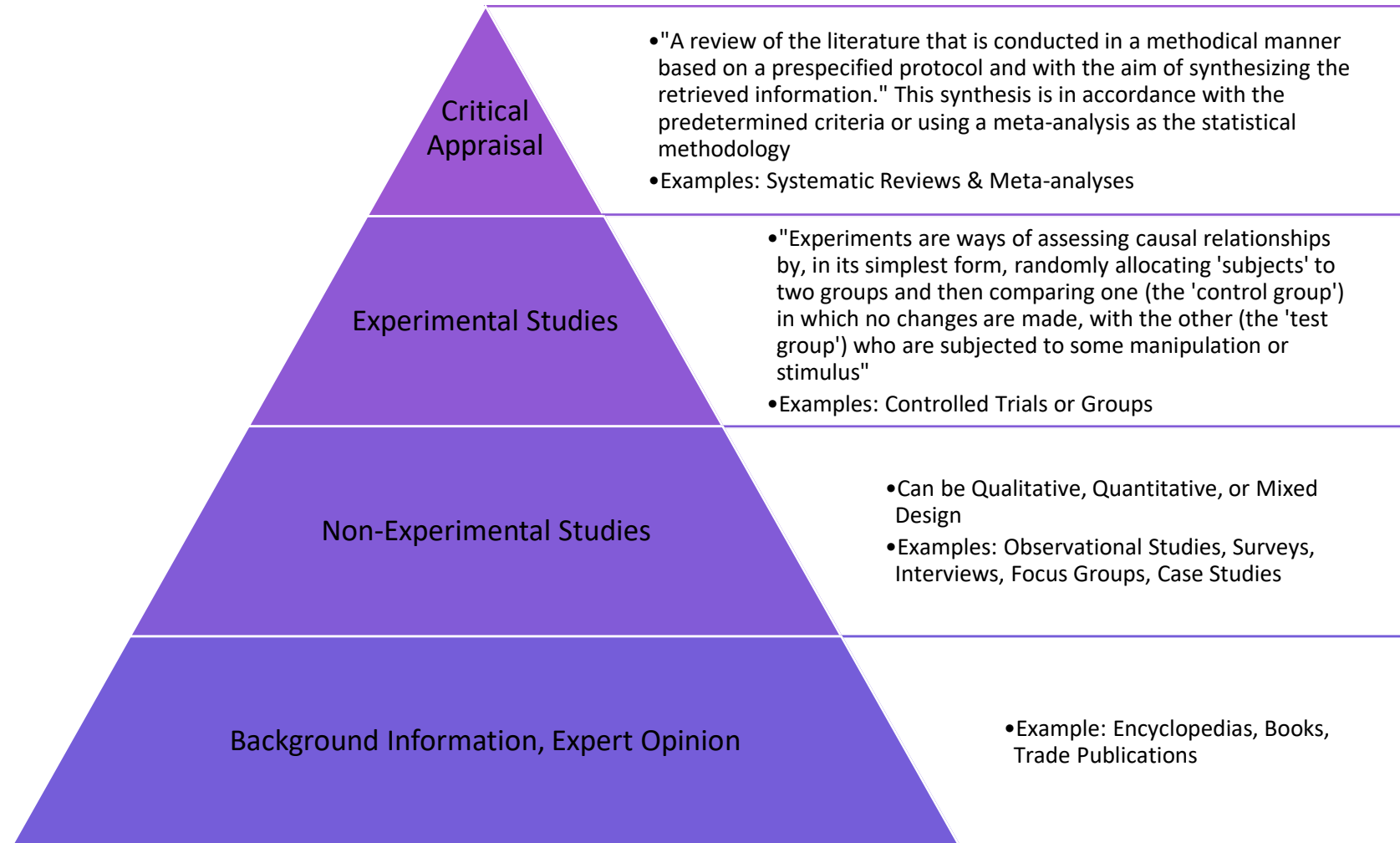# Levels of Evidence & How to Find It

Not all evidence is created equal! When making evidence-informed decisions for program planning and implementation, it's important to have an understanding of what kind of evidence you're looking at and where it's coming from. This pyramid is a simple visualization of how evidence gets more refined as it goes up the hierarchy.

