

DISCUSSION ABOUT p -VALUES

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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?](#)
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 - (v) Ziliak [The significance of the ASA statement on statistical significance and p-values](#).
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25. Colquhoun (2017) [The reproducibility of research and the misinterpretation of p-values](#), *Royal Society Open Science*, 4(12).
26. Johnson, Payne, Wang, Asher and Mandal (2017) [On the reproducibility of psychological science](#), *JASA*, 112(517), 1-10.
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.
 - (b) Woolston (2015) [Psychology journal bans P values](#), *Nature*, 519, 5 March 2015, page 9.
 - (c) Leek and Peng (2015) [Statistics: P values are just the tip of the iceberg](#), *Nature*, 520, 30 April 2015, page 612.
 - (d) Nuzzo (2015) [How scientists fool themselves – and how they can stop](#), *Nature*, 526, 8 October 2015, pages 182-185.
 - (e) Allison, Brown, George and Kaiser (2016) [Reproducibility: A tragedy of errors](#), *Nature*, 530, 4 February 2016, pages 27-29.
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 - (g) Chawla (2017) [P-value shake-up proposed: Big names in statistics want to shake up much-maligned P value](#), *Nature*, 548, 3 August 2017, pages 16-17.
28. Benjamin, Berger, Johannesson *et al* (2018) [Redefine Statistical Significance](#), *Nature Human Behavior*, 2, 6-10.
29. Dickson (2018) [The Significance Delusion: Inconvenient Truths about P-values](#). Slides of her presentation.
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31. Johnson (2019) [Retiring significance: raise the bar](#), *Nature*, 567, 461.

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 - (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.
 - (p) Hurlbert, Levine and Utts [Coup de Grace for a Tough Old Bull: “Statistically Significant” Expires](#), Pages: 352-357.
 - (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.