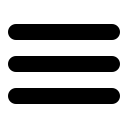
Independent Samples T-Test in JASP

***Research Question:*** Is there a difference in mean pulse rate between male and females?

We will use the *BodyTemp50.csv* file to investigate this question, which contains data on body temperatures and pulse rates for a sample of 50 healthy adults.

1. What are the hypotheses (H0 and Ha)?

**Open the *BodyTemp50.csv* into JASP**

* Open JASP
* Click the **Hamburger Icon** () in the upper-left corner of JASP.
* Click **Open**then **Computer**then **Browse** and find the *BodyTemp50.csv* on your computer (likely in your Downloads folder).

**Descriptive Statistics**

* Click **Descriptives** then **Descriptive Statistics**.
* Click **Pulse** then the upper triangle to move **Pulse** to the *Variables* list.
* Click **Gender** then the lower triangle to move **Gender** to the *Split list.*
* Click **Plots,** select **Distribution plots**
* Select **Boxplots**



1. Do we meet the necessary conditions to use the t-distribution and perform a t-test? Explain.

**Perform Statistical Inference**

* Click **T-Tests, Independent Samples T-Test**
* Click **Pulse** then the upper triangle to move **Pulse** to the *Variables* list.
* Click **Gender** then the lower triangle to move **Gender** to the *Grouping Variable*.
* Under Tests, select **Welch** and deselect **Student**.
* Set the *Alt. Hypothesis* based on your Ha in Question 1.
* Under Additional Statistics, select **Location Parameter** and **Confidence Interval** and set this number to **90.** This will give you the sample difference in means (*Mean Difference*) and a 90% confidence interval.



1. Report the t-statistic and df.
2. Report the p-value.
3. Report the 90% confidence interval.
4. Provide an answer to the research question.