Give It to Me Straight: Plain Language Summaries and Their Role in Scholarly Journals

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Overview
Changes in the publishing industry such as open access and online availability of research articles means that research is available to a larger audience than ever before. While traditional journal article elements (e.g., key words, abstracts, summaries, takeaway points) help give context to a paper or emphasize the point the authors are trying to make, they assume a level of expertise with the topic that may no longer be the case for some readers. Although plain language summaries (PLSs) have existed for a long time, they can better appeal to this broader audience because a PLS serves a different purpose altogether. Generally, a PLS is a short summary of a scientific article written in nontechnical language that makes the main idea of the paper easier to understand for a nonexpert audience.

Scholarly journals tend to cater to a specific professional audience. In general, they are intended for practitioners or researchers who are familiar with the topic of the journal as it relates to their profession. Readers of scholarly journals are assumed to have the basic knowledge required to interpret the articles, despite the use of jargon and complex terminology. For example, a reader of a cancer journal could be assumed to understand the basics of chemotherapy, the current standards of care, common abbreviations, or other technical jargon without those things having to be explained in the article. However, this means that a person whose specialty lies outside the topic of an article, or who has none of the basic knowledge assumed by the authors, may find it difficult to understand. A PLS can bridge that gap between a highly technical article and a general audience.

Audience and Purpose
If a journal article is intended for a specific professional audience that will have the requisite background to understand it, won’t those readers be the very ones who don’t need a PLS? Yes, but a PLS can expand that once-narrow audience by explaining an article in a way that anyone can understand. PLSs can help fellow scientists understand a paper, even if they are not in the same field or familiar with the jargon. General practitioners or those in loosely related fields may use a PLS to help them better understand a disease they only treat rarely and may not be familiar with. For example, a dermatologist may want to better understand a rare form of skin cancer. Doctors can use a PLS to better explain a patient’s diagnosis or treatment. Many who are experts in a field find it surprisingly difficult to explain their research in a way that is simple and clearly understood, and a PLS can help facilitate that doctor–patient communication.

But PLSs can help the general public as well. Patients or caregivers wanting to better understand a health condition may find a PLS helpful. In this case, a PLS may even have the potential to improve treatment. Patients who use a PLS to understand more about their condition may feel empowered to talk about the research with their doctor and make decisions about their own care in a more informed way. Reporters writing a story that references recent scientific advances may use a PLS to get some background on a topic.

Many PLSs are published alongside the articles they summarize, often appearing after the abstract, but this is not always the case, as some journals publish standalone PLSs. For example, Future Science Group publishes standalone PLSs on articles from a wide variety of journals. Each summary has a link back to the original journal publication. Some scientific advances receive attention in the lay press. A PLS may help reporters accurately describe the science, resulting in a better-informed public. Similarly, advocates or lobbyists may use these summaries to talk to policy makers when trying to bring about change. A PLS may influence policy by translating complex science into something much easier to understand.
As a hypothetical exercise: When the COVID-19 pandemic started, very little was known about the disease. Scientists began publishing papers quickly, and in those early months, misinformation thrived. With many papers on preprint servers or otherwise freely available, lay people read these articles and drew their own conclusions, accurate or not. A PLS could help in a situation like this by providing a place for the authors to state in the most basic terms what their research found, instead of leaving the interpretation of their results to a nonexpert lay public.

The fact is that the audience for a PLS may be anyone who is not familiar with the topic of the paper. We are only beginning to identify the myriad potential audiences and use cases.

Format and Content

PLSs can come in different forms, but the most common is text-only. Some PLSs are short, generally limited to about 250 words, and may be published alongside the article in the journal. Others may be much longer or could be published as a standalone item with a link back to the original article. Different publishers will have different requirements, but common elements of a PLS are the following:

- What the article is about
- Background information a nonexpert might need
- Why the study was done
- If it was a trial of some kind, what were the results?
- What the results mean
- How the results should be applied
- Any keywords and how they are pronounced
- Why a nonexpert would be interested in the article

Another PLS format is more like an infographic, so that text and visual elements combine to explain the main points of the article in language that is easy to understand. In these cases, the content is similar to the text-only format, but the language may be in smaller chunks like bullet points, and the visual elements further explain the topic of the article.

A PLS in graphic format should not be confused with a graphic abstract. While the 2 may appear similar in style, a graphic abstract still uses the technical language of the paper itself and is not necessarily written for a nonexpert audience. A graphic PLS may convey similar information as the abstract, but uses nontechnical language that is easy to understand by a lay audience. It may also include more basic information such as key words and definitions.

Generating Plain Language Summaries

PLSs are still somewhat new, and many authors will not necessarily have the skills to create one for their article. If a journal asks authors to create their own PLS, they should provide some guidance. This could mean providing a template for authors to work with, which could ensure uniformity of color, style, and layout and provide some level of quality control for the journal. There are many resources available online to help authors with the process. In particular, the American Geophysical Union, Sage, and Taylor & Francis have guidelines that explain the concept of a PLS and provide detailed instructions to assist authors in every step of the process of creating a PLS. Journals can point authors to these resources to help them get started.

As a side note, if the authors create the PLS, it is wise for an editor to review it before publication to check for accuracy and prevent “spin” from the authors. It is also helpful for the journal to have a nonexpert review the PLS to see if it actually is understandable to a lay audience.

Journals may also work with a vendor to create PLS. In this arrangement, a journal gives the vendor guidelines to work within and the vendor works directly with the authors to create the PLS, so that all the journal needs to do is review the final product.

Finally, we should consider the fact that artificial intelligence (AI) may eventually be used to create PLSs. Some video conferencing software has the ability to create meeting summaries that are extremely accurate. It is not a far jump to believe AI may also be able to produce a PLS.

Conclusion

Given their many benefits and uses, we can reasonably expect PLSs to become more popular, standardized, and easier to produce in the future. We have uncovered some interesting use cases for PLSs in this article, but as they become more and more commonplace, no doubt there are many more ways to use PLSs still waiting to be discovered.

References and Links

1. https://uk.sagepub.com/en-gb/eu/plain-language-summaries