Critical Appraisal

- "A review of the literature that is conducted in a methodical manner based on a prespecified protocol and with the aim of synthesizing the retrieved information." This synthesis is in accordance with the predetermined criteria or using a meta-analysis as the statistical methodology
- Examples: Systematic Reviews & Meta-analyses

Experimental Studies

- "Experiments are ways of assessing causal relationships by, in its simplest form, randomly allocating 'subjects' to two groups and then comparing one (the 'control group') in which no changes are made, with the other (the 'test group') who are subjected to some manipulation or stimulus"
- Examples: Controlled Trials or Groups

Non-Experimental Studies

- Can be Qualitative, Quantitative, or Mixed Design
- Examples: Observational Studies, Surveys, Interviews, Focus Groups, Case Studies

Background Information, Expert Opinion

- Example: Encyclopedias, Books, Trade Publications

Definitions from: Sage. *Methods Map*. Sage Research Methods. http://methods.sagepub.com/methods-map

Levels of Evidence & How to Find It

How to find Critical Appraisals

Outside JMU resources

- Search systematic review resources or organizations such as The Campbell Collaboration (social sciences), WhatWorksClearinghouse (education), Cochrane (health), etc
- These are established organizations in which systematic reviews are registered, so they are often the cream of the crop

JMU resources

- **Databases:** It depends on the discipline, but generally for Student Affairs research needs, the best bets are ERIC (Education), PsycNET (Behavioral Sciences & Education), PubMed (Health), and Scopus (interdisciplinary)
  - *Note that sometimes people call a review "Systematic" but it might not always be the case. Still take a critical eye to what you find in any database when reading!
- **Search Strategies:**
  - Add "Systematic Review" or "Meta-analysis" as a search term along with your keywords

(*ERIC*)   (*Scopus*)

  - Some databases have specific methodology or type filters you can use:

PsycNET: Select "Methodology" filter on the left side of search results. Then select "Systematic Review" or "Meta Analysis"
Sometimes you have to first select "Literature Review" to see the SR or MA options

PubMed (R): Select "Systematic Review" under "Article Type" on the left side of search results

Levels of Evidence & How to Find It

How to find Background Information, Expert Opinion, etc

Outside JMU
- Association or Trade Publications (i.e. APA Monitor, NASPA's SA Weekly, university magazines, etc)

JMU Resources
- **Journals**: Chronicle of Higher Education, Inside Higher Ed
- **Books**: Search the JMU Library Catalog
- **Databases**: ERIC, Education Research Complete, Business Source Complete
  - Search by keyword

How to find Studies (both experimental & non-experimental)

JMU Resources:
- **Databases**: Depends on the topic/discipline, but for Student Affairs some best bets are ERIC & Education Research Complete (Education), PsycNET (Behavioral Sciences & Education), and Scopus (Interdisciplinary)
  - These may also be helpful: Communication & Mass Media Complete (Communications), Business Source Complete (Business, Nonprofits, and Higher Ed), SocINDEX (Sociology)
  - A librarian can always help you determine the best place to look if you are unsure.
- **Search Strategies**
  - While these databases may look different from each other, the operate on these same search principles
  - Think of keywords to describe your topic to search in the database
  - If your keywords are made up of multi-word phrases, use quotations to keep them together
    - *i.e. "college students"*
  - Combine words with "AND" to narrow results
    - *i.e. mindfulness AND "college students"*
  - Combine words with "OR" to broaden results
    - *i.e. (mindfulness OR "contemplative practices") AND (college OR university)*
  - Add specific methodologies to your search terms
    - *i.e. mindfulness AND "college students" AND survey*
      - *Pro tip* In PsycNET you can select "Methodology" as a filter on the left side of your search results and narrow that way instead of adding it as a keyword.

Levels of Evidence & How to Find It

How to find Help

JMU Libraries

- Researching can often be tricky, but there are resources to help you!
- Research Guides are a great place to start if you aren't sure what databases are most appropriate for your research topic: https://guides.lib.jmu.edu/researchguides
- JMU Libraries has a liaison librarian for every program on campus
  - Find the best liaison to help you with your specific research topic here: https://apps.lib.jmu.edu/staffdir/liaisons.aspx
    - Liz Chenevey is the liaison to the CSPA program (chenevet@jmu.edu)
    - Kristen Shuyler coordinates the relationship between the Libraries and Student Affairs as a whole (shuyleks@jmu.edu)
- If you're ever unsure of where to start, or what you're looking at, don't hesitate to reach out!