References

- 1 Nuijten MB, Hartgerink CHJ, Van Assen MALM, Epskamp S, Wicherts JM. The prevalence of statistical reporting errors in psychology (1985-2013). *Behavior Research Methods*. 2015. doi: 10.3758/s13428-015-0664-2
- 2 Epskamp S, Nuijten MB. statcheck: Extract statistics from articles and recompute *p*-values. R package version 1.0.1. http://CRAN.R-project.org/package=statcheck2015.
- 3 American Psychological Association. *Publication Manual of the American Psychological Association*. Sixth Edition. Washington, DC: American Psychological Association; 2010.
- 4 Garcia-Berthou E, Alcaraz C. Incongruence between test statistics and *p*-values in medical papers. *BMC Medical Research Methodology*. 2004;4:13. doi: 10.1186/1471-2288-4-13
- 5 Berle D, Starcevic V. Inconsistencies between reported test statistics and *p*-values in two psychiatry journals. *International Journal of Methods in Psychiatric Research*. 2007;16(4):202-7. doi: 10.1002/mpr.225
- 6 Francis G. The frequency of excess success for articles in Psychological Science. Psychonomic Bulletin & Review. 2014;21:1180-7. doi: 10.3758/ s13423-014-0601-x
- 7 Fanelli D. "Positive" results increase down the hierarchy of the sciences. *PLoS One.* 2010;5(3):e10068. doi: 10.1371/journal.pone.0010068
- 8 Veldkamp CLS, Nuijten MB, Dominguez-Alvarez L, van Assen MALM, Wicherts JM. Statistical reporting errors and collaboration on statistical analyses in psychological science. *Plos One*. 2014;9(12):e114876. doi: 10.1371/journal.pone.0114876
- 9 Greenwald AG. Consequences of prejudice against the null hypothesis. *Psychological Bulletin.* 1975;82:1-20.
- 10 Sterling TD. Publication decisions and their possible effects on inferences drawn from tests of significance—or vice versa. *Journal of the American Statistical Association*. 1959;54(285):30-4.
- 11 Sterling TD, Rosenbaum WL, Weinkam JJ. Publication decisions revisited The effect of the outcome of statistical tests on the decision to publish and vice versa. *American Statistician*. 1995;49(1):108-12.
- 12 John LK, Loewenstein G, Prelec D. Measuring the prevalence of questionable research practices with incentives for truth-telling. *Psychological Science*. 2012;23:524-32. doi: 10.1177/0956797611430953
- 13 Wicherts JM, Bakker M, Molenaar D. Willingness to share research data is related to the strength of the evidence and the quality of reporting of statistical results. *PLoS One*. 2011;6(11):e26828. doi: 10.1371/journal.pone.0026828
- 14 Sakaluk J, Williams A, Biernat M. Analytic review as a solution to the misreporting of statistical results in Psychological Science. *Perspectives on Psychological Science*. 2014;9(6):652-60. doi: 10.1177/1745691614549257
- 15 R Core Team. R: A Language and environment for statistical computing. http://www.R-project.org/2014.
- 16 Kerr NL. HARKing: Hypothesizing after the results are known. *Personality and Social Psychology Review.* 1998;2:196-217.
- 17 Wagenmakers EJ, Wetzels R, Borsboom D, Maas HLJvd, Kievit RA. An agenda for purely confirmatory research. *Perspectives on Psychological Science*. 2012;7:632-8. doi: 10.1177/1745691612463078

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Independent editors – how secure is your position?

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Prior to the start of the millennium, scientific papers were published largely as hard copy, usually by editors working for particular organisation and societies, which either paid to have them published by firms such as Academic Press and Wiley, or more usually the journals were sent out to subscribers (usually institutional libraries rather than individuals) who paid for each one or for a "basket" of those in a similar field. Most publishers did not see any particular profit in providing this service for the scientific community. But all this was soon to be quickly superseded by electronic publishing, with almost no journals continuing to produce only hardcopy, and increasingly fewer offering both hardcopy and online versions, as had been the case with *Cell Biology International* in the last few years, for which I was Editor-in-Chief for 14 years before recently demitting office.

Around 2000-2001 when electronic online publishing began in earnest, there was a rapidly growing demand for publication, and the "author-pays" model took off. Authors were charged for papers that were accepted for publication, and the papers were immediately made accessible to readers free of charge once online. Although the converse method still remains available, ie the *reader* or the institution pays to download the full paper (only the abstract being free), this has become less and less common. Crucially, the authorpays system means that publishers get paid up-front.

Taking an overview of the present situation, publication costs are miniscule compared with the cost of hardcopy journals published before the 21st century. Unlike authors of novels and other publications, who sell their work or receive royalties, scientists and other academics do not get paid for their contribution to the literature; on the contrary, they pay for the privilege. And the costs can be hefty, with publishers charging thousands of pounds or euros per accepted article. The scientific paper has become a cash-cow, which is why there has been a burgeoning of new journals. Many less reputable outfits have jumped on the band-wagon – the predatory journals. Beall's list shows how prolific these have become as the entries are coming close to a thousand; see http://scholarlyoa.com/publishers/.

