

Comment

JCOM — FIVE YEARS IN THE FUTURE

While changes in the “how” are exciting, changes in the “how much” could be exasperating

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ABSTRACT: In terms of efficiency, managing the effects of overpublishing (the sheer volume of new papers published each week) has become seriously challenging for science communication researchers. This comment analyzes causes and consequences of this situation and proposes to research journals to take into considerations the following elements: a) special attention to headline and abstract, b) more visible and updated keywords and c) a clear structure of content and a shortening of the average number of pages per paper.

I've been working on scientific communication for almost two decades. Throughout this time I have been a witness and a participant of deep changes in the communication of science and in science itself. The formats and channels have changed, but also the dimensions of what is communicated (that is, the number of scientific papers published). We, as science communicators, often adapt very well to new formats and channels: we were among the first professionals to use e-mail, as well as to publish and browse Internet contents, blogging and microblogging, participate in social networks, or use mobile telephony, smartphones, apps, and tablets. However, if changes in the “how” can be easy and even exciting for us, science communicators and science communication researchers, changes in the “how much” (the sheer volume of new papers published each week) can become exasperating.

“I'm worried about the pressure of young scientists for publishing nonstop,” said Philip Campbell, editor of *Nature*, in an interview published by SINC¹ (the Spanish Agency of Science News). Certainly, young scientists, pressured by the need to compete in their academic career, have an uncontrollable desire to publish. But besides this higher “offer” by the researchers, overpublishing is also due to changes that have occurred in the industry of research journals itself. Among others, in the last 20 years this industry has experienced a substantial time shortening of the process of submission, review and publication of manuscripts (mainly due to higher efficiency of online applications), an unprecedented explosion in the number of new journals going to market (due to movements such as digital publishing and open access) and an almost limitless increase in the access to scientific journals contents from any place of the world (although dramatic differences between countries).

As a result, I often feel that the time I usually spent searching and reading papers is disproportionate to what I dedicate to the research itself. And the worst is that, unless I could spend an endless time on a search, some interesting works from other authors will pass unnoticed through my eyes. Managing the effects of overpublishing, in terms of efficiency, has become seriously challenging.

How can journals in the field of science communication help us in our search of their contents? Elements that research journals need to reconsider in deep are:

- Headline and abstract, those parts of the paper more visible in a search process need a special attention. How many times the expectations of a headline, even in journals with peer review system, do not correspond at all with the content of the paper! How often an abstract, rather than a summary of main findings, is a mere invitation to read the paper, an introduction!
- Keywords and topics, should be at the same time more standardized and updated to the emergence of new debates (concepts and research areas, methodologies, etc.); a complete list of keywords should also be easily available to readers in the area.
- Contents and number of pages per paper, content must be straight forward , with a clear structure. Could we consider shortening the average number of pages of papers in science communication field? What kind of consequences could be derived from a decision like this?

In the way of transformation and change on science communication research, scientific journals should be the best travelling companions for their authors and readers.

Notes and references

- ¹ “I’m worried about the pressure of young scientists for publishing nonstop” [“Me preocupa la presión de los jóvenes científicos por publicar sin parar” original text in Spanish]. Interview to Philip Campbell by Pampa Garcia, *SINC*, July 26, 2012, available at <http://www.agenciasinc.es/Entrevistas/Me-preocupa-la-presion-de-los-jovenes-cientificos-por-publicar-sin-parar>.

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