

Noah Mitchell

BIO 294

February 23, 2026

Writing Assignment #2/Article Types

Primary research articles are the very first recordings by a person or a team of discoveries they made during their scientific study. This article's key components comprise the abstract (the main premise of the article), introduction (which gives some insight into how the study came about, the main idea, other information important to the study, and the hypothesis), methods (the study model), results (all of the data), discussion, and all of the references used. Primary research articles are the backbone of the scientific world, on which other scientists can utilize them and build on their own ideas for their own studies.

When it comes to **secondary research articles**, these are review articles, books, meta-analyses, and systematic reviews. They are basically like the opinions and overall personal reviews (done by someone else that is not involved in the original study) on the findings from the researchers who conducted the study. It is similar to a primary article in the sense of structure due to its introduction, body paragraphs with more

background information, data, discussion, and references due to the extensive information compiled.

The scientific peer review process happens after a researcher or team completes their study, collects all their data, and writes their findings down (primary or secondary research article). The first step is sending the article in to be published in a journal, then it gets decided on whether it is even worthy of being reviewed by an editor. The second step is that after that it goes to the review process for the Peer(s) or ‘referees’ who are usually other professionals from the same field of study who review and revise the article for any mistakes and to check its authenticity through various ways, on the basis on if the work is ethical, is it biased, is it up to standard, are the methods in the work easy to read and follow in case someone wants to conduct the study themselves, are the numbers and other data correct?, etc. From there, they ask all the important questions and decide whether to accept or reject it. A lot of papers get rejected, but they might make suggestions on what to alter and submit it again for review. Even if it gets accepted, they can also ask for a change as well after the journal publishes it. Finally, the article is published in the journal and sent to the subscribers (mostly going to the universities; it is very expensive). Every individual can read it if the article is placed in an open-access journal, eliminating that pricey pay wall obstacle and making it accessible.

References: <https://library.unr.edu/help/quick-how-tos/evaluating-sources/understanding-the-peer-review-process>

<https://libguides.library.drexel.edu/biomed-literature-types>