

Exploring Whether a Manuscript Should Be Rejected If It Proves Difficult to Secure Reviewers

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Objectives

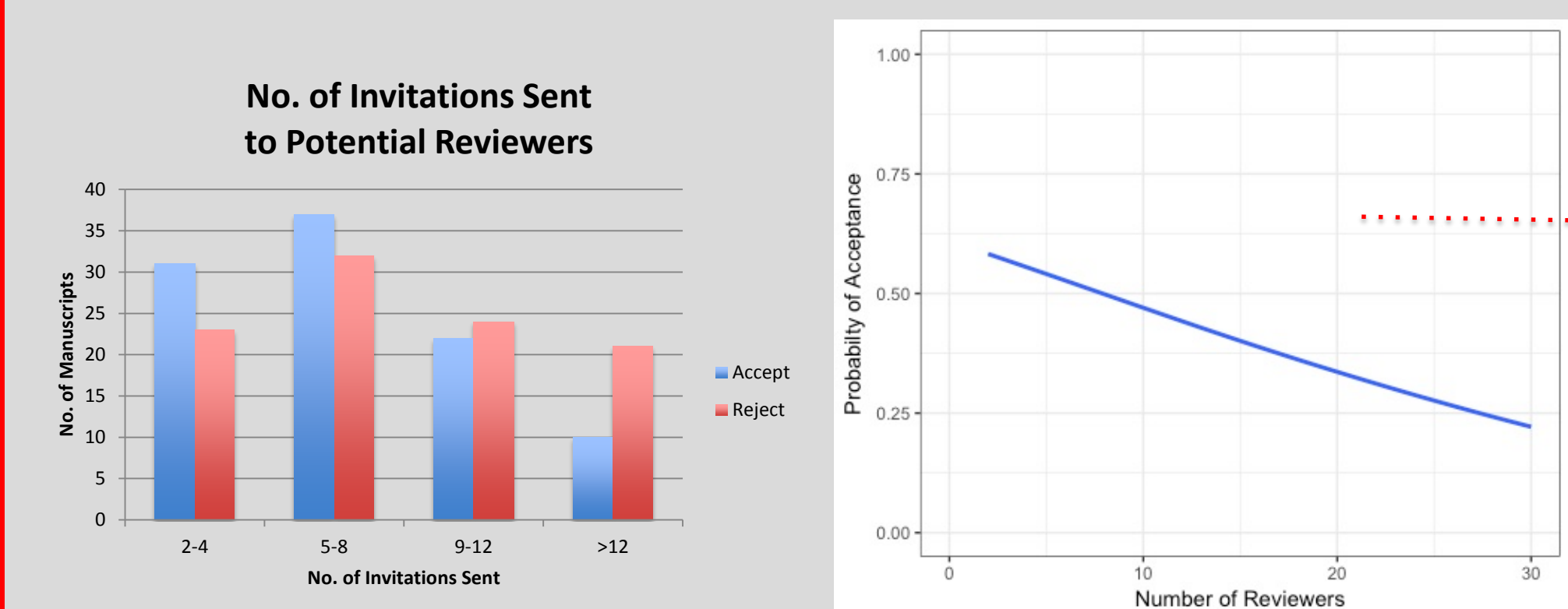
Is there a correlation between low paper quality and a high number of invitations required to secure the minimum number of reviewers (i.e., potential reviewers decline to spend valuable time reviewing a paper they assume is low quality)? If so, is there evidence that would inform policy regarding at what point a paper should be rejected rather than inviting more reviewers and extending an ill-fated process?

Design

We collected specific variables for 2015 data on original articles (only) from the online submission system (EES) for one medical journal (single-blind, annual subs. ~ 1200) and compared random samples ($n = 100$; randomized in Excel) of those papers rejected in the first round of review and those eventually accepted. In preparing our poster, we discovered 1 manuscript in our random sample for papers that were accepted that was never sent for review. Therefore, we removed that manuscript from the raw data and ran a new random sample for the accepted papers. This sample showed the hypothesized result; the original had not.

Results

The data, plotted in Excel and R, showed a correlation between the higher numbers of invitations sent and the likelihood of rejection. Additionally, we found about 25% of both samples required more than 10 review invitations, and the Reject sample had one paper that required 30 invitations to secure the minimum number of required reviewers for this journal, which is 2.



Method

Data Collection

Downloaded 2015 data (from EES system) to Excel spreadsheet

- Excluded all Article types that were not "Original Research"
- Excluded all submissions not sent for peer review
- Excluded all submissions that had not received an Accept or Reject decision
- Excluded all Rejected papers that hadn't received the Reject decision for the original version (no revisions)

Collect Data

Went into the Details in the EES system of each manuscript in the sample and recorded in the Excel spreadsheet how many reviewers were invited in order to get the minimum number ($n = 2$) to agree to review the original submission. Included any notes that might be useful.

Editor Start Date
Editor Stop Date
Decision Term
Days With Editor
First Name of Editor
Last Name of Editor
Manuscript Number
Article Type
Initial Date Submitted

Analysis

Sorted data by # of reviewers invited. Analyzed # of reviewer invitations sent and probability of acceptance

Randomized sample in Excel, using the MS#s, and saved the first 100 records

Accepted Data ($n = 124$)

Randomized sample in Excel, using the MS#s, and saved the first 100 records

Rejected Data ($n = 145$)

Sorted Collected Data by Decision

Excluded any records that were inappropriate (e.g., special issue papers)

Conclusion

This was a pilot study; it will be important for each journal using this method to determine the appropriate p-value for its sample, depending upon the probability of acceptance. The data above suggest our journal may want to set a policy of inviting no more than 8 reviewers, the point at which there is less than a 50% probability of acceptance. Other journals should replicate this process; some may find results that will inform journal policy or workflow improvements. Future studies should look into how individual editor behavior could affect the data (e.g., how individual reviewers are assigned).

Acknowledgment

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