

I will provide a reminder about the value of graphical representations of data with confidence intervals, in comparison to significance testing, showing how the two are related. A brief tutorial on Bayesian analogues to these two methods (Bayesian highest density intervals and Bayes factor) will be provided, followed by an examination of how results produced by these two Bayesian methods are related. Our discovery of this relationship creates for the first time a ready translation from one measure to the other. Emphasis will be on within-subjects designs, for which an appropriate Bayesian highest density interval has only recently been defined. An **R** package that can be used to easily compute Bayesian highest density intervals for within-subject designs will be described.