

Nested ANOVA design

- Each observation belongs to a group
- Each group belongs to a higher level group
- Graphical representations of designs can be helpful (e.g. fig 9.1)

Parameters in nested ANOVA model (9.1, 211)

- Factor A
 - p groups ($i = 1$ to p)
 - α effect of each group
 - If fixed (α minus overall mean)
 - If random (RV with mean zero and variance σ_α)
- Factor B-
 - q groups within A
 - β effect of each group
 - Usually random, so RV with mean of zero and variance of σ_β
- Overall mean
- Error (E_{ijk})
 - Mean of zero
 - Normal distribution