

Thought for Food

There is increasing evidence researchers are struggling to keep up with the sheer volume of research being produced.

It has been estimated that in 2006 over 1 million articles were published in around 24,000 peer-reviewed journals. A later study in 2010 estimated a total of 50 million scholarly articles in existence, with a growth rate of around 4%/year. Why is there so much? Part of the explanation is the size and continued growth of the international research community. However, it has been argued that existing structures for research funding and career progression have made the problem worse. Scholars have, in some cases, been encouraged to publish larger numbers of increasingly specialised journal articles to show their impact in a subject. The result has been an overload of ever more fragmented information which is difficult for scholars to digest. It is harder to identify trends and find what is relevant.

As proof of this, research on researcher behaviour shows the increasing number of articles researchers feel the need to read to keep up with their subject, shifts towards shorter reading times and the number of times this kind of information gathering fails to produce a useful result. One study suggested as many as a third of researchers felt the process of information gathering had not produced the right outcome. The consequences of this failure include poorer targeting and planning of research as well as duplication of effort between research groups. Given that there is little prospect of any decline in the number of articles being published, what can be done to help researchers? This will be the subject of my next blog.

A version of this blog with supporting references can be found [here](#) (link to relevant page on BDS site)

References and further reading

Anon., 'How science goes wrong: problems with scientific research', *The Economist*, 19 October 2013.

Brunelle, B., *Scientists as Information Users: product innovation is the name of the game*, 2006, Outsell Inc., London, UK.

Jinha, A., 'Article 50 million: an estimate of the number of scholarly articles in existence', *Learned Publishing*, 2010, 23(3): 258-263.

King, D., Tenopir, C. and Clarke, M., 'Measuring total reading of journal articles', *D-Lib Magazine*, 2006, 12(10).

Larsen, P. and von Ins, M., 'The rate of growth in scientific publication', *Scientometrics*, 2006, 84(): 575-603.

Nicholas, D. and Clark, D., 'Reading in the digital environment', *Learned Publishing*, 2012, 25(2): 93-98.

Tenopir, C., King, D., Edwards, S. and Wu, L. 'Electronic journals and changes in scholarly article seeking and reading patterns', *Aslib Proceedings: New information perspectives*, 2009, 61(1): 50-32).

Tenopir, C., Volentine, R. and King, D., 'Scholarly reading and the value of academic library collections: Results of a study in six universities', *Insights: the UKSG Journal*, 2012, 25(2): 130-149.