

## Selecting the right journal for a manuscript

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**Highlights:** The selection of the journal for the manuscript may significantly influence the author's career, and it can also strongly determine the impact that the reported findings will have. The process of selecting the journal for a manuscript should thus be done carefully and considering the publication goals.

**Keywords:** Impact factor, publishing goals, open access

### Introduction

The selection of the journal may profoundly affect the quality of the final publication and the short-term and long-term impacts that the publication will have. Through a right journal, a paper will reach the right readers: the researchers who will cite the paper and the professionals who will apply the new information. Publishing in a well-renowned journal will add to authors' professional reputation and increase their success in competition for funding. The selection of the journal is thus a crucial step in the publishing process and it should be preceded by a thorough decision making process where the journal's Impact Factor is only one of the factors to be considered. In the next sections, a stepwise, systematic process for selection of the journal is outlined.

### Step 1 – Defining the publishing goals and target audience

The right journal for a manuscript meets the publishing goals of the authors in an optimal way. Although each established research field usually has a set of standard choice journals, these may not automatically be the right journal for an individual paper. Before submitting, the authors should therefore take some time to define the publishing goals for the manuscript to be submitted. Two questions will help to define these goals: 1) Why is the paper published?, and 2) Who is the target audience?

In most cases, the primary goal is to publish the findings in a journal that has as high Impact Factor as possible, and to gain as many citations as possible from the interested target audience, the peer scientists. In some cases, however, the primary publishing goals may be different, in particular when it comes to speed of publishing and target audience. A typical case where the primary publishing goal is simply to get the manuscript published rapidly in an indexed journal is a PhD thesis project. In some cases, the goal may be to spread the information to a specific target group, such as specialists, while in other cases the authors wish to reach as broad audience as possible. A paper with high policy relevance may reach out to decision makers rather than scientists. The goals and target groups associated with a manuscript paper also depend on the quality of the data to be published: a publication in *Nature* or *Science* is hardly realistic if the findings and the analysis have low novelty value.

A broad target audience can be reached through open access publishing. Open access publishing, whether achieved by following the golden or green road, provides increased visibility since it allows even readers without prenumeration to read the publication free of charge (Harnad et al. 2004). Open access publishing may be recommended or requested by research financiers. The quality of the open access journal may vary considerably, and predatory publishers with questionable ethics are found among the serious open access journals. Special care should thus be taken when selecting an open access journal. The Directory of Open Access Journals (DOAJ) maintains a whitelist of open access journals, providing information about their quality.

### Step 2 – Evaluate the quality of the journals

Quality and credibility of a journal does not automatically translate to the quality and credibility of an individual paper published in the journal in question. However, it is accepted that the journals vary considerably in their prestige and reputation, and the ranking of the journal may be used as an indicator in evaluation of the work of individual researchers and research groups. Once the publishing goals have been

defined and used for framing the options, a list of suitable journals can be made, and the next step is to evaluate their creditability using a several criteria.

Within a certain field of science, the scientific journals are ranked according to their prestige and impact, which can be measured using journal level metrics. There are several metrics available (Bergström 2007; Lancho-Barrantes et al. 2010; Guerrero-Botea et al. 2012). The best known, first-generation metrics is the Impact Factor (IF), which is based on the Web of Science database and reflects the average number of citations to the articles published in the journal (Garfield 2006). The IF is generally defined on 2-year basis or 5-year basis. Despite that IF still governs the choice of journal in many cases, it is heavily criticized, in particular because of its inability to assess the quality of citations, its sensitivity to outliers and the poor comparability between different scientific fields. It is also known that the IF can be artificially boosted by the editorial policies, which do not necessarily contribute to the quality of the publications. In 2007, the European Association of Science Editors (EASE) issued an official statement recommending that journal IFs should be cautiously used for measuring and comparing the influence of journals (EASE 2007).

The second generation metrics, such as the SCImago Journal Rank (SJR) metrics, based on Scopus data and the PageRank algorithm, aim to capture both the number of citations received by the journal and the prestige or significance of the journals where the citations originate from. Unlike IF, the SJR gives different weight to citations depending on the prestige of the citing journal and does not account for journal self-citations. The SJR deviates from IF due to its open access, larger source database (Scopus), and assessment of the quality of citations (Falagas et al. 2008). Even the second generation metrics can, however, be criticized for their relativity and for not taking properly into account for the differences between the citation practices of the different scientific areas.

