20 Ways Journal Editors Can Promote Transparency and Replicability

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Slides posted at web.uvic.ca/~dslind/?q=resources

1. Sign on to the Transparency and Openness Promotion guidelines.

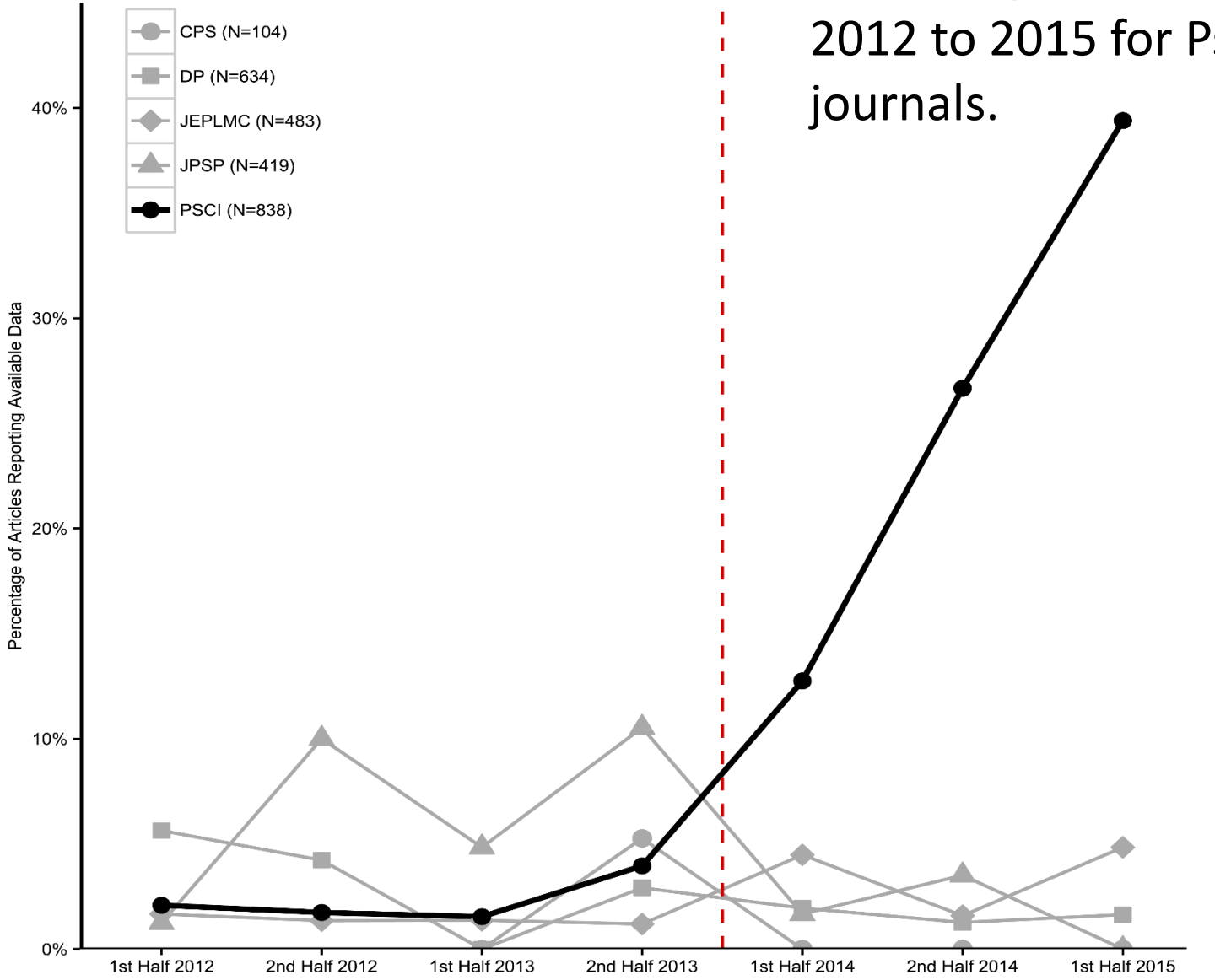
2. Encourage detailed preregistration.

3. Be wary of papers that report a single underpowered study with surprising findings especially if critical *p* values are greater than .03.

4. If the work has potential but you doubt its replicability, consider inviting a revision with a preregistered replication, perhaps under terms of a Registered Report.

