Practical tips on managing paper mills: A publisher’s perspective

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Renee Hoch, Ph.D. | Managing Editor, PLOS Publication Ethics
Polls – experiences with paper mill cases
Various tactics can be used to manipulate the publication process

- Content
- Authorship
- Peer review
Identifying & investigating concerns about systematic manipulation of the publication process

1. **Identify affected content**
2. **Deep assessment for a cohort of articles**
   - Evidence of series-level concerns?
     - Invite authors to comment on concerns
     - Evaluate responses & take action
3. **Conduct periodic audits to identify related submissions**
4. **Notify journal team(s). Add pre-publication checks, if possible**

**Red flag triggers investigation**
Evaluating whether there is evidence of potential paper mill activity

**Content**
- Recycled or plagiarized content
- Data/image integrity concerns
- Article structure & presentation
- Metadata & files

**Authorship**
- Author information
- Authorship changes
- Contributions & affiliations
- Publication history

**Peer review**
- Competing interests
- Reviewer information
- Review timing, content, & quality
- Patterns of linked contributor activity
Common concerns across a series of articles may indicate different underlying issues – and warrant different editorial action – than the same concerns noted for an isolated article.
There is not always a ‘smoking gun’ providing definitive evidence of paper mill activity. Based on the cumulative evidence, do the editors trust and stand by the content & its assessment?
A recent case investigated by PLOS

This case has been discussed at:

- [https://retractionwatch.com/2022/08/03/exclusive-plos-one-to-retract-more-than-100-papers-for-manipulated-peer-review/](https://retractionwatch.com/2022/08/03/exclusive-plos-one-to-retract-more-than-100-papers-for-manipulated-peer-review/)

Author behavior outlier

- High submission frequency
- High publication volume 2020-2022
Evaluation of a series of submissions linked to the author revealed a co-publication network involving authors and editors.

- Highly prolific authors and editors connected via co-publications.
- Most editors tied to the network recently joined the editorial board.
- Submissions typically include a couple of network authors, along with authors from other institutions.

Author 1*, Author 2, Author 3, Author 4, Author 5, Author 6

Network authors

Authors from other institutions
Editorial assessment revealed common issues across the series pertaining to authorship, competing interests, and peer review integrity.
PLOS concluded that retraction was warranted for most articles with links to the prolific author-editor network.

Editors should consider retracting a publication if: ...

• It has been published solely on the basis of a compromised or manipulated peer review process

• The author(s) failed to disclose a major competing interest (aka, conflict of interest) that, in the view of the editor, would have unduly affected interpretations of the work or recommendations by editors and peer reviewers.

Common language in retraction notices links the series and specifies series-level concerns

“The PLOS ONE Editors retract this article [1] because it was identified as one of a series of submissions for which we have concerns about authorship, competing interests, and peer review. We regret that the issues were not addressed prior to the article’s publication.”
Collaboration across publishers is essential in effectively combating these issues.

Multiple publishers may be affected by the same large-scale issue.
Thank you!!

Questions?