Description

[Peer review](#) is the heart of the academic publishing industry and is extremely important to maintain the excellency of the published scholarly literature. However, with the rapid rise in the number of cases reported for ethical violations due to pressure to publish, predatory journals, fake peer reviews, data manipulation, etc.; the need of the hour is to focus on improving the quality of the peer-review process and maintaining the trust of the research community. This infographic provides an overview of the underlying challenges in the peer review process and the best approaches to overcome those challenges to help uplift the quality of peer review.

The major factors that would help revamp the peer review process are:

- **Standardizing the review process**

Although the peer review workflow is common in most journals but some journals still differ in certain aspects like turnaround times for reviews, review submission systems, reviewing policies, etc. Streamlining and standardizing the review process by adopting innovative approaches like transferable peer review would definitely take the burden off the scholarly community and address some of the current challenges.

- **Maintaining the integrity**

Peer review is used for validating research before it is communicated to the entire community. To maintain the sanctity of the process, it is essential that reviewers follow the ethical principles at every step of the peer-review process.

- **Diversifying the reviewer pool**

The gradual rise in the number of submissions in the recent times has put a lot of pressure on the limited pool of volunteer reviewers. Collaborating with more expert reviewers from the emerging countries would take off some burden and evenly distribute the load.

- **Training the reviewers**

Most researchers feel the need for a clearer guidance for reviewing and that a formal training would positively impact their performance as a peer reviewer.

- **Rewarding the reviewers**

Awarding recognitions, rewards or incentives to to explicitly recognize the peer review contributions of the researchers would boost their spirits and the quality of the published literature.

These are some stumbling blocks which need to be overpassed for a stronger research community.

(Click here to download the infographic)

# Uplifting the Quality of Peer Review...The Best Way Forward!

32.9 % of the researchers volunteer to review to ensure the quality and integrity of published literature in their field.

Standardizing the Journal Review Policies

Dissatisfied 15.9% | Neutral 30.1% | Satisfied 54%

Dissatisfied 29.1% | Satisfied 42.8% | Neutral 28.1%
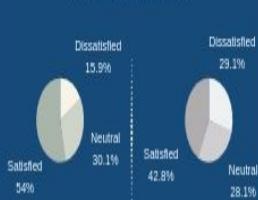
Only 54% researchers are satisfied with the current technology supporting the peer review process

Only ~43% researchers are satisfied with the current turn around time of the peer review process

Negative 1.6% | Neutral 23.0% | Positive 74.8%

Negative 15.9% | Positive 46.7% | Neutral 37.4%
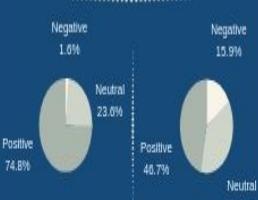
>70% researchers believe that the online manuscript and review submission systems needs improvement

46% researchers believe that more journals and publishers should adopt transferable peer review

Maintaining the Integrity

"Ensuring the integrity of the peer review process is vital and an increasing challenge that we cannot fail to meet"
- Tami Potten, British Institute of Radiology

Retracted papers for fake peer review by country from 2012-2016

China, Taiwan, Iran, South Korea, Pakistan, India, Australia, Malaysia, Egypt, Turkey, US, Belarus, Germany, Italy, Poland, Saudi Arabia, Serbia
0 100 200 300

>740 articles have been reported for fake peer reviews by Retraction Watch until Sept 2019

Diversifying the Reviewer Pool

The burden of peer review is currently unevenly distributed.

~10% of reviewers are responsible for ~50% of the peer review records.

USA researchers contribute the maximum number of manuscript reviews in the world.

Women are less engaged in the peer review process than men

Female Reviewers | Male Reviewers
0 20 40 60 80

Training the Reviewers

80% of the researchers believe that peer review training would tremendously improve the peer review process.

One-on-one with an Established Researcher 13% | Other 4% | Practical Online Course 46% | Live Training Sessions 24% | Webinars 13%

Online courses are the most popular means of training for reviewing

Universities, Publishers and Journals, Learned Societies, Third Parties, Doesn't Matter, Training is Unnecessary
0% 25% 50% 75%
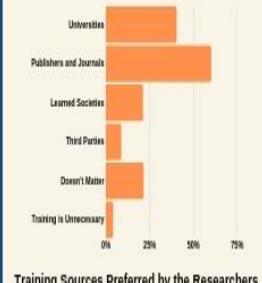
Training Sources Preferred by the Researchers

Rewarding the Reviewers

9% Reviewers expect performance based awards

31% Reviewers expect cash or rewards in-kind

12% Reviewers expect accreditation in some form

28% Reviewers expect feedback for the review report

20% Reviewers expect acknowledgement from the editor, in the publication, or in the journal

Negative 2.5% | Neutral 14.1% | Positive 83.4%
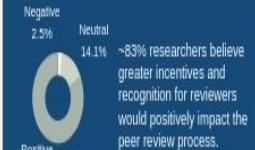
~83% researchers believe greater incentives and recognition for reviewers would positively impact the peer review process.

Sources: 1. https://publons.com/static/Publons-Global-State-Of-Peer-Review-2018.pdf
2. https://aaapbio.org/peer-review-survey
3. https://www.nature.com/news/journals-invite-too-few-women-to-referee-1.21337
4. https://verneaboutscience.org/wp-content/uploads/2019/08/Quality-trust-peer-review.pdf
5. https://onlinelibrary.wiley.com/doi/full/10.1002/leap.1002

Category

1. Infographic
2. Understanding Ethics

Date Created
2019/09/19
Author
editor