Description

When scientific manuscripts are submitted to a journal they have to undergo a peer review process so that the journal can decide whether or not they should publish the article. In recent years, many articles have been retracted from journals due to falsification of the reviewing process.

Fraudulent Review by Chinese and Polish Researchers

Recently, four Chinese researchers were involved in multiple article retraction cases. The authors appearing in all three articles are He-Ling Wang, Peng Liu, Ping-Yi Zhou, and Yu Zhang, were all affiliated with the Shengjing Hospital of China Medical University, Shenyang, China. These articles were not retracted due to image or scientific fraud. The fraud involved here goes beyond producing scam scientific data, and rather corresponds to identity abuse or theft. The retraction notice of the article indicates that the peer review process was compromised. It is believed that the paper was accepted based on recommendations from fake reviewers. On first reading, it may seem like the editors made a mistake when assigning the article to reviewers, and trusted the decision of these reviewers. However, on further investigation, it was discovered that there were fake e-mail accounts created and used as accounts of these “suggested reviewers” by the authors. Thus, the authors could themselves review their own paper!

A similar case involved another researcher from the Shanghai Jiang Tao University. The retraction note published in PLOS ONE on a paper by Linshan Wang stated that on reviewing of the submission history of the manuscript, the editors at *PLOS ONE* found indications that the peer review process was compromised by the submission of reviews through fabricated reviewer accounts.” This statement is more explicit with respect to authors’ behavior and suggests that the fraud was not done solely at the scientific level, but also implies a legal crime. In addition, the same author has seen two more papers in which he was the first author, one in Gene and the other in Tumor Biology, being retracted in the same year. These papers were also retracted on the same grounds.

A Polish researcher was also recently involved in similar retraction cases. Five papers by Mariusz Ksi??ek, who is affiliated with the Wroc?aw University of Science and Technology, Poland, were recently retracted and the causes for retraction were due to the fake review process.

Frequency of Frauds

One would hope such cases are pretty rare, however, a more extensive review of this phenomenon revealed that it is rather widespread, even though it mainly occurs in a few countries. A study by Qi, Deng, and Guo, published in the Postgraduate Medical Journal identified 250 retracted papers overall that were published in 48 journals by six publishers. The top five journals included the *Journal of Vibration and Control* (24.8%), *Molecular Biology Reports* (11.6%), *Immunopharmacology and Immunotoxicology* (8.0%), *Tumor Biology* (6.8%), and *European Journal of Medical Research* (6.4%). The publishers included SAGE (31%), Springer (26%), BioMed Central (18%), Elsevier (13%), Informa (11%) and LWW (1%). A majority (74.8%) of retracted papers were written by Chinese researchers.”

With respect to the “ranking” of the journals, *Molecular Biology Reports*, a Springer journal, had an impact factor of 1.7 for 2015, while *Tumor Biology*, a SAGE journal, had an impact factor of 2.93. These journals are thus not “major” journals but still not completely secondary journals. The potential impact of such fake or unverified results on scientific ideas, therefore, cannot be completely neglected.

Nationality Bias

The study also underlined that a majority of the frauds were due to Chinese researchers. However, one could argue that there are many more publications originating from Chinese scientists, and taking into account the size of the scientific population would compensate for the overwhelming representation of Chinese researchers in such frauds.

Figures for the number of research workers in Research and Development per 100,000 inhabitants, in 2010, were 465 for Canada, 409 for the United Kingdom, 387 for the United States, 167 for Poland and 90 for China. With the respective populations into consideration, there are 99 researchers in China for each 100 in the United States, hence these are almost identical numbers. The over-representation of China is thus more likely due to other parameters and could be due to a stronger pressure to publish, and maybe lower scientific ethics.

Possible Remedial Actions

A series of simple actions could be taken in order to eliminate, or at least strongly reduce, these frauds. The weak point in the peer review process that these authors have exploited is the laxity of some journals in selecting their reviewers or in checking their identities. In most journals nowadays, authors are requested to suggest some reviewers for their manuscript. Editors should be more careful when checking the identity of the suggested reviewers, as well as their affiliations, which should be different from those of the authors. In some of the quoted cases, the editors blindly trusted the authors for the suggested reviewers.

Moreover, reviews should be restricted to peers having institutional contact addresses. Authors in the above cases created e-mail addresses which they provided as a contact for the reviewers so that they could themselves reply to the review request(s). One possible solution to overcome this problem would be to let editors have access to the databases of researchers throughout the world, possibly distinct for each field of knowledge, where they could check the official contact address of reviewers.

Another solution would be that editors directly pick the reviewers themselves, instead of relying on authors to do the job for them.

Finally, more researchers should be educated in ethical values irrespective of their country of origin, so that they do not resort to fraudulent practices. More importantly, the current system of limited funding and pressure to publish should also be considered as a possible cause for such behaviors.

Category

1. Publishing Research
2. Understanding Ethics

Date Created
2017/02/26
Author
daveishan