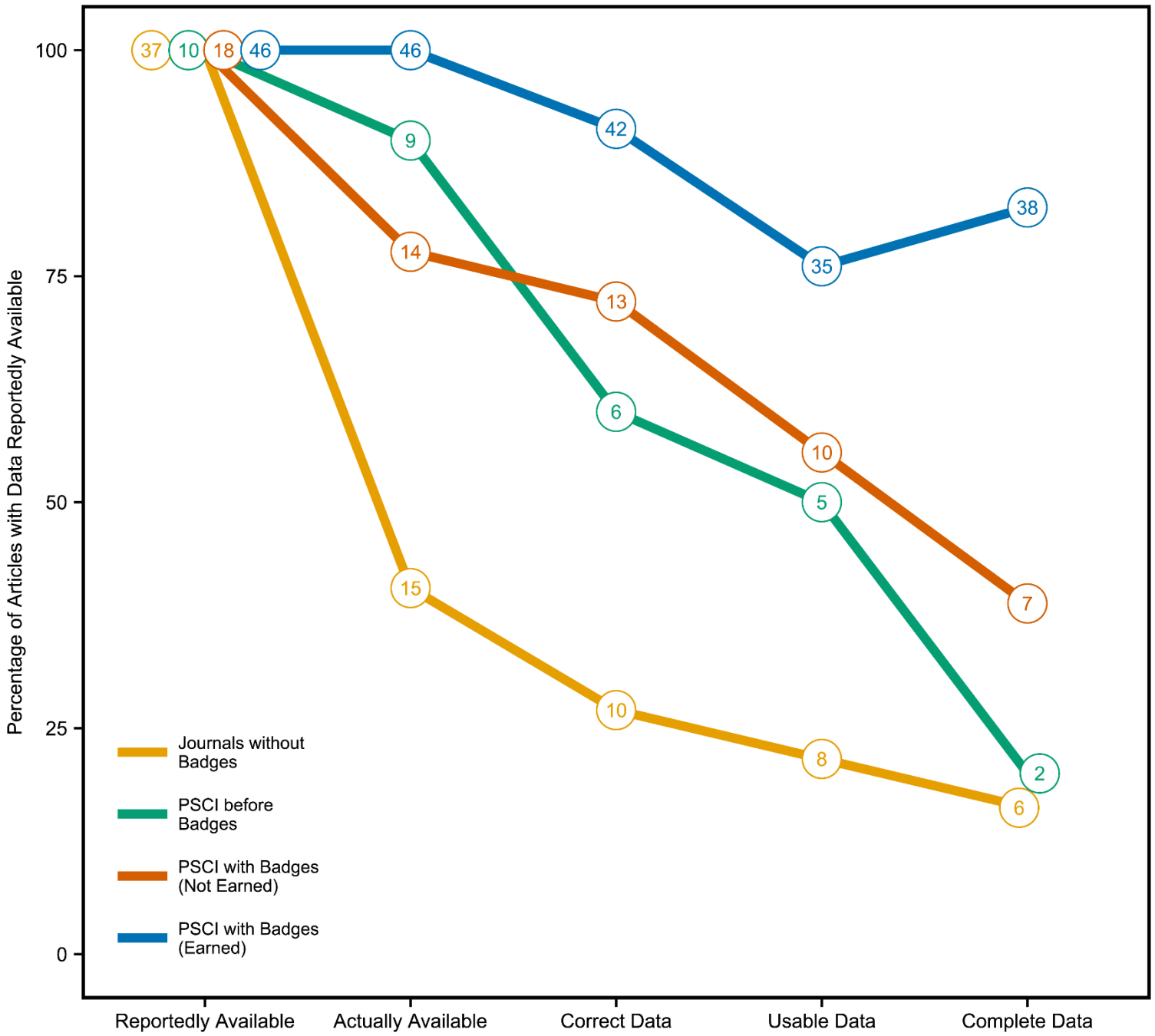
5. Ask submitters if/how reviewers can access data and materials (and to address longer-term plans for availability); reward easy access.

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 articles claiming data to be available, what percentage actually delivered?

Similar patterns regarding stimulus materials.

6. Ensure that your Associate Editors have appropriate stats/methods chops and are committed to promoting transparency and replicability.

7. Consider appointing Statistical Advisers.

8. Ensure that for each ms sent for review at least one reviewer has stats chops.

9. Require compelling rationale as to why sample size appropriate (see, e.g., Anderson, Kelley, & Maxwell, 2017). Not precedent.

10. Require report of an index of precision (e.g., 95% confidence or credible intervals) around DV means and estimates of effect size.

11. Require fine-grained graphical presentations showing distributions (scatter plots, box plots, pirate plots, frequency histograms).

12. Don't let authors describe *NS* results as strong evidence for null, nor describe a pattern in which an effect is significant in one condition but not in another as if it by itself evidenced an interaction.

13. Attend to measurement sensitivity, reliability, validity, manip checks, demand characteristics, experimenter bias, etc.

14. Require authors to address anticipated constraints on generality.

15. Use tools such as StatCheck to detect errors in stats reporting.

16. Consider inviting submissions that propose Registered Reports.

17. Consider inviting submissions reporting pre-registered direct replications of findings published in your journal (ideally as RRs).

18. Publish the action editor's name with each article.

19. If you learn of errors in a work you published, strive to correct them in a transparent manner.

20. Include in each article an Open Practices Statement that addresses availability of data, materials, and preregistration.

QUESTIONS, COMMENTS, SUGGESTIONS?