Now I come to the crux of this article, which concerns my own experience as an independent editor. When these changes in electronic publishing began, some publishers created "core" journals edited by their own staff. However, they also encouraged the creation of new journals that would be independently edited. This meant that someone not employed by the publisher would work hard to establish a journal, raise an impact factor and get a healthy submission rate of good articles. Anyone who has attempted this exercise will know how much time and effort is required to succeed. In my own case, I created two new journals,

both of which are now in good shape, viz. *Theoretical Biology and Medical Modelling* (IF 0.95) and *Cancer Cell International* (IF 2.77). The former has since had two editors-in-chief, both highly competent experts who took up their posts after invitation. Both journals are "owned" by the same publisher, and the editor-in-chief receives a small annual honorarium and a little of the article processing charge (APC) paid by the authors of accepted papers. This recompense, however, amounts to only about 10% of the heavy charges levied by the publishers. During the last 10 years or so, the remuneration of editors per accepted article has remained essentially unchanged, whereas the APC has at least doubled, hardly fair on those who have to do the most work, ie the editors, some - but not all - of whom will be helped by paid assistants.

Independent editors need to be respected for the hard work put into creating and running successful journals while maintaining the high standards of research integrity. The fewer manuscripts accepted by a journal, the smaller the salary becomes. If weaker manuscripts start being accepted, an independent editor's income will increase but standards will fall. This raises another issue regarding the treatment of independent editors by publishers; the publishers are there to make money, not primarily for the science or its veracity. The more papers are published, the greater the publisher's profit. Pressure on independent editors to relax their standards is therefore inevitable.

Independent editors have an agreement with a publisher regarding the continuation of the journal annually. Since the publishers "own" the journals, agreements can come to a close by either party provided it is mutually understood why this is being done; this should be through a process which is fair and ethical. WAME (www.wame.org/), COPE (www.publicationethics.org/) and other similar bodies in several countries have set out regulations regarding the way in which independent editors should be treated.¹ But business is business, and independent editors can find themselves out of a job. These regulations are not readily enforceable, but when they are flouted, cases need to be brought to the attention of everyone², especially to other independent editors, who must be aware that their editorial position and independence can be quite fragile.

In my case, not one of these regulations was taken into consideration, and therefore there was no redress after I was literally dumped by the publisher as the chief editor of my journal. According to the WAME regulations, the main issues that were ignored are as follows:

- 1. There was no negotiation before the termination notice was sent.
- 2. All parties involved were not informed.
- 3. No clear reasons were given for terminating the agreement.
- 4. Notice of termination should have come from the senior management of the overall owning company, based on information from *both sides following prior discussions* (some major publishers having a small committee dealing with such matters).

There were two further concerns. First, the publisher's sub-editor, who had my journal in her portfolio, waded in without my permission almost immediately after the termination notice was sent, effectively pushing aside the editorial role that my assistant and I had been operating smoothly for nearly 15 years. Second, the publisher had already decided who they wanted to take over, and this person was not identified until well through the 6-month termination period. No information was provided about the new editor and his standing in the field of the cell biology of cancer (necessary for a journal called Cancer Cell International). Passing on an editorship usually involves extended consultation between the editor and the publishers, since it is essential that the journal is passed on to trustworthy and competent persons with sufficient experience of editing.

Independent editors must be made aware that under present day publishing practices they can find themselves out of office at short notice, as has been experienced by others with little or no redress³. The case for legal regulations in such circumstances has been well argued by Matko Marusic⁴. Therefore it is particularly important that a contract or "agreement" between an independent editor and the publishing company (usually on an annual basis) is carefully drawn up and renegotiated as necessary each year, along with negotiations on an increase in remuneration at least commensurate with any increase in APC by the publisher. Second, the business considerations mentioned above (particularly in the case of predatory journals) can seriously compromise and undermine the integrity of scientific publications. This problem needs to be recognised before it gets much worse, and this is why WAME and other editorial organisations have asked that instances such as this are made public.

Finally, it seems odd that many independent editors, like myself, can be and have been exploited in helping to fill the coffers of wealthy publishing houses. We seem to act as the "piggy-in-the-middle" that gets the raw deal. This raises the question of who is truly important in the publishing of scientific articles. Cannot independent editors provide the scientific fraternity with a better service than having authors spend a great deal of valuable funding to get their papers published? Thanks to ever advancing IT, there are other ways of going about this business that can greatly improve the situation compared with the now "conventional" online publication process.

References

- 1 European Science Editors' Handbook, 2nd Edition, 2013. Several chapters, notably 6.10.
- 2 Poynder R. Open and Shut. Follow his Blogs at http://poynder.blogspot. co.uk/. Many deal with open access issues.
- 3 http://www.oapublishinglondon.com/news/43#
- 4 Marusic M. The importance of legal regulation for scientific journals. *European Science Editing*. 2015;41(2):36-38.