

Editorial

More and Better Psychological Science

For decision-making regarding the manuscripts submitted to the journal *Psychology: Theory and Practice*, our editors consider not only the empirical relevance and/or potential for theoretical impact of the article but also its methodological and, when applicable, statistical rigor. It is not enough for a work to promise to significantly advance knowledge in Psychology to be accepted, it must also report in detail and transparency the method applied and adequately describe the analysis plan and the results obtained.

To increase the quality of the published research and the chance of approval in our journal, here is a set of recommendations for authors of articles with quantitative analysis. These guidelines are in line with proposals from leading journals and organizations and scholars in Psychological Science:¹

Sample

- Explain how to select the sample (e.g., random, stratified, for convenience) and its composition. This is essential since the results obtained in the statistical analyses are often (albeit implicitly) taken as representative of the effects existing in the population from the sample. By specifying the characteristics of the sample and how it was selected, the authors contribute to greater clarity about which target population their results may be generalized (for example, to university students at a private university in São Paulo? to humans in general?). The detailed method must be accompanied, in the discussion, by an explanation about the scope (generalization versus specificity) of its results. This information is essential to guide future research, including efforts to replicate (direct or conceptual) the findings (Simmons, Shoda, & Lindsay, 2017).

1 https://www.psychologicalscience.org/publications/psychological_science/ps-submissions#CRIT
<https://psychdisclosure.org/about.html>
<https://psycnet.apa.org/fulltext/1999-03403-008.pdf>
<https://osf.io/ud578/>
<https://www.equator-network.org>

- Specify how the sample size was defined. The details concerning the size of the sample and the criterion for interrupting recruitment offers vital information about, among other aspects, the statistical power of the study and the confidence in the reported results. Ideally, I suggest using statistical programs for a first sample calculation (according to the expectations of the magnitude of the effect to be tested and the type of analysis to be performed). Among others, the free G*Power software (<https://www.gpower.hhu.de>) allows you to obtain this information.
- Clarify the sample's inclusion and exclusion criteria, specifying how many participants were excluded and the reasons for this.
- Detail the year(s) of recruitment and data collection. This information is particularly relevant considering the COVID-19 pandemic, the impacts of which on people's psychological functioning is still only partially known.

In general, the sample data as mentioned above will be helpful to authors and potential readers, elucidating the scope and limits of the conclusions drawn from the results obtained. Then, I leave recommendations for the presentation of results of statistical tests.

Statistical analysis

The main recommendation concerns the inclusion, for all reported analyses, of the magnitudes of the effects. Considering only the value of the Null Hypothesis Significance Testing for interpreting the results has been debated (and frequently criticized) in Psychological Science since, at least, the 1990s (Hammond, 1996). The generalized report (in this journal and others) of the effects' magnitudes will allow analyzing the stability of the results obtained in different samples, experimental designs, and analyses, being also very useful for analyses of power and future meta-analyses (Wilkinson, 1999).

In addition to the aforementioned guidelines, designed to increase transparency in the description of samples and statistical analysis results, I would like to end by encouraging the submission of replications of previous studies, especially those published in our journal. To this end, interested authors should indicate that this is a study of this nature in the letter of introduction. Efforts to replicate studies in Psychology are fundamental, regardless of the results that may

be obtained – much can be learned, and Psychological Science will certainly benefit from transparency and knowledge consolidation.

References

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- Simmons, D. J., Shoda, Y., & Lindsay, D. S. (2017). Constraints on generality (COG): A proposed addition to all empirical papers. *Perspectives on Psychological Science*, 12(6), 1123–1128. doi:10.1177/1745691617708630
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