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New journal for reproduction and replication results

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Correspondence about: In praise of replication studies and null results, Nature **578**, 489-490 (2019).
Link: https://www.nature.com/articles/d41586-020-00530-6

The educative nature of replication studies

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Not only are replications studies "*important*", as explained in Nature **578**, 489-490 (2020) [1], they also have a fundamental role for education. Students are typically involved in experiencing research first-hand. However, mirroring the world outside their curriculum, they also ambition to design novel experiments and hunt for significant, ground-breaking results, as their theoretical grasp and analytical skills are still developing.

Reproductions (of methods) and replications (of results) [2], we posit, offer an opportunity to acquire a rounded experience of research, from pre-registration to publication, ultimately training better scientists. Perhaps more importantly, this exercise would show generations of scientists to come that it is okay to spend time learning by studying someone else's results.

If most academic disciplines are now sensitive to issues of reproducibility, however, this has yet to translate into better structures: e.g. only about 3% of psychology journals state explicitly that they accept replications [3] and mistaking high-impact publications for measures of achievement plagues PhD training [4]. The successful incorporation of replication studies into daily routine, and embracing null results, require that this kind of work regains nobility, that incentive structures change, and scientists rediscover the joy of learning: learning for the sake of in-depth understanding and experiencing wonder.

To host replication studies and null results, there exists a journal dedicated to the publication of computational replication (ReScience C) and a new journal for the publication of experimental reproduction and replication (ReScience X) will be launched during Summer 2020. These peer-reviewed outlets provide an ideal remit for high-quality student work, and an invaluable support to the foundation of scientific endeavor. Of course, in the best of all possible worlds, we would not need such initiatives; academic journals publishing a study would subsequently be responsible for publishing reproductions and replications of that study, the so-called Pottery Barn model.

References

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