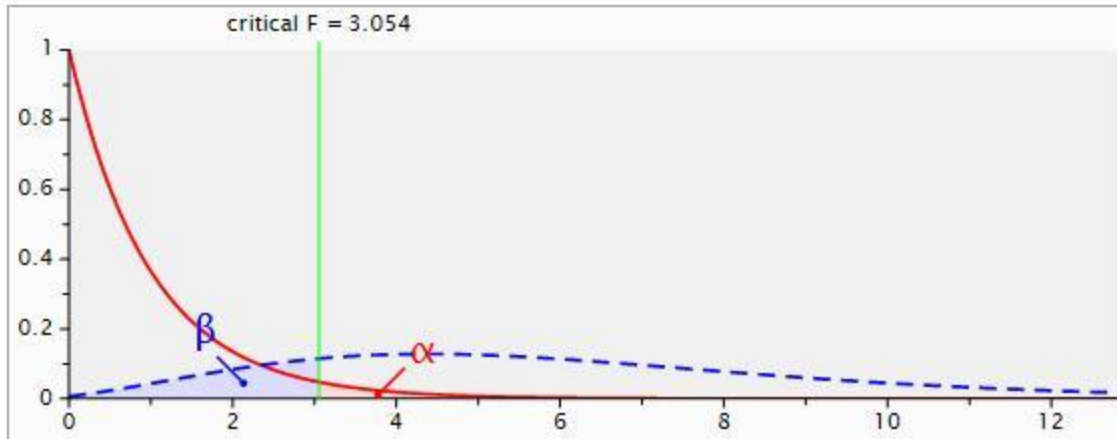


Central and noncentral distributions Protocol of power analyses



Test family

F tests

Statistical test

ANOVA: Fixed effects, omnibus, one-way

Type of power analysis

A priori: Compute required sample size - given  $\alpha$ , power, and effect size

Input Parameters

Determine =>

Effect size f 0.25

$\alpha$  err prob 0.05

Power (1- $\beta$  err prob) 0.8

Number of groups 3

Output Parameters

Noncentrality parameter  $\lambda$  9.937500

Critical F 3.054004

Numerator df 2

Denominator df 156

Total sample size 159

Actual power 0.804887

X-Y plot for a range of values

Calculate