If you only have time to read one article I would suggest you to read the article item [146] in this list; if you have time to read two articles I would suggest you to read items [146] and [141]; if you have time to read one book, it is item [2] (*The Lady Tasting Tea*) that I would recommend; if you have 30 minutes to watch a video, it is the very last item [152] I would recommend: https://www.youtube.com/watch?v=U4kqk3V8jJQ online video presented by Professor Geoff Cumming. I truly believe, either as a statistician or as a researcher/scientist who need to use statistical analysis seriously, it is worth spending your precious time to read at least some of the references listed here.

The message is clear: Null Hypothesis Significance Testing (NHST) should hardly have a place in statistical inference or scientific reasoning; any attempt to claim a ‘statistical significance’ by dichotomizing (or categorizing) a continuous testing measure (e.g., a \( p \)-value, a confidence interval, or Bayes factors) is not logically defensible in theory, flawed technically, and damaging in practice; with data sets obtained from non-repetitive studies (whether or not an experimental design) the best statistical data analysis that one can do is what-if analysis (namely, no conclusive/confirmatory statement can be made about the population true value based on sampling distribution ground).

List of a selection of literature related to concerns/criticisms on NHST (in chronical order):

**Part I: Books**

Part II: Articles (including book chapters if any)


45. Frank L. Schmidt (1997). *Eight common but false objections to the discontinuation of significance testing in the analysis of research data, in book: What if there were no significance tests?* Editors: Lisa L. Harlow, Stanley A. Mulaik, James H.Steiger, Publisher: Lawrence Erlbaum Associates.


60. Gerd Gigerenzer (2002). **The Superego, the Ego, and the Id in Statistical Reasoning.** Print publication date: 2002; Published to Oxford Scholarship Online: October 2011; DOI: 10.1093/acprof:oso/9780195153729.001.0001.


117. Steven N. Goodman, Daniele Fanelli, John P. A. Ioannidis (2016). What does research reproducibility mean? Sci Transl Med 8, 341ps12341ps12, DOI: 10.1126/scitranslmed.aaf5027


Part III: Online materials


149. https://fionaresearch.files.wordpress.com/2013/06/fidler-phd-2006.pdf Fiona Fidler’s PhD thesis “FROM STATISTICAL SIGNIFICANCE TO EFFECT ESTIMATION: STATISTICAL REFORM IN PSYCHOLOGY, MEDICINE AND ECOLOGY.”


152. https://www.youtube.com/watch?v=iJ4kqk3V8jQ online video presented by Professor Geoff Cumming, La Trobe University, Australia