Universal Rejection as an Editing Policy to Avoid the Publication Bias: State-of-the-Art and Future Directions

Oliver Herbort
Department of Psychology, University of Würzburg, Würzburg, Germany

Julia Vogt
Department of Psychology, Ghent University, Ghent, Belgium

Abstract:

The publication bias poses a serious threat to today's scientific community. We analyze various editing policies with respect to the avoidance of the publication bias. Only a zero-acceptance rate editing policy (e.g., Journal of Universal Rejection) guarantees a balanced view on empirical reality. For the further improvement of the editing process, we recommend a negative-acceptance rate policy.

Introduction:

The specter of the publication bias threatens science as we know it. As more and more experimental data is collected all over the world, more and more results are published that may be statistically significant but that cannot be replicated (in 19 out of 20 cases). As most current journals tend to prefer "positive" results, it is almost impossible to know whether an research article reports an empirical fact or a statistical hick-up. Even worse, as most editors strive to publish novel, extraordinary, and simply unbelievable findings that no one ever expected, such accidentally significant reports, which do not reflect empirical reality and are therefore novel, extraordinary, and unbelievable, are biased to get published in high-impact journals. This obscures researchers' and the general public's view on solid scientific facts and thus gnaws at the very columns of science and society. The aim of this article is to analyze current publishing practices and propose potential avenues for the avoidance of the publication bias.

Method:

One exemplar journal was selected from each of three journal categories (medium-, low-, zero-acceptance rate) by toss of a one-sided coin. Each journal was thoroughly screened by an expert rater (the first author) to reveal the number of experimental results that are unreplicable (categorized by the expert rater as "hard to believe"). Hereafter, the second author reviewed the selection of the first author. As first and second author differ concerning age, gender, height, weight, country of residence, number of children, and favorite chocolate sort, this procedure allowed us to ensure a truly unbiased selection. Moreover, the expert's failure to publish in the screened journals guaranteed their objectivity.

Results:

Figure 1 shows that only the zero-acceptance rate journal (the Journal of Universal Rejection, JofUR, right column) has never published unreplicable data. On the other hand, the medium acceptance rate journal (middle column) turned out to be even more reliable than the low-acceptance rate journal (left column).

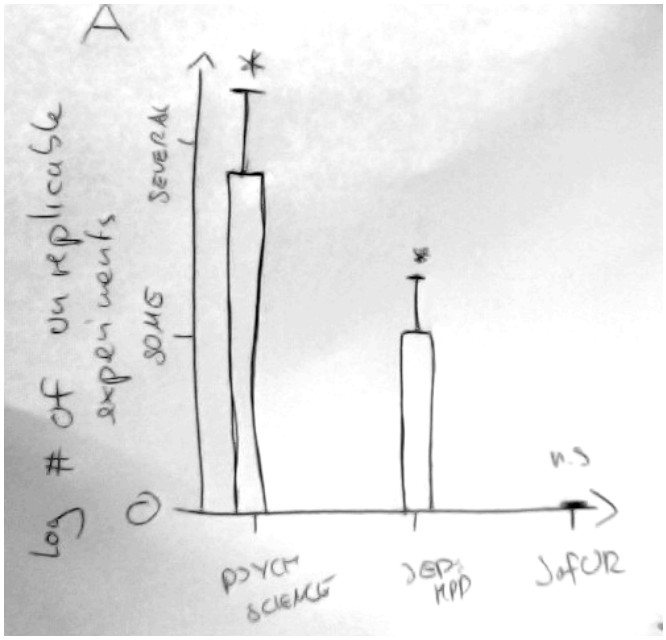

Fig. 1: (Log) number of unreplicable experiments in three exemplar journals.

Discussion:

Only the zero-acceptance rate editing policy of the JofUR yielded an acceptable number of unreplicable reports. Thus editors should adopt the JofUR's policy and stop accepting manuscripts. Besides the dramatic reduction of unreplicable reports, this would idle the resources of publishers, editors, associate editors, reviewers, type setters, proof readers, and individual researchers alike.

Moreover, such a policy would also allow to avert the dramatic effects of publishing this "knowledge" on the general public. Recently, many researchers and journals aim to make their findings available not only to the scientific community but also to the generable public. Consequently, layman try to apply this knowledge in order to improve various aspects of their lives. However, as this ostensible "knowledge" is simply crap, these attempts fail and if anything, worsen the lives of these people. Figure 2 provides an illustration of desperate laymen after having tried to apply recent "scientific" findings to their lives.[1] Hence, preventing researchers from publishing their manuscripts might save the happiness and lives of many innocent people.


Fig. 2: Desperate laymen after failing to improve their lives by applying recent scientific findings.

Outlook:

While the JofUR certainly provides the best-practice standard with respect to the integrity and quality of the published results, future improvements of the editing process are conceivable. A logical continuation of the trend from the outdated positive-acceptance rate policy to the zero-acceptance rate policy might be the negative-acceptance rate publication (NAP). Submissions

to NAPs might automatically result in the withdrawal of one or several already published articles of the submitting authors, thus eliminating potentially unreplicable data. Even though submissions to NAPs may be initially considered as career-hindering, current research suggests that only NAPs will be able to provide a solid foundation for the future of empirical science (Herbort, in preparation).

References:

Herbort, O. (in preparation) Negative acceptance rates are positive for science. *To be submitted to the Journal of Universal Rejection.*

Footnote:

[1] More examples can be received from the authors upon request.