 5</td>
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<tr>
<td>7</td>
<td>exp MARIJUANA/ or exp MARIJUANA USAGE/</td>
</tr>
<tr>
<td>8</td>
<td>exp CANNABIS/</td>
</tr>
<tr>
<td>9</td>
<td>exp HASHISH/</td>
</tr>
<tr>
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<td>(marijuana or marihuana or cannabis or hashish or weed or hemp or dagga or ganja).tw.id.</td>
</tr>
<tr>
<td>11</td>
<td>7 or 8 or 9 or 10</td>
</tr>
<tr>
<td>12</td>
<td>6 and 11</td>
</tr>
<tr>
<td>13</td>
<td>limit 12 to peer reviewed journal</td>
</tr>
<tr>
<td>14</td>
<td>limit 13 to english language</td>
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</table>

### Database(s): CINAHL Plus with Full Text

#### Query:

<table>
<thead>
<tr>
<th>#</th>
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<tbody>
<tr>
<td>S1</td>
<td>(MH &quot;Pregnancy&quot;)</td>
</tr>
<tr>
<td>S2</td>
<td>(MH &quot;Postnatal Period+&quot;)</td>
</tr>
<tr>
<td>S3</td>
<td>(MH &quot;Expectant Mothers&quot;)</td>
</tr>
<tr>
<td>S4</td>
<td>TI ( (peripartum or peri-partum or intrapartum or intra-partum or antepartum or ante-partum or puerperium or puerperal or perinatal or peri-natal or prenatal or pre-natal or postpartum or post-partum or postnatal or post-natal) ) OR AB ( (peripartum or peri-partum or intrapartum or intra-partum or antepartum or ante-partum or puerperium or puerperal or perinatal or peri-natal or prenatal or pre-natal or postpartum or post-partum or postnatal or post-natal) )</td>
</tr>
<tr>
<td>S5</td>
<td>S1 OR S2 OR S3 OR S4</td>
</tr>
<tr>
<td>S6</td>
<td>(MH &quot;Medical Marijuana&quot;) OR (MH &quot;Cannabis&quot;)</td>
</tr>
<tr>
<td>S7</td>
<td>TI ( (marijuana or marihuana or cannabis or hashish or weed or hemp or dagga or ganja ) ) OR AB ( (marijuana or marihuana or cannabis or hashish or weed or hemp or dagga or ganja ) )</td>
</tr>
<tr>
<td>S8</td>
<td>S6 OR S7</td>
</tr>
<tr>
<td>S9</td>
<td>S5 AND S8</td>
</tr>
<tr>
<td>S10</td>
<td>S5 AND S8 Limit English only</td>
</tr>
<tr>
<td>S11</td>
<td>S5 AND S8 Limit Peer Reviewed</td>
</tr>
</tbody>
</table>
Components of a comprehensive search strategy

- Subject headings
- Textwords (including alternative spelling)
- Syntax (truncation, proximity operators, etc.)
- Searched in the appropriate fields
- Correct use of And/Or

Organized in the concept block method
Boolean operators

**OR** is used between synonyms in the same concept

**AND** is used between concepts

**NOT**

- Be careful using **NOT** in your search strategy
- It is possible to exclude studies of relevance

https://pgcc.libguides.com/c.php?g=60038&p=385676
1. **Truncation**: (*) looks for different endings of a word  
   E.g. lead* will find – leaders, leadership, leading….. etc.

2. **Proximity/adjacency operators**: (adjN) looks for two terms within N words of each other, in any direction.  
   E.g. project* adj3 manag* will find project* within 3 words of manag*.  

Database(s): PsycINFO 1806 to October Week 2 2019

<table>
<thead>
<tr>
<th>#</th>
<th>Searches</th>
<th>Results</th>
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<tr>
<td>1</td>
<td>&quot;project* manage**&quot;</td>
<td>1584</td>
</tr>
<tr>
<td>2</td>
<td>(project* adj2 manag*)</td>
<td>2127</td>
</tr>
<tr>
<td>3</td>
<td>(project* adj3 manag*)</td>
<td>2482</td>
</tr>
<tr>
<td>4</td>
<td>(project* adj5 manag*)</td>
<td>3116</td>
</tr>
<tr>
<td>5</td>
<td>(project* adj20 manag*)</td>
<td>6538</td>
</tr>
<tr>
<td>6</td>
<td>(project* and manag*)</td>
<td>14312</td>
</tr>
</tbody>
</table>

OVID (Medline) = adjN  
adj2  
Ebsco (CINAHL) = Nn  
N2

Note: Operators are often database (vendor) specific
Question formulation using PICO

- **P** | Population/Problem
  - Patient, population, problem, disease

- **I** | Intervention (or exposure or factor)
  - Intervention, exposure, prognostic factor

- **C** | Comparison
  - Comparison (such as gold standard, alternate intervention, no exposure)

- **O** | Outcomes
  - Outcome of interest (such as efficacy, incidence, prevalence, sensitivity, or other measurable outcome)

Humor in romantic relationships: A meta-analysis

The goal of the present investigation is to identify the direction and strength of the association between humor and relationship satisfaction in romantic relationships.

