

So far we have looked at ANOVA for designs when we have one factor which is between subjects (i.e., each participant appears in one condition), and for designs when we have one factor that is repeated measures (each participant appears in all conditions). These are examples of 1-way ANOVA.

Now we're going to look at factorial ANOVA - this is for cases where we have more than one factor and we might be interested in how the two factors interact with each other. If we have two factors, we have a 2-way ANOVA, three factors a 3-way ANOVA etc.

- Imagine we have 2 factors. Factor 1 with two levels, Factor 2 with three. Our analysis might reveal a main effect of Factor 1 (i.e., a difference between the two levels), a main effect of Factor 2 (i.e., a difference between the three levels) or an interaction between the two.....

- This is a 2x3 ANOVA

Corresponds to  
Factor 1 – it has  
two levels.

Corresponds to Factor 2  
– it has three levels.