# Moderation

**Research Question:**

* Is there an interaction between the number of hours you’ve watched Big Brother and your memory span when predicting your IQ score?

**Regression Assumptions:**

* Missing data (you can just say if you had any or not)
* Outliers
  + Mahalanobis – cut off score and how many?
  + Leverage – cut off score and how many?
  + Cooks – cut off score and how many?
  + Delete all outliers with two or more problems.
* Multicollinearity – insert box showing that the IVs are not too highly correlated.
* Normality – insert box showing IVs are normally distributed.
* Linearity – insert box showing that IVs are linearly related.
* Homogeneity/Homoscedasticity – insert box showing that these two assumptions have been met – talk about each one (i.e. say if they are good or bad).

**Regression test for the first test (average scores):**

Include the model box (make sure this has R2 change):

Include the coefficients box (make sure this has pr and sr):

**Are the main effects significant (step 1)?**

* **Model F-value:**
* **Big brother b or beta (with t, p, pr2):**
* **Memory span b or beta (with t, p, pr2):**

**Is the interaction significant?**

* **Model F-value (change statistics):**

**FLIP variable:**

**SLOPE variable:**

**SLOPE b or beta when FLIP is AVG (look at step 2):**

**Regression test for the low group of your FLIP variable:**

Include the model box (make sure this has R2 change) – STOP make sure these are the same but one says FLIPLO:

Include the coefficients box (make sure this has pr and sr):

**SLOPE b or beta when FLIP is LO (look at step 2):**

**Regression test for the high group of your FLIP variable:**

Include the model box (make sure this has R2 change) – STOP make sure these are the same but one says FLIPHI:

Include the coefficients box (make sure this has pr and sr):

**SLOPE b or beta when FLIP is HI (look at step 2):**

**IN A SEPARATE WORD DOCUMENT:**

Write up a results style section for this experiment.

1. Include a brief description of the experiment, variables, and order entered into steps.
2. Include a brief section on the data screening/assumptions.
3. Include the following:
   1. Model 1 f-value
   2. Main effects b or betas
   3. Model 2 f-value change
   4. Simple slopes (3 b or beta values)
      1. Average slope
      2. Low slope
      3. High slope
4. Include a graph of the interaction.