

Preliminary Empirical Results

This assignment is your opportunity to provide **empirical evidence** on your research question. That empirical evidence may be derived from using a variety of tools: descriptive tables showing averages for different groups, visual charts depicting relationships in your data, and regression analysis that quantifies the statistical relationships in your data. The evidence that you provide is empirical (*i.e.*, is based on numbers) but your tables and charts **must be accompanied by a written discussion** of those tables and/or charts. This assignment is a short paper (2-3 pages) plus supporting tables and/or charts.

Here is a list of things for you to keep in mind as you proceed:

- If your analysis includes regression, be sure to write down an equation for the regression model (*e.g.*, $Y_i = \beta_0 + \beta_1 X_{1i} + \beta_2 X_{2i} + \varepsilon_i$) using the equation editor in Microsoft Word. Also, be sure to define each of the variables as you did in Assignment #5 ($Y_i = \dots$, $X_{1i} = \dots$, $X_{2i} = \dots$) and state what null/alternative hypothesis (or hypotheses) you test.
- If your method of analysis does not include regression, you still have to clearly lay out your null/alternative hypotheses and your means of providing empirical evidence on these hypotheses.
- Look at the papers that you include in your literature review. How do those authors present their empirical evidence and discuss it? The “Results” sections of these papers are great examples of how you should proceed.
- Be sure that your tables and/or charts:
 - a. are numbered (and refer to them by those numbers in your written discussion),
 - b. have titles that clearly tell the reader what information they contain,
 - c. have appropriate labels (column headings, axes, units of measurement, etc...), and
 - d. refer to full variable names (not your cryptic abbreviations).
- Some other points to consider:
 - a. Tables of regression results should include the parameter estimates and **either** standard errors or t-statistics for each estimated β coefficient, the number of observations, and the adjusted R^2 . It is certainly **not** the case that all of Excel’s output should go in your table, so please do not cut and paste directly from Excel.
 - b. Decimal places are not to be