Cramming Sam's Tips for Chapter 9: Comparing two means

The independent *t*-test

- The independent *t*-test compares two means, when those means have come from different groups of entities.
- Look at the column labelled *Levene's Test for Equality of Variance*. If the *Sig.* value is less than .05 then the assumption of homogeneity of variance has been broken and you should look at the row in the table labelled *Equal variances not assumed*. If the *Sig.* value of Levene's test is bigger than .05 then you should look at the row in the table labelled *Equal variances assumed*.
- Look at the column labelled *Sig.* If the value is less than .05 then the means of the two groups are significantly different.
- Look at the table labelled *Bootstrap for Independent Samples Test* to get a robust confidence interval for the difference between means.
- Look at the values of the means to tell you how the groups differ.
- Report the mean difference and its confidence interval, the *t*-statistic, the degrees of freedom and the significance value. Also report the means and their corresponding standard errors (or draw an error bar chart).
- Calculate and report the effect size. Go on, you can do it.☺

Paired-samples *t*-test

- The paired-samples *t*-test compares two means, when those means have come from the same entities.
- Look at the column labelled *Sig.* If the value is less than .05 then the means of the two conditions are significantly different.
- Look at the values of the means to tell you how the conditions differ.

- Look at the table labelled *Bootstrap for Paired Samples Test* to get a robust confidence interval for the difference between means.

- Report the mean difference and its confidence interval, the *t*-statistic, the degrees of freedom and the significance value. Also report the means and their corresponding standard errors (or draw an error bar chart).

- Calculate and report the effect size too.