Altmetrics are the new metrics that rate journals based on scholarly references to them in social media. Several journals now offer altmetric information (e.g., PLOS, Frontiers), such as the number of times the journal or an individual article has been viewed, discussed, and cited. Altmetrics aim to cover a larger spectrum of the impact of a journal or a paper, including the references in data bases, views, downloads, references in news and social media. Thus, altmetrics captures a larger part of the scholarly ecosystem and describes its dynamic, fast and updated developments. Altmetrics acknowledge the fact that a significant part of the scientific conversation has been moved to social media and blogs, and that data is increasingly moving to online repositories. Altmetrics are referred to as "tomorrows filter" for scientific publishing, and considered as an alternative for the traditional citation impact metrics (Priem et al. 2010). It is probable that the importance of these metrics will increase in future, and the authors should therefore be aware of them and consider them when selecting the journal.

Other, more traditional indicators for the quality of the journal are its indexing in credible databases. It is also important to consider whether the journal offers readily available information about the peer-review process and practices. A very quick processing time sounds attractive but may also indicate that the peer-reviewing process is compromised. The so called predatory publishers are listed in Beall's List of Publishers on Scholarly Open Access. The composition of the editorial board is often indicative of the quality of the journal, as is the easiness of contacting the publisher and the editors, reputation and affiliations of the previous authors. The journal's page charges can also be a decisive factor for the researchers that often work on constrained research budgets.

### Step 3 – Matching the manuscript with the journal

Once the creditability of the framed journals has been evaluated and the ones passing the filters have been identified, the authors might have up to three or four possibilities to choose from. The last step is to rank these choices to Plan A, Plan B, etc. The most common reason for immediate rejection is mismatch between the manuscript and the journal aims and scope. Most of such rejections could, however, be easily avoided if the authors made a proper analysis of whether the manuscript lies inside the journal's aims and scope, and consider whether the topic will be of interest for the readers of the journal. The starting point is to read the statement of aims and scope for the journal. A good way to get familiar with the journal's aims and scope is to actually read the journal, examine the earlier issues and volumes for their contents. Factors like time from submitting to publishing, composition of editorial board, etc. can also be important to consider.

If the Plan A journal results in rejection, the manuscript needs to be carefully reformatted according to the guidelines for the Plan B journal. Failure to meet the formal requirements may as such be a reason for immediate rejection. Attention should thus be given to matching the format of the manuscript with those formats that the journal accepts (e.g., research article, review, and short communication) and the author guidelines should be carefully followed.

## Conclusions

In summary, by carefully defining the publishing goals and target groups, the authors set the frames for journal selection. There are different metrics that are informative, once one understands how the metrics have been calculated and what are their limitations. When comparing the quality and creditability of journals, it is worthwhile to consider also other metrics than the traditional IF: sometimes, your paper may receive larger readership and a higher impact in a journal with a low IF. Finally, by carefully analysing how the manuscript's contents match with the journal aims and scope, the authors may save themselves from the unnecessary delays caused by immediate rejections.

## References

- Bergström C. (2007). Eigenfactor: Measuring the value and prestige of scholarly journals. *College & Research Libraries News* 68: 314–316.
- Falagas M.E., Kouranos V.D., Arencibia-Jorge R., Karageorgopoulos D.E. (2008) Comparison of SCImago journal rank indicator with journal impact factor. *FASEB J.* 22: 2623–2628. <http://dx.doi.org/10.1096/fj.08-107938>.
- EASE (2007). Impact Factor Statement. <http://www.ease.org.uk/publications/impact-factor-statement>. [Cited 29 September 2014].
- Garfield E. (2006). The history and meaning of the journal impact factor. *Journal of the American Medical Association* 295: 90–93.
- Guerrero-Botea V.P., Moya-Anegón F. (2012). A further step forward in measuring journals' scientific prestige: The SJR2 indicator. *Journal of Informetrics* 6: 674–688. <http://dx.doi.org/10.1016/j.joi.2012.07.00>.
- Harnad S., Brody T. Vallières F. O., Carr L., Hitchcock S., Gingras Y., Oppenheim C., Stamerjohanns H., Hilf E. R. (2004). The Access/Impact Problem and the Green and Gold Roads to Open Access. *Serials Review* 30:310. <http://dx.doi.org/doi:10.1016/j.serrev.2004.09.013>.
- Lancho-Barrantes B. S., Guerrero-Bote V. P., Moya-Anegón, F. (2010). What lies behind the averages and significance of citation indicators in different disciplines? *Journal of Information Science* 36:371–382.
- Priem J., Taraborelli P., Groth P., Neylon C. (2010). Altmetrics: A manifesto, 26 October 2010. <http://altmetrics.org/manifesto>. [Cited 29 September 2014].