

## Supplementary Materials for:

### ***“Average Power: A Cautionary Note”***

In addition to this document, these supplementary materials contain two scripts, *aux.R* and *sim.R*.

The script *aux.R* contains functions required by the script *sim.R*. These functions compute model likelihoods, estimate models by maximizing the likelihood, calculate average power, and calculate sample size.

The script *sim.R* generates draws from the sampling distribution of average power for the 810 cases of Scenario 1 and Scenario 2 discussed in the manuscript. For each draw, the script records point, standard error, and interval estimates of the effect size ( $d.\hat{}$ ,  $d.se$ ,  $d.ci.lb$ ,  $d.ci.ub$ ) and point and interval estimates of average power ( $ap.\hat{}$ ,  $ap.ci.lb$ ,  $ap.ci.ub$ ). The latter are the quantities of interest.