

1. The larger the sample size in a given one-way ANOVA analysis, the larger the power of associated tests (e.g., pairwise comparisons).

True

False

2. The power of tests associated with a one-way ANOVA analysis are impacted by:

Sample size

The units of the response

The significance level

The true size of the mean differences across groups

The within group variability

3. Retrospective power analyses are widely thought to be epistemically unjustified.

True

False

4. Prospective power analyses are often used to:

Choose the effect size

Choose a sample size to achieve a particular power level

Minimize the type I error

Estimate the power of a given study design