

The Evolving Landscape of Academic Publishing: Essential Knowledge for Extension Scholars

Abstract

Extension faculty participate actively in creating and disseminating research in the natural sciences, social sciences, and emerging field of implementation science. This article discusses several current trends in academic publishing of which Extension scholars need to be aware. These include the rise in the use of metrics to evaluate journals, the growing open-access movement in academic publishing, and the proliferation of sham or predatory journals that charge publication fees without providing meaningful review or academic rigor. An awareness of these trends and the capacity to deal with them effectively will enable Extension scholars to optimize their success in disseminating their creative scholarly contributions.

Keywords: [academic journals](#), [Extension scholarship](#), [impact factor](#), [publication](#)

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Many Extension faculty have significant requirements for scholarship among their professional responsibilities (Franz & Stovall, 2012; Powell, 2011). For these individuals, successful scholarship is essential for professional advancement, and it is important to keep abreast of opportunities for disseminating their work in scholarly disciplinary settings. This article highlights several important recent developments in academic publishing. Understanding these trends will help Extension faculty maximize their success in publishing their scholarly work.

The Choice of Where to Publish: The World of Journal Metrics

With dozens, sometimes hundreds, of journals in any given academic discipline, there is a need to identify the leading journals in a field. Top journals are more widely read, favored by researchers as publication outlets, and more likely to be the source of essential new research advances. Bibliometrics is the statistical analysis of journal characteristics and has been used to develop indexes for comparing journals.

The best known and most prominent bibliometric measure is the journal impact factor (IF), which is a measure of the frequency with which a journal's articles are cited. The established standard for calculation of IFs is the annual publication *Journal Citation Reports* (e.g., Cornell University Library, 2017), available through most university libraries. Table 1 provides a descriptive summary of essential aspects of the IF and related information.

Table 1.

The Journal Impact Factor (IF): A Descriptive Summary

Topic	Description
Overview	An index of the frequency with which the articles in a journal are cited by other journals in the Web of Science database
Source	<i>Journal Citation Reports</i> , from the journal database Web of Science
Distributor	Clarivate Analytics (formerly distributed by Thomson Reuters)
Technical description	A journal's IF for a given year is the average number of citations in that year for all articles that were published in the journal in the previous 2 years. For example, a journal's 2017 IF is the average number of times that articles published in the journal in 2015 and 2016 were cited in 2017.
Typical values	IFs vary widely by discipline. For example, in the 2016 <i>Journal Citation Reports</i> , median IFs for some of the represented disciplines were as follows: Agricultural Economics and Policy, 1.05; Nutrition and Dietetics, 2.47; Education and Educational Research, 1.11.
Other journal metrics	5-year IF: Average number of citations in a given year for articles published in a journal in the previous 5 years (rather than 2). Eigenfactor score: Also an index of citation frequency, but with the additional feature that citations appearing in highly ranked journals are given more weight than citations in lower-ranked journals. Immediacy index: Indicator of the extent to which articles are cited in the year in which they first appear.

Other bibliometric measures exist (e.g., Eigenfactor score, immediacy index; see University of Illinois at Chicago Library, 2017), but the IF is the most closely tracked, having become a near-ubiquitous standard in the evaluation of journals. For many scholars, it is a primary consideration in decisions about where to publish one's work, and, as many Extension researchers are probably aware, the IF is typically used in evaluation of scholarly records during promotion and tenure reviews. Its appeal is easy to understand: It creates a linear scale along which journals can be ranked. Whether the IF deserves its central role is a subject of debate. Critics have claimed that it oversimplifies the issue of journal quality and has been grossly overused (Adams, 2014; Bohannon, 2016). But these arguments have not, thus far, diminished its prominence in academic settings.

With regard to bibliometrics, implications for Extension scholars are as follows:

- The IF and other indicators of journal prestige can be major considerations in deciding where to publish your scholarly work.
- The IFs of the journals in which one's publications appear can be an important consideration in promotion and tenure reviews.
- There are other sources of journal impact calculations (e.g., Google Scholar), but these are generally less rigorous than *Journal Citation Reports* in appraising which journals to include in their databases and are less

widely recognized.

