Learning objectives

• Explain why it is important to identify the main concepts of your topic
• Identify the main concepts in your topic and apply them to a framework of your choice
Identifying Major Concepts of Your Topic

Separating out the major components of your topic of interest will help you to:

- Clarify and develop your research question
- Prepare for your initial search by brainstorming for relevant keywords and synonyms

This is a preliminary stage and your defined research question may change as a result of your initial search
Conceptual Frameworks Help…

By giving you a set of boxes (defined boundaries) to divide your concepts into

One framework is PICO
Another is PCC
Others: SPICE, PESICO, SPIDER, ECLIPSE, etc.

Different frameworks work well with different types of research or fields of study
PICO

Patient / Problem / Population

Intervention / Item of interest

Comparison

Outcome

May be phrased as: Among P does I (versus C) affect O?
SPICE

S - Setting
P - Perspective (population)
I - Intervention
C - Comparison
E - Evaluation

Can be used in social sciences
SPIDER

Sample

Phenomenon of Interest

Design

Evaluation

Research type

Good for qualitative and mixed-methods research
PICO Example

What treatments or counselling are effective in preventing or managing depression in people experiencing recurrent pregnancy loss?
Among people with recurrent pregnancy loss, does counselling or self help improve prevention or management of depression?
Or, Keep It Simple

Not all questions fit into a neat framework. Whatever your research question is, it’s important to identify its 2 or 3 main concepts to guide your database search.

It is perfectly acceptable to use: Concept 1, Concept 2, and Concept 3 as your starting framework.

Example Question: I wonder how doctors are doing during this COVID-19 outbreak? Will they be traumatized by their experiences?
Question: I wonder how doctors are doing during this COVID-19 outbreak? Will they be traumatized by their experiences?

Are we talking about doctors who meet patients, all clinical personnel, or any doctors involved with COVID-19, including those in labs doing research?

Concept 1: only doctors in hospital settings who directly deal with patients (concept has been narrowed down)
Question: I wonder how doctors are doing during this COVID-19 outbreak? Will they be traumatized by their experiences?

_Do I want to include other epidemic or pandemic situations such as SARS or Spanish influenza, and if I do, what is the criteria for inclusion (dates or maybe impact)? Does this change the scope of my research?_

Concept 2: COVID-19 and other equivalent pandemic situations (may be refined later)
Example: Concepts 123, Part 3

Question: I wonder how doctors are doing during this COVID-19 outbreak? Will they be traumatized by their experiences?

Do I mean only post-traumatic stress disorder, or do I want to include all types of stress and other negative impacts?

Concept 3: Post-traumatic stress disorder (may be refined later)
Question: I wonder how doctors are doing during this COVID-19 outbreak? Will they be traumatized by their experiences?

*Having decided on PTSD as your concept 3, it is possible to further divide ‘traumatized by their experiences’ into ‘trauma’ and ‘experiences’. If you like, you can pull out a certain type of experience to look at exclusively*

Concept 4: effects of limited supplies and staff
Your search topic:
Could the current pandemic situation be expected to cause PTSD in doctors?

<table>
<thead>
<tr>
<th>Concept One</th>
<th>doctors</th>
<th>OR</th>
<th>Physician(s)</th>
<th>OR</th>
<th>clinician(s)</th>
</tr>
</thead>
</table>

AND

| Concept Two | COVID-19 | OR | PANDEMICS (MeSH 2011) | DISEASE OUTBREAKS (MeSH 1966-2010) | OR | Novel coronavirus
Epidemic |

AND

| Concept Three | post-traumatic stress disorder | OR | Psychological trauma (Medline MeSH, 2016) | NEUROSES, POST-TRAUMATIC 1963-80 | OR | PTSD (also: posttraumatic stress disorder(s), post traumatic stress disorder(s), emotional trauma, moral injur(-y or -ies)) |
Activity – 5 minutes

What is YOUR question?

Use one of the frameworks provided to identify the different elements of your question