# Mediation

**Research Question:**

* Does anxiety mediate the relationship between a family history of depression and a person’s depression 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).

**Step 1: Show that family history predicts depression with nothing else in the equation:**

Paste the coefficients box.

List the relationship for the predictor (family history 🡪 depression):

**Step 2: Show that family history is related to anxiety with nothing else in the equation:**

Paste the coefficients box.

List the relationship for the predictor (family history 🡪 depression):

**Step 3: Show that anxiety is related to depression WITH family history in the equation:**

Paste the coefficients box.

List the relationship for the predictor (anxiety 🡪 depression):

**Step 4: Show that family history *no longer or has a lowered prediction* for depression WITH anxiety in the equation:**

Same box as above.

List the relationship for the predictor (family history 🡪 depression):

**Step 5: Show that the mediation is either full or partial (use Preacher’s page):**

[**http://quantpsy.org/sobel/sobel.htm**](http://quantpsy.org/sobel/sobel.htm)

List z-score for Sobel test:

**Remember you will need the F-values for each model (see write up example) for each one (model summary box) even though they are not pasted here.**

**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. All model values – you will have 3 F-values for models.
   2. All b/beta values for each predictor (all the steps above 4 of them).
   3. Sobel test Z-score and what that implies.
4. Include a picture of the mediation (see example in write up guide).