Paw preferences in cats and dogs: Meta-analysis

...determine the existence and extent of population level paw preferences in domesticated cats and dogs.


P – domesticated cats and dogs
I/E – paw preference
C – none
O – existence and prevalence
Initial Question: Is pet therapy effective?

P (population) – Post-secondary students

I/E (exposure) – Pet Therapy

C (Comparison) – none

O (Outcome) – Stress reduction

**Answerable research question:** In post-secondary students, is pet therapy an effective intervention for alleviating stress?
PICO Activity

Initial Question: Is social media harmful

P (population) –
I/E (exposure) –
C (Comparison) –
O (Outcome) –

Answerable research question:

Complete the activity on the Google form, individually.

We will share your PICO or research questions with the class

Link to Google form: https://tinyurl.com/yyxnaxfn
Quick search of the literature in one or two databases or Google Scholar

Check if another protocol/review already exists
Ensure there is enough literature
Identify study designs
Identify disciplinary areas
Identify terminology/language
Locate seed/known articles
Determine searchable concepts
RESEARCH:
THAT MOMENT WHEN NOT EVEN GOOGLE KNOWS WHAT YOU'RE TALKING ABOUT.

I broke google!
Abstract

The objective of the present study was to identify empirical studies of older adults (≥60) bereaved by the loss of a significant other to suicide. A systematic literature search in CINAHL, Embase, Medline, PsycINFO, and SCOPUS was conducted. The inclusion criteria were empirical studies investigating people bereaved by suicide at age ≥60 published in English or a Nordic language. Although a total of 12,871 references were identified, after screening, no articles fulfilled the inclusion criteria. The study led to the conclusion that there is a lack of research on older adults bereaved by suicide. With the aim of tailoring evidence-based interventions to this group, future research should investigate whether they have particular experiences, psychosocial responses and needs, and help-seeking strategies.

Locating Seed Articles

**What:** Quick search of P and I/E (in Google Scholar, or multi-disciplinary database)

**Goal:** Locate 3-5 articles that meet our inclusion criteria.

**Aim for a “diverse” set**
The following criteria were used for study inclusion:

(1) Species: For the cat meta-analyses, the study had to report pawedness data in the domestic cat (*F. silvestris catus*). For the dog meta-analyses, the study had to report pawedness data in the domestic dog (*Canis lupus familiaris*). Data from all other species were excluded.

(2) Study Language: Only reports written in English or German were included.

(3) No selection of animals based on paw preferences: Studies in which animals were included in equal groups based on a pre-screening of paw preferences were excluded.

(4) No use of split-brain animals: Studies in which the corpus callosum had been surgically removed in the animals were not included, as this might affect paw preferences.

(5) Report of paw preferences: Only studies in which paw preferences were reported with a clear number or percentage of animals in each group (left and right or left, right, and ambilateral) or studies for which authors provided such information on request were included.

Inclusion / Exclusion Criteria

Is this study relevant?
How do you determine what will be included, or excluded, in your study?
Inclusion / exclusion criteria are your intellectual checklist to determine if a study is relevant
Common Inclusion / Exclusion Criteria

Age
Gender
Population characteristics
Specific interventions
Specific outcomes

Study design
Geographic location
Time restrictions
Language
Publication type
Searchable Concepts

Not all concepts are searchable. Not all concepts need to be searched.
Humor in romantic relationships

P – individual in a romantic relationship
I/E – Humor
C – none
O – relationship satisfaction


Paw preferences in cats and dogs

P – domesticated cats and dogs
I/E – paw preference
C – none
O – existence and prevalence


Laughter-inducing therapies:

P – Any individuals
I/E – laughter-inducing therapy
C – other or no intervention
O- mental and physical health outcomes

These are all the potential words that authors could use to describe a concept. This may include:

