Discussion about $p$-values

By Hedibert Lopes

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(a) Greenland, Senn, Rothman, Carlin, Poole, Goodman and Altman *Statistical Tests, P-values, Confidence Intervals, and Power: A Guide to Misinterpretations*.

(b) Altman Ideas from multiple testing of high dimensional data provide insights about reproducibility and false discovery rates of hypothesis supported by p-values.

(c) Benjamin and Berger A simple alternative to p-values.

(d) Benjamini It’s not the p-values’ fault.

(e) Berry P-values are not what they’re cracked up to be.

(f) Carlin Comment: Is reform possible without a paradigm shift?

(g) Cobb ASA statement on p-values: Two consequences we can hope for.

(h) Gelman The problems with p-values are not just with p-values.

(i) Goodman The next questions: Who, what, when, where, and why?

(j) Greenland The ASA guidelines and null bias in current teaching and practice.

(k) Ioannidis Fit-for-purpose inferential methods: abandoning/changing P-values versus abandoning/changing research.

(l) Johnson Comments on the “ASA Statement on Statistical Significance and P-values” and marginally significant p-values.

(m) Lavine and Horowitz Comment.

(n) Lew Three inferential questions, two types of P-value.

(o) Little Discussion.

(p) Mayo Don’t throw out the error control baby with the bad statistics bathwater.

(q) Millar ASA statement on p-values: some implications for education.

(r) Rothman Disengaging from statistical significance.

(s) Senn Are P-Values the Problem?

(t) Stangl Comment.

(u) Stark The value of p-values.

(v) Ziliak The significance of the ASA statement on statistical significance and p-values.


27. *Nature’s articles between February 2014 and July 2017*
   
   (a) Nuzzo (2014) *Statistical errors: P values, the “gold standard” of statistical validity, are not as reliable as many scientists assume*, *Nature*, 506, 13 February 2014, 150-152.


34. The American Statistician, Volume 73, Issue sup1 (2019) *Statistical Inference in the 21st Century: A World Beyond p < 0.05*

   (a) Wasserstein, Schirm and Lazar Moving to a World Beyond “p < 0.05, Pages: 1-19.

   (b) Ioannidis What Have We (Not) Learnt from Millions of Scientific Papers with P Values?, Pages: 20-25.

   (c) Goodman Why is Getting Rid of P-Values So Hard? Musings on Science and Statistics, Pages: 26-30.

   (d) Hubbard Will the ASA’s Efforts to Improve Statistical Practice be Successful? Some Evidence to the Contrary, Pages: 31-35.

   (e) Kmetz Correcting Corrupt Research: Recommendations for the Profession to Stop Misuse of p-Values, Pages: 36-45.

   (f) Kennedy-Shaffer Before p < 0.05 to Beyond p < 0.05: Using History to Contextualize p-Values and Significance Testing, Pages: 82-90.

   (g) Greenland Valid P-Values Behave Exactly as They Should: Some Misleading Criticisms of P-Values and Their Resolution With S-Values, Pages: 106-114.

   (h) Betensky The p-Value Requires Context, Not a Threshold, Pages: 115-117.

   (i) Krueger and Heck Putting the P-Value in its Place, Pages: 122-128.

   (j) Johnson Evidence From Marginally Significant t Statistics, Pages: 129-134.

   (k) Fraser The p-value Function and Statistical Inference, Pages: 135-147.

   (l) Benjamin and Berger Three Recommendations for Improving the Use of p-Values, Pages: 186-191.

   (m) Colquhoun The False Positive Risk: A Proposal Concerning What to Do About p-Values, Pages: 192-201.

   (n) Matthews Moving Towards the Post p < 0.05 Era via the Analysis of Credibility, Pages: 202-212.

   (o) McShane, Gal, Gelman, Robert and Tackett Abandon Statistical Significance, Pages: 235-245.


   (q) Fricker, Burke, Han and Woodall Assessing the Statistical Analyses Used in Basic and Applied Social Psychology After Their p-Value Ban, Pages: 374-384.

   (r) Maurer, Hudiburgh, Werwinski and Bailer Content Audit for p-value Principles in Introductory Statistics, Pages: 385-391.