

Suggestions for Reviewers, Referees, Editors (and Members of Institutional Review Boards)

- Base acceptance on the quality of the design, implementation, analysis, and writing (as well as the importance of the questions being studied), but *not* on the results of the analysis
 - For example, a well-done study with a negative result for a worthwhile question is more worthy of publication than a poorly-done study with a novel result.
- See the Suggestions for Researchers.
 - Have authors followed these guidelines?
- See the Suggestions for Reading Research.
 - Is the paper written to facilitate reading following these suggestions?
 - How would a reader following these guidelines rate the research?
- Is the research "reproducible"? That is, is the information given in the paper and the material referenced in the paper adequate for someone to duplicate the data gathering and analysis?
- Check to be sure power calculations are prospective, not retrospective.
- As needed, join with others to help promote "best practices" in research and publication. These include:
 - Establishing guidelines for submission that encourage best practices.
 - Establishing submission options for registered replications of important but unreplicated results. Examples which might themselves be in need of improvement) include:
 - *Cortex* registered reports, http://www.elsevier.com/inca/publications/misc/PROMIS%20pub_idt_CORTEX%20Guidelines_RR_29_04_2013.pdf,
 - *Perspectives on Psychological Science* registered replication reports, <https://www.psychologicalscience.org/index.php/replication>
 - See also <https://www.psychologicalscience.org/index.php/replication> and <http://alexholcombe.wordpress.com/2012/08/29/protect-yourself-during-the-replicability-crisis-of-science/>
 - Encourage collaborations to increase power for research studies and replications.
- Consult the references below for more suggestions.

Further References:

J. Coyne (2009), Are most positive findings in health psychology false ... or at least somewhat exaggerated?, *European Health Psychologist*, Vol. 11, No. 3, pp. 49 - 51.

J. P. A. Ioannidis (2008) Why most discovered true associations are inflated, *Epidemiology* vol 19 (5), 640 - 648.

C. Kilkenny et al, Improving Bioscience Research Reporting: The ARRIVE Guidelines for Reporting Animal Research, *PLoS Biol* 8(6): e1000412.
doi:10.1371/journal.pbio.1000412,
<http://www.plosbiology.org/article/info%3Adoi%2F10.1371%2Fjournal.pbio.1000412>

Nature.com Peer-to-Peer blog, now closed, but archives online at
<http://blogs.nature.com/peer-to-peer/>)

Owens, Brian, Psychologists Do Some Soul Searching, Nature News Blog 08 Nov 2012,
<http://blogs.nature.com/news/2012/11/psychologists-do-some-soul-searching.html>

PLoS Medicine Editors (2005) Minimizing Mistakes and Embracing Uncertainty, *PLoS Med* 2(8): e272, doi:10.1371/journal.pmed.0020272,
<http://www.plosmedicine.org/article/info:doi/10.1371/journal.pmed.0020272>

This is an editorial response to the Ioannis article mentioned in the course descriptions and introduction to Day 1 of this SSI course.