Editor’s Perspective: What Happened when *Psychological Science* Began Encouraging the Use of the New Statistics?

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Eric Eich brought in emphasis on “new statistics” and on the Transparency and Openness Promotion Guidelines (757 journals and 63 Organizations) https://cos.io/our-services/top-guidelines/

Move away from articles that report a single, small-$N$ study with a surprising result, in favour of articles whose findings are interesting and replicable.

• Badges to reward sharing of materials, data, pre-registration.
Percentage of articles reporting data available from 2012 to 2015 for Psych Science versus comparison journals.

From Kidwell et al., 2016, COS
http://journals.plos.org/plosbiology/article?id=10.1371/journal.pbio.1002456
Of 2015 articles claiming data to be available, what percentage actually delivered?

Similar patterns regarding stimulus materials.
• Badges to reward sharing of materials, data, pre-registration.
• Requirements to justify \( N \), report data-collection stopping rule, disclose COIs.
• Requirement to disclose all IVs and DVs
• Removed word-count limits on Method and Results sections
• Encourage alternatives to NHST, require measure of ES and precision (e.g., CIs).
The influence of journal submission guidelines on authors' reporting of statistics and use of open research practices
David Giofrè, Geoff Cumming, Luca Fresc, Ingrid Boedker, Patrizio Tressoldi

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[http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0175583#pone-0175583-g001](http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0175583#pone-0175583-g001)
Compared to JEP:G, PSCI had greater increase from 2013-2015 on several (but not all) new-statistics virtues.

Lots of room for improvement!
Less good news:

1. Submission rates have declined
2. Statistical power/precision still very often less than impressive.
3. Preregistration still very rare
4. Direct replication still fairly rare