Module 05 Lesson 03 Demo: Calculating t-tests Transcript

To see how to calculate a t-test without doing it manually, let's use the anxiety data set we've used before.

The first thing to do is to go to this web site for quick calcs. You do not need to memorize the URL, because where the t-tests are required in this course, the link to the web site is provided.

Looking at this web site, you will see four different sections labeled "1" "2" "3" and "4."

In Number 1, there are a few options. But it is best to click on Option 2: Enter or paste up to 2000 rows. You will notice the page will update and you will have the option to copy and paste.

Return to the Google spreadsheet, select the Group 1 data, go to "Edit" - "Copy." Back on the web site, go to "Edit" - "Paste" (in Group 1, 2. Enter Data).

Likewise, return to the Google spreadsheet, select the Group 2 data, go to "Edit" - "Copy." Back on the web site, go to "Edit" - "Paste" (in Group 2, 2. Enter Data).

We now have the values to perform the t-test. In Number 3. Choose a test, you have the option to choose unpaired and paired t test. In this case, the same individuals were using both before and after, so it's best to used a paired t test. Click "paired" t test.

The last thing to do at Number 4 is to press "Calculate now." When the calculations are complete, you will see a P value which in this case is 0.0409. This P value is less than 0.05, so the difference between the two means will be considered to be statistically significant. The readout also gives the t score and the degrees of freedom.