Critical Thinking/Evaluating Process

HNF 610: Nutrition & Fitness
Susan Arnold
A few more words about exporting to RefWorks

• Importing citations manually

• Importing citations directly from a journal article
  • *Journal of Applied Poultry Research* (HighWire Press)
  • *Journal of the American Dietetic Association* (Science Direct)

• Importing from Google Scholar
Evaluating Websites

- **RADCAB**
  - Relevancy—is info relevant to the question at hand?
  - Appropriateness—is it appropriate for intended audience?
  - Detail—is the depth of coverage adequate?
  - Currency—when was the info published or last updated?
  - Authority—who is the author and what are his qualifications?
  - Bias—why was this info written? To inform, persuade, sell?
Evaluating Websites

- **CRAAP Test**
  - Currency—timeliness of the information
  - Relevance—importance of the information for your needs
  - Authority—source of the information
  - Accuracy—reliability, truthfulness, and correctness of the informational content
  - Purpose—the reason the information exists
Evaluating Research Studies

- See tab on LibGuide for complete list of questions to ask

- Many people put higher value on studies that have been cited many times and/or that are published in leading journals in their fields
  - Cited Reference Searching
  - Determining Impact Factors to evaluate top journals
Cited Reference Searching

• **Definition:** When an article is listed in the references of another article, it becomes a cited reference.

• Allows a researcher to identify which later articles have cited any particular earlier article.

• Can be used to determine which articles have cited a particular author.

• Can be used to determine which articles have been cited most frequently.
Uses of Cited Reference Searching

- Faculty seeking new jobs/promotion in rank based on their research
- Peer Review/Search Committees evaluating impact of publications
- Search for more articles on a specific research topic when good articles have been identified
Where to Look for Cited References

• Unfortunately, they are not in a single database

• Web of Science

• Google Scholar

• Many EBSCO databases, such as Academic Search Complete, CINAHL, SPORTDiscus, and PsycINFO have a Cited References tab, but only for journals/articles included in each particular database
Web of Science

• Began as a printed index called **Science Citation Index**

• Covers more than 6,500 journals across 150 disciplines from 1900 to the present

• WVU Libraries’ web-based version covers 1976-present

• If author A writes an article, and authors B, C, & D list that article in their references, then that article is considered more useful than an article that no one references

• Web of Science counts the number of cited references for a particular article and generates a list of them
Problems with Web of Science

- Cited References include only articles from journals that are indexed in Web of Science
- Searching is only available for the first author of each article
- Self-citing: many authors cite their own previous articles, which can artificially inflate their cited reference statistics
- Theses/dissertations and web sites are not included in this database
Cited Reference Search. Find the articles that cite a person's work

**Step 1:** Enter the author's name, the work's source, and/or publication year.

- **Cited Author:** Kelly GA
  - Example: O'Brian C* OR OBrian C*

- **Cited Work:** Prev Med
  - Example: J Comput Appl Math*
  - Journal abbreviation list

- **Cited Year(s):** 2004
  - Example: 1943 or 1943-1945

- **Search**
- **Clear**
  - Searches must be in English

**Current Limits:** [Hide Limits and Settings]  (To save these permanently, sign in or register.)

- **Timespan:**
  - All Years  (updated 2010-09-11)
  - From 1976 to 2010  (default is all years)

**Citation Databases:**
- Science Citation Index Expanded (SCI-EXPANDED) -- 1976-present
- Social Sciences Citation Index (SSCI) -- 1976-present
- Arts & Humanities Citation Index (A&HCI) -- 1976-present
Articles that have cited the 2004 article in *Preventive Medicine* by George A. Kelley
Google Scholar

• Database of scholarly, peer-reviewed article descriptions
• **Advantages:**
  • “Cited By” feature
  • Includes large number of formats such as dissertations, patents, and websites
  • Very diverse group of journals included
  • Ability to search for related articles by topic
Disadvantages of Google Scholar

• Limited ability to restrict searching

• Don’t really know what sources are included or excluded

• Should be used in addition to traditional databases such as Web of Science to determine the total number of cited references for a particular article
Use Advanced Scholar Search
Same search for GA Kelley as author, *Preventive Medicine* as publication, 2004 as date.
Here is the result which shows “Cited by 55”

Need to determine if these are unique, same as Web of Science, or include dissertations, web pages, or self-citing.
Low HDL cholesterol levels
MD Ashen, RS Blumenthal - New England Journal of Medicine, 2005 - content.nejm.org
This Journal feature begins with a case vignette highlighting a common clinical problem. Evidence supporting various strategies is then presented, followed by a review of formal guidelines, when they exist. The article ends with the authors' clinical recommendations.
Cited by 100 - Related articles - BL Direct - All 10 versions

Effect of aerobic exercise training on serum levels of high-density lipoprotein cholesterol: a meta-analysis
S Kodama, S Tanaka, K Saito, M Shu, Y ... - Archives of internal ... , 2007 - Am Med Assoc
You are seeing this message because your Web browser does not support basic Web standards. Find out more about why this message is appearing and what you can do to make your experience on this site better. ... Add to CiteULike Add to Connotea Add to ...
Cited by 80 - Related articles - BL Direct - All 4 versions

Features of the neighborhood environment and walking by US adults
RR Suminski, WSC Poston, RL Petosa, E ... - American journal of ..., 2005 - Elsevier
The analyses conducted in 2004 revealed that women were more likely to walk for exercise (odds ratio [OR]=4.6, 95% confidence interval [CI]=1.01–20.72) or walk a dog (OR=3.3, 95% CI=1.01–11.08) in the neighborhood if neighborhood safety was average as opposed to ...
Cited by 63 - Related articles - All 6 versions

Aerobic exercise and lipids and lipoproteins in women: a meta-analysis of randomized controlled trials
Background: Cardiovascular disease (CVD) in women is the leading cause of mortality in the United States, and less than optimal lipid and lipoprotein levels are major risk factors for CVD. The purpose of this study was to use the meta-analytic approach to examine the ...
Cited by 62 - Related articles - All 8 versions

Physical activity for secondary prevention of disease
Physical activity for secondary prevention of disease. Systematic reviews of randomised clinical trials. Katrine Karmisholt & Peter C. Gotzsche. PDF. ...
Cited by 51 - Related articles - Cached - All 6 versions
Journal Impact Factors

• **Definition:** a measure reflecting the average number of citations to articles published in science and social science journals

• Frequently used to determine the relative importance of a journal within its field

• Journals with higher impact factors are deemed more important than journals with lower ones

• Calculated annually; published in *Journal Citation Reports*
Can search by subject category, publisher or country; or for a specific journal
Can search for Nutrition & Dietetics Journals
Can be sorted alphabetically by title or by impact factor.
Compare Dietetics Journals results with:

- PLoS Journals (open access titles)
- Very well-known journal
  (New England Journal of Medicine)