Types of Scholarly Articles

For most graduate research projects, and term papers, your professors will expect you to avoid using popular magazines and require you to find and use articles from scholarly research journals only. For some assignments, trade or professional journals may also be appropriate. Here are some examples of each type.

- You are probably familiar with popular magazines: you have seen them at bookstores and public libraries, or perhaps you subscribe to one. They are written for a general audience, and their purpose is usually to inform or entertain.
- Scholarly journals are written for a much more specialized audience, and their purpose is to report original research and contribute new knowledge in a particular discipline or field. You will find plenty of scholarly journals in a university library, but you will not find them at your local newsstand.
- Trade or professional journals are also written for a specialized audience but tend to be more practical or "applied" in nature. These are usually aimed at people in a particular industry or profession.

What Does "Peer Review" Mean?

Scholarly journals do not employ staff reporters to write articles. Instead, authors must submit their articles to scholarly journals for consideration. The editors of these journals employ a peer review or referee process to help them decide which articles to publish.

In the peer review process, a group of experts on the subject of the submitted article -- the author's peers -- are asked to read the draft and to recommend its publication, revision, or rejection. Because they are experts on the topic, they can evaluate the quality of the author's research and can determine the extent to which the article would add valuable new information to the field.

This process is meant to ensure high quality in scholarly sources. While some popular magazines may enjoy good reputations, none of them employs this kind of rigorous review process. If your professors advise you to use peer-reviewed (or refereed) journals in your research, it is because these journals can generally be trusted to present valid, reliable information.

Research versus Review Articles

Scientific and other peer reviewed journals are excellent sources for primary research sources. However, not every article in those journals will be research articles. Some will include book reviews and other materials that are more obviously secondary sources. More difficult to differentiate from original research articles are review articles. Both types of articles will end with a list of References (or Works Cited). Review articles are often as lengthy or even longer that original research articles. What the authors of review articles are doing is analyzing and evaluating current research and investigations related to a specific topic, field, or problem. They are not primary sources since they review previously published material. They can be of great value for identifying potentially good primary sources, but they aren't primary sources themselves.

Primary sources

A primary source is an original object or document -- the raw material or first-hand information.

Primary sources include historical and legal documents, eye witness accounts, results of an experiment, statistical data, pieces of creative writing, and art objects. In the natural and social sciences, the results of an experiment or study are typically found in scholarly articles or papers delivered at conferences, so those articles and papers that present the original results are considered primary sources.

Secondary sources

A secondary source is something written about a primary source. Secondary sources include comments on, interpretations of, or discussions about the original material. You can think of secondary sources as second-hand
information. If I tell you something, I am the primary source. If you tell someone else what I told you, you are the secondary source. Secondary source materials can be articles in newspapers or popular magazines, book or movie reviews, or articles found in scholarly journals that evaluate or criticize someone else’s original research.

**How Do I Identify Research Articles?**

Research articles, or primary articles, are based on original research. They can be identified by a commonly used format. If an article contains the following elements, you can count on it being a primary research article. Look for sections titled **Methods** (sometimes with variations, such as Materials and Methods), **Results** (usually followed with charts and statistical tables), and **Discussion**. You can also read the abstract to get a good sense of the kind of article that is being presented. If it is a review article instead of a research article, the abstract should make that pretty clear. If there is no abstract at all, that along may be a sign that it is not a primary resource. Short research articles, such as those found in *Science* and similar scientific publications that mix news, editorials, and forums with research reports, may not include any of those elements. In those cases look at the words the authors use, phrases such as "we tested," "we used," and "in our study, we measured" will tell you that the article is reporting on original research.

**ABSTRACT**

A summary of the article (note: abstracts appear in secondary articles as well)
- Orientation to topic/rationale for study
- What the research found; results
- Implications recommendations

**INTRODUCTION**

Includes a review of previous research (also known as a *literature review*). The introduction should provide an outline of the sequence of information presented. From general to specific aims of the research.

**METHODS**

Sometimes called "methodology" or "materials and methods," this section describes the author's research methods and tools: experiment, survey, data sources, etc.

**RESULTS**

Also called "findings," this is the section of the article in which raw data are presented. This section describes the results found.

**DISCUSSION**

Sometimes called "analysis," this is the section in which the author analyzes the data. Interpretation of what the results actually mean in terms of the field and the original research question and hypothesis.

**CONCLUSION, RECOMMENDATIONS, IMPLICATIONS OR SUMMARY**

The author's conclusions based on the analysis. It also details the implications of the research and makes recommendations about further research or policy and practice in the relevant area. Read the conclusion or general discussion section for an understanding of the key issues resulting from the research.

**REFERENCES**

List of references to works cited in the article.

These standard parts of a research article may not always be labeled, and sometimes they are combined (for example, "Data and Methods"). Still, every research article indicates what methods and tools were used to conduct the research, what the results were, and how the author interprets those results.

Prepared by Professor Eloise M. Bellard 02/07/2006. Graphics and wording taken from several online guides.

"Types of Journals: What is a scholarly journal?"

"Library Resources and Methods of Research. Primary and Secondary Sources."

"How to Read a Scholarly Journal Article in the Social Sciences."