

Evaluating Sources I: Internal Characteristics and Research Design

The evaluation of a source will largely depend on how it relates to other sources. However, the internal characteristics and research design of a source also need to be closely analyzed when evaluating.

Genre

What genre is this article?

There are a few genres of scholarly writing. However, the characteristics of the genres are discipline specific.

- Reports on original research or new empirical studies
- Literature reviews, literature surveys, or meta-analyses that summarize, synthesize, or evaluate several other studies
- Case studies, case reports, or species descriptions that introduce anecdotes or examples that suggest the limitations of existing literature or new directions for research
- Scholarly book reviews that evaluate recently published books
- Position papers that advance new opinions, perspectives, or theories without undertaking original, rigorously designed, empirical research
- Letter and research notes that provide brief descriptions of urgent research that is in progress or has been recently completed
- Data papers and supplemental articles that provide detailed descriptions of datasets

Keep in Mind

Most of your research should consist of reports on original research or new empirical studies. The following characteristics (research question; theories, methods, evidence; inferences and interpretations) will focus on this genre.

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The Research Question

What is the research question?

The research question is what an article is trying to answer or explain. Some articles have more than one question, and many have a main question and a series of subsidiary questions.

Generally, the research question emerges from the literature review. If the article satisfactorily answers the research question, it fills a gap in the state of knowledge about a topic, resolves a contradiction, or demonstrates limitations to the existing scholarly consensus.

Why is this a significant question?

Often the significance of a research question can be demonstrated by showing how it contributes to an ongoing scholarly conversation. One good strategy for determining an article's significance is to look closely at the literature review to see how the author connects his or her own inquiry to the perspectives that already exist in the literature.

Alternatively, the article may establish its significance by discussing a larger social, political, economic, or cultural problem or issue to which it relates. This may be evident in the introduction, literature review and/or conclusion.

Keep in Mind

The research question can be explicitly or implicitly stated in the article. Also, you may be unable to find a portion of the article that directly addresses the question's significance. Establishing the significance of a question will require attention to sources on similar topics. You may need to reconstruct the research question by looking at the claims, methods, and evidence.

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Theories, Methods, Evidence

What research methods are used to answer the question?

Research methods are the systematic means through which an author has collected, processed, and analyzed evidence responsive to the research question. Researchers will often explicitly describe their research methods in the hard and social sciences, but the research methods in the humanities may require some reconstruction.

What theories are tested or used in research?

Theories are generalizations made from empirical evidence; they provide a “lens” or “way of seeing” the evidence. In the sciences, theories usually are used to produce falsifiable predictions about empirical evidence and are built upon repeated observations or experiments; many scientific projects consequently test such predictions. In more interpretive and qualitative research, theories are more often used to explain or structure the evidence, but there may be some kind of process of verification or a comparative account of competing theories.

What is the most important evidence or data?

The first step to determine the most important evidence or data is to characterize it. How does it contribute to the understanding of the research question? Which type of evidence is most important? Which evidence best supports the researcher’s findings? It is not enough to simply label the evidence with a very general label; it must summarize how the research method produced the evidence and how the evidence responds to the research question. It is important to be specific when characterizing and describing.

Keep in Mind

The relationships between laws, theories, models, and hypotheses can be complicated. While it is worthwhile to consider these relationships, it is more important to determine how an article decides what counts as evidence, which evidence is most important, and how a given research method contributes to or undermines attempts to generalize about a phenomenon, artifact, text, archive, or state of affairs.

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Inferences & Interpretations

What are the inferences the article draws from this evidence? What interpretations of the evidence are provided?

Evidence is not usually expected to speak for itself; researchers give it meaning by viewing it in light of a working hypothesis, model, or theory. An inference is a logical conclusion, finding, or interpretation drawn from the evidence on the basis of a model of theory. It may confirm or refute a hypothesis.

What are the limitations to these inferences or alternative interpretations of the evidence?

Since research on settled questions is rarely worth undertaking or publishing, there are almost always alternative interpretations of evidence. Moreover, any research design selects what is foregrounded or backgrounded, emphasized or de-emphasized, and included or excluded. Instead, it is the necessary process of determining what an article is able to demonstrate and what it can do.

Keep in Mind

Be sure to think critically about how the inferences relate to the evidence as well as to the working hypotheses, models, or theories. Some articles explicitly acknowledge limitations, directions for future research, or alternative interpretations of the evidence, but this is often work you will have to do on your own. The goal is to generate plausible alternative explanations and identify limits while staying in contact with the empirical basis of a research article and the scholarly debates that pertain to a research question. Ground this work in the evidence in order to avoid “conspiratorial” critiques of scholarship.