Why ANOVA, why not t-tests?

 So, t-tests are fine if we're just comparing two means.

 In the real world of psychology, we often have more than two conditions.

• How could we analyse our data?

 One possibility could be that we do multiple t-tests – but there's a problem with that.

With one t-test, at p < 0.05 level of significance there is a 5% chance of falsely rejecting our null hypothesis (type I error).

 If we have three conditions, then we have three pairs of means to compare (condition I vs condition 2, condition 2 vs condition 3 and condition I vs condition 3).