**SPSS T-Test Instructions**

To import data from Excel to SPSS:

* Make excel file SPSS readable
	+ Insert your data
	+ Variables along the top
* Convert excel file to SPSS file
	+ Open SPSS
	+ File 🡪 Open 🡪 data 🡪 find the saved excel files
* Save file(s) onto your computer
* Make sure your variables are correctly named and that they correspond to the variables in the original datasets you are using.

Once your data is in SPSS:

* Variable view – nominal, scale, or ordinal? What kind of data do we have?
	+ Change seasons measure
* Analyze 🡪 Compare Means 🡪 Independent Samples T-test
* Test variable? Grouping variable?
* Define groups (variables 0 and 1 mean something)
* Read output ☺

**Results**

1. Your Group Statistics table will give you the number of squirrels per season, and the means and standard deviations for each behavior. You will need these descriptive statistics for when you are reporting your t-test. The means and standard deviations that you see will help us make sense the differences.
2. Look at the Independent Samples Test table to see if there are significant differences. Under t-test columns, sig. (2-tailed)
3. Levine’s test – looks to see variances of two groups are different.

**If Levine’s test is not significant (*p* > 0.05) then *equal variances assumed.***

**(Looking for differences – not significant = no differences = equal variances)**

**If Levine’s test is significant (*p <* 0.05) then *equal variances not assumed.***

**(Looking for differences – is significant = are differences = not equal variances)**

1. Find *t* for proper Levine’s test
2. Find df (= N - # of groups) (in table, always equal variances assumed, always whole number)

An independent samples *t-*test…... Results indicated that squirrels searched less in the summer (*M* = 6.00*, SD* = 4.77) as compared to the winter (*M* = 8.34*, SD* = 8.20), however the differences were not significant (*t*(78) = -1.52, *p* = .13).