

Kinesiology 119 Introduction to Kinesiology CRITICAL EVALUATION OF RESOURCES

In the research process you will encounter many types of resources including **books**, **articles** and **websites**. But not everything you find on your topic will be suitable. How do you make sense of what is out there and evaluate its authority and appropriateness for your research?

Scholarly vs. Popular

A **scholarly journal** is generally one that is published by and for experts. In order to be published in a scholarly journal, an article must first go through the **peer review** process in which a group of widely acknowledged experts in a field reviews it for content, scholarly soundness and academic value. In most cases, articles in scholarly journals present new, previously un-published research. Scholarly sources will almost always include:

- Bibliography and footnotes
- Author's name and academic credentials

As a general rule, scholarly journals are not printed on glossy paper, do not contain advertisements for popular consumer items and do not have colorful graphics and illustrations (there are, of course, exceptions).

Popular magazines range from highly respected publications such as *Scientific American* and *The Atlantic Monthly* to general interest newsmagazines like *Newsweek* and *US News & World Report*. Articles in these publications tend to be written by staff writers or freelance journalists and are geared towards a general audience. Articles in popular magazines are more likely to be shorter than those in academic journals. While most magazines adhere to editorial standards, articles do not go through a peer review process and rarely contain bibliographic citations.

Tip: When searching a **journal index** try narrowing your search by limiting to **refereed publications**. This will retrieve only scholarly journals matching your search terms. Some other journal indexes offer this or a similar option.

If you do your searches in an index like PubMed, it will retrieve only scholarly articles since only academic journals are indexed in this database.

SUITABILITY

Scope. What is the breadth of the article, book, website or other material? Is it a general work that provides an overview of the topic or is it specifically focused on only one aspect of your topic. Does the breadth of the work match your own expectations? Does the resource cover the right time period that you are interested in?

Audience. Who is the intended audience for this source? Is the material too technical or too clinical? Is it too elementary or basic? You are more likely to retrieve articles written for the appropriate audience if you start off in the right index. For instance, to find resources listing the latest statistics on heart disease you may want to avoid the Medline database which will bring up articles designed for practicing clinicians rather than social science researchers.

Timeliness. When was the source published? If it is a website, when was it last updated? Avoid using undated websites. Library catalogs and periodical indexes always indicate the publication date in the bibliographic citation.

AUTHORITY

Who is the author? What are his or her academic credentials? What else has this author written? Sometimes information about the author is listed somewhere in the article. Other times, you may need to consult another resource to get background information on the author. Sometimes it helps to search the author's name in a general web search engine like [GoogleScholar](#).

OTHER INDICATORS

Documentation. A bibliography, along with footnotes, indicate that the author has consulted other sources and serves to authenticate the information that he or she is presenting. In websites, expect links or footnotes documenting sources, and referring to additional resources and other viewpoints.

Objectivity. What point of view does the author represent? Is the article an editorial that is trying to argue a position? Is the website sponsored by a company or organization that advocates a certain philosophy? Is the article published in a magazine that has a particular editorial position? Consult these resources which indicate whether a publication is known to be conservative or progressive, or is affiliated with a particular advocacy group.

Primary vs. secondary research. In determining the appropriateness of a resource, it may be helpful to determine whether it is primary research or secondary research. Also **primary vs. secondary source**.

Primary research presents original research methods or findings for the first time. Examples include:

- A journal article, book, or other publication that presents new findings and new theories, usually with the data

A **secondary research** does not present new research but rather provides a compilation or evaluation of previously presented material. Examples include:

- A scientific article summarizing research or data, such as in *Scientific American*, *Discover*, *Annual Review of Genetics*, or *Biological Reviews* - “Review article”
- An encyclopedia entry and entries in most other Reference books
- A textbook

Take an article in a popular magazine such as *Mother Jones* about the public health aspects of handgun control -- if it relies on interviews with experts and does not present any new research in the area, this article would be considered secondary research. If one of the experts interviewed in the *Mother Jones* article published a study in *JAMA (The Journal of the American Medical Association)* documenting for the first time the effect that handguns have on youth mortality rates, only the *JAMA* article would be considered primary research.

Websites. While most of the strategies listed above for evaluating information can be applied to any type of resource (books, articles or websites), the unfiltered, free-form nature of the Web provides unique challenges in determining a website's appropriateness as an information source. In evaluating a website, these are some questions that you can ask yourself:

- Is there an author of the document? Can you determine the producer's credentials? If you cannot determine the author of the site, then think twice about using it as a resource.
- Is the site sponsored by a group or organization? If it is sponsored by a group or company, does the group advocate a certain philosophy? Try to find and read "About Us" or similar information.
- Is there any bias evident in the site? Is the site trying to sell you a product? Ask why the page was put on the web?
- Is there a date on the website? Is it sufficiently up-to-date? If there is no date, again, think twice about using it. Undated factual or statistical information should never be used.
- How credible and authentic are the links to other resources? Are the links evaluated or annotated in any way?

REFERENCE SOURCES

Book reviews. A book review -- which can appear in a journal, magazine or newspaper -- provides a descriptive, evaluative discussion of a recently published book. Reading how others have evaluated a book may help you decide whether to use that book in your research.

Citation indexes. To see the impact a particular source has had on scholarship, you may want to consult a citation index. A citation index lists when and where a work has been cited. In other words, you could consult a **Citation Index** to see all the articles that have cited Dr. Diffie's work on muscle physiology.

*Adapted from University of California at Berkley Library, Last updated 5/16/2007.
Available at <http://www.lib.berkeley.edu/instruct/guides/Evaluation.html>
Accessed 9/12/2007.*

Common Journals in Kinesiology:

American Journal of Epidemiology
 American Journal of Physiology
 American Journal of Sports Medicine
 Archives of Physical Medicine and Rehabilitation
 Experimental Brain Research
 Human Movement Science
 JOPERD
 Journal of Applied Biomechanics
 Journal of Applied Physiology
 Journal of Athletic Training
 Journal of Biological Chemistry and Molecular Biology
 Journal of Biomechanics
 Journal of Experimental Psychology: Human Perception and Performance
 Journal of Motor Behavior
 Journal of Orthopedic and Sports Physical Therapy
 Journal of Physiology
 Journal of Teaching in Physical Education
 Medicine & Science in Sports & Exercise
 Motor Control
 Pediatric Exercise Science
 Physical Educator
 Quest
 Research Quarterly for Exercise & Sport
 Sports Medicine