

Week 5 in-class exercise

- 1) Break up into four small groups of equal size.
- 2) Download the `zebra.finch.csv` data set from the course website.
- 3) Each group should work together to decide how to complete their assigned problem using R.

Problem 1. Make a single plot that visualizes the raw data. Calculate the 95% confidence interval for the number of offspring that both males and females produce using the output from `t.test`. Describe the distribution of the data?

Problem 2. Try transforming this dataset to make it more normal. Plot a comparison of the raw and transformed data. Should you transform this data?

Problem 3. Determine whether males have a lower mean offspring number than females. Do this with a T-test and a permutation test.

Problem 4. Determine whether males and females have the significantly different variance. Do this with a permutation test and compare to a Levine's test.

Present your work to the class.