- Different forms of the same word (singular, plural, verbs, etc.)
- Synonyms and antonyms
- Variation in spelling (British versus American)
- Terms used in other regions (medical residents versus house staff)
- Terms that have changed over time (previously used terms which may have been replaced)
Subject Headings: Also known as Index term, Subject term, controlled vocabulary, descriptors
Used to “tag” records so they can be found easily (in one place)
Assigned by a database (which means that each database has its own thesaurus/list)
A subject heading search can make up for a missed keyword term (but is not a substitute for a full list of keywords)
<table>
<thead>
<tr>
<th>Subject Headings</th>
<th>Textwords/Keywords</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Assigned by database (needs to be looked up)</td>
<td>- Chosen by authors and used in the title/abstract/author-sourced keywords</td>
</tr>
<tr>
<td>- One assigned term for that topic</td>
<td>- Many synonyms/variations/words/spellings</td>
</tr>
<tr>
<td>- Takes time for it to appear (indexing time)</td>
<td>- Immediately available from the article record in a database</td>
</tr>
<tr>
<td>- Similar to a twitter hashtag</td>
<td>- Similar to the words in a tweet</td>
</tr>
</tbody>
</table>
Petting away pre-exam stress: The effect of therapy dog sessions on student well-being.

Authors: Ward-Griffin, Emma; Collins, Hanne K.; Coen, Stanley; Chen, Frances S.; Klaiber, Patrick; Owens, Rhea L.

Affiliation: Department of Psychology, University of British Columbia, Vancouver, BC, Canada
Department of Education and Psychology, Freie Universitat Berlin, Berlin, Germany
Counseling Psychology and Community Services, University of North Dakota, Grand Forks, ND, USA


Publication Type: Article - pictorial, research, tables/Charts

Language: English

Major Subjects: Pet Therapy
Dogs
Psychological Well-Being
Student Attitudes
Students, Undergraduate

Minor Subjects: Human; Questionnaires; Male; Female; Descriptive Statistics; Data Analysis Software; Repeated Measures; Young Adult; Funding Source

Abstract: Recently, many universities have implemented programmes in which therapy dogs and their handlers visit college campuses. Despite the immense popularity of therapy dog sessions, few randomized studies have empirically tested the efficacy of such programmes. The present study evaluates the efficacy of such a therapy dog programme in improving the well-being of university students. This research incorporates two components: (a) a pre/post within-subjects design, in which 246 participants completed a brief questionnaire immediately before and after a therapy dog session and (b) an experimental design with a delayed-treatment control group, in which all participants completed baseline measures and follow-up measures approximately 10 hr later. Only participants in the experimental condition experienced the therapy dog session in between the baseline and follow-up measures. Analyses of pre/post data revealed that the therapy dog sessions had strong immediate benefits, significantly reducing stress and increasing happiness and energy levels. In addition, participants in the experimental group reported a greater improvement in negative affect, perceived social support, and perceived stress compared with those in the delayed-treatment control group. Our results suggest that single, drop-in, therapy dog sessions have large and immediate effects on students’ well-being, but also that the effects after several hours are small.
Research supports the efficacy of the human-animal bond and pet therapy in a variety of settings. A nursing students' request at one school, the author began offering pet therapy prior to examinations. Anecdotally, evidence of a study with the author's Golden Retriever, Goldilocks, demonstrates that pet therapy can reduce test anxiety and improve nursing student performance.
Demonstration in Medline and CINAHL

Medline:

CINAHL:
Keywords/textwords, and subject headings can be found by analyzing database records
1) Looking up a known article and looking at the metadata for subject headings
2) Reviewing titles/abstracts/author keywords for textwords

Activity

Look up 2 seed papers in each of the databases and analyze the article.

Add 1) relevant subject headings and 2) textwords to the appropriate columns of the table in the following Googledoc:
Testing your search

- Create a test set using the known/seed articles.
  1. Search each article title in the title field
  2. Combine all seed articles using OR
  3. Run your search strategy
  4. Combine the last line of your search with the line from 2) above using an AND
     - If the number of articles is different from the # of articles in 2) above, then investigate
     - If the number is the same then your search found all seed articles
- Use the NOT function to identify missing seed papers, then investigate why it wasn't found.
- Demonstration to follow
Choosing the Information Sources

What disciplines inform your study?

What *types* of literature inform your study?
- Peer/non-peer review studies (ie journal literature)
- Conferences
- Trade publications
- Working papers
- Government reports
Building your “recipe”

…. takes time, understanding of the terminology used in the literature, as well as knowledge of how the databases work.
THANKS!

Any questions?

Alix Hayden
ahayden@ucalgary.ca