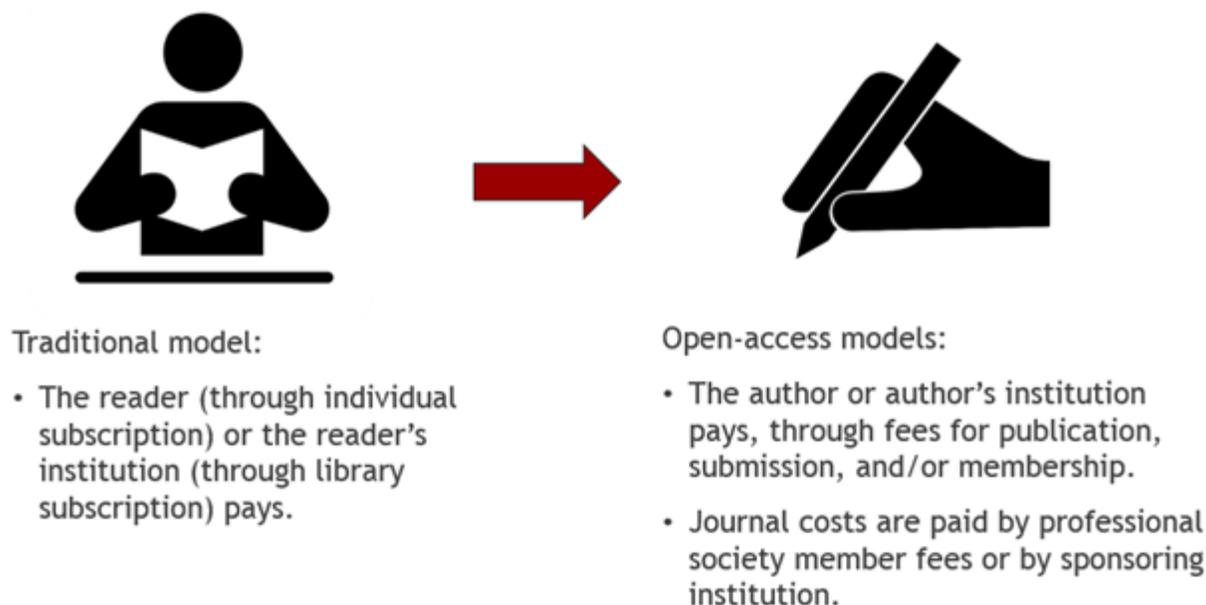
The Open-Access Movement for Academic Publication

The open-access movement calls for academic publications to be freely available to researchers and scholars worldwide. Its proponents claim that findings from research, particularly scientific and medical research, serve the public good and should not be restricted only to journal subscribers. Further, advocates claim that because much research is funded by public tax dollars (e.g., from the National Institutes of Health, Centers for Disease Control and Prevention, or—in Extension's case—National Institute of Food and Agriculture), the public deserves immediate access to its benefits. In the traditional academic publishing model, research journals typically limit access to their articles for at least several years, and annual subscription rates for university libraries can be thousands of dollars (Suarez & McGlynn, 2017).

Numerous high-quality open-access journals have arisen, led by the publisher Public Library of Science (2017). Because these journals do not charge subscription fees, their operating costs are usually borne by the contributing authors, or in some cases by sponsoring organizations (Figure 1). Consequently, fees to publish an article can be several hundred dollars or higher, with the expectation that they will be covered by the authors' institutions or grant funds. Many open-access journals (e.g., *PLOS ONE*) use rigorous review processes and are highly respected. As a result, however, when choosing where to submit manuscripts, scholars must take account of potential publication costs.

Figure 1.

Who Pays for Publication Products? Economic Models for Academic Publishing



Implications of the open-access movement for Extension scholars are as follows:

- The fact that a journal charges author fees to publish a manuscript does not rule out its being a valid, high-quality journal (see next point also). But carefully check out the journal's reputation.

The benefits of publishing in an open-access journal are that your work will be able to be widely read and readership will not depend on subscriber access (e.g., subscriptions maintained by university libraries). This circumstance will increase the chance of your work's having broad impact.

- The disadvantage of open-access publishing is that you will need to obtain the funds to cover the fees, typically hundreds of dollars or more. This cost sometimes can be covered by grants or professional development funds, but not everyone has access to these sources. Thus, this will be a factor in your decision about where to publish.

Sham and Predatory Journals

The open-access movement has also given rise to an unwelcome phenomenon: sham online publications that falsely claim academic credentials. Sometimes called predatory journals, they accept manuscripts without any significant review processes and exist solely to collect publication charges. Without editorial staff, manuscript review processes, or other forms of quality control, the costs of producing these "publications" are minimal, and their numbers have soared—by some estimates, in the thousands (Carey, 2016; Kolata, 2017). The open-access movement, which has introduced the legitimate use of publication fees, has made it difficult to determine the legitimacy of many academic journals. Due to this frequent ambiguity, efforts to identify and monitor the world of predatory journals have sometimes been accompanied by controversy (Straumsheim, 2017).

The introduction of predatory journals has generated the following implications for Extension scholars:

- Avoid publishing in predatory journals; be wary of unsolicited invitations to publish from unfamiliar sources.
- In researching a topic area, be aware of the existence of sham journals; maintain skepticism about unknown publications.
- Be aware that this issue exists when participating in promotion reviews of academic colleagues.

Conclusion

The technological and organizational context for academic scholarship is evolving rapidly as new opportunities and challenges emerge. Journal metrics, the open-access movement, and the rise of predatory journals are some of the recent developments of which Extension scholars need to be aware in order to optimize success in publishing and disseminating their creative contributions.

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Recommendations for Further Reading

For information on individual open-access journals, open-access business models, and specific journals' publication fees, see the following sources:

- Directory of Open Access Journals (<https://doaj.org/>)

- Open Access Directory (<http://oad.simmons.edu/>)

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