

Lauren Ba

Janet Rhinehart-Kim

Biol 294

September 21, 2020

The Difference Between a Primary and Review Article

In science, primary or empirical articles are original scientific reports of new findings or experiments. These articles are reports of empirical research studies conducted by the author and almost always published in a peer-reviewed journal (University, 2019). For an article to be peer reviewed, it must be examined by experts or a board of scholarly reviewers in that particular subject area for the quality of research and adherence to the editorial standards of the journal (What does Peer Review Mean?, n.d.). Key components in primary articles include but are not limited to an introduction (stating a hypothesis), identifies a research population, the methods used in the research or experiment, tests or research explained, results, discussions, and references used to support the research.

A review article or also known as a secondary article is written by someone who did not conduct the initial research but interprets and analyzes primary sources (Library, 2020). Examples of secondary or review articles include but are not limited to text books, encyclopedias, histories, scholarly journals, editorials, and speeches and interviews (University, 2019). Review articles are studies that draw conclusions based on research from many other studies. Key components of review articles include much analysis and an extensive bibliography.

After reviewing both articles: Bat Coronaviruses in China and Isolation and Characterization of a Novel Bat Coronavirus Closely Related to the Direct Progenitor of Severe Acute Respiratory Syndrome Coronavirus, I was able to identify that Bat Coronaviruses in China

is a primary source because it was a study done by the author and consist of most of the key components: an abstract, introduction, graphs, figures, discussion section, a conclusion section and a references section. Characterization of a Novel Bat Coronavirus Closely Related to the Direct Progenitor of Severe Acute Respiratory Syndrome Coronavirus is a review or secondary article because it is an analysis of multiple primary articles which is outlined in the list of references.

As stated before, a peer reviewed article is examined by experts or a board of scholarly reviewers in that subject area for the quality of research and adherence to the editorial standards of the journal. The process starts by a group of scientists conducting an experiment and write it up as an article and submit it to the journal. The article is then sent to experts in that field and reviewed. The reviewers provide feedback to the author(s) about the article and let the editor know if the study's quality is high enough to be published. If not, the author has a chance to revise the article and resubmit it for review (Scrutinizing science: Peer review, n.d.).

References

Library, H. (2020, January 15). *Library Research Guide for the History of Science: Introduction*.

Retrieved from Harvard Library:

<https://guides.library.harvard.edu/HistSciInfo/Secondary#s-lg-box-wrapper-7437015>

Scrutinizing science: Peer review. (n.d.). Retrieved from Understanding Science how science

really works: https://undsci.berkeley.edu/article/howscienceworks_16

University, C. (2019, August 22). *TUTORIAL: Scholarly Literature Types: Primary vs.*

Secondary Articles. Retrieved from Cornell University Library:

<http://guides.library.cornell.edu/c.php?g=293669&p=2004549>

What does Peer Review Mean? (n.d.). Retrieved from San Diego State University Library:

<https://library.sdsu.edu/reference/news/what-does-peer-review-mean>