Erratum to: A tutorial on a practical Bayesian alternative to null-hypothesis significance testing

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On p. 6, the first paragraph indicates that the posterior probability favoring the alternative hypothesis constitutes “positive” evidence, based on Raftery’s (1995) descriptive terms. In fact, the posterior probability qualifies as “very strong” evidence.

Near the bottom of p. 7, and on to p. 8, a specification for the value of n is given for the comparison between two models that are fit to all four conditions of the experiment. Even though the models can be characterized as single- df contrasts, the fact that they are being fit to all four within-subjects conditions means that the correct

number of independent observations (n) is the number of subjects (48) multiplied by the number of conditions minus one ($4 - 1$), yielding $48(3) = 144$. Thus, the correct formulation for the difference between BIC values for the main effect model and the interaction model is

$$\begin{aligned}\Delta\text{BIC} &= n \ln\left(\frac{\text{SSE}_1}{\text{SSE}_0}\right) + (k_1 - k_0) \ln(n) \\ &= (144)\ln\left(\frac{40.410}{55.282}\right) + (0)\ln(144) = -45.13.\end{aligned}$$

The resulting Bayes factor is 1.589E-10, and the posterior probability favoring the interaction model is $p_{\text{BIC}}(H_1|D) > .999$.

The online version of the original article can be found at <http://dx.doi.org/10.3758/s13428-010-0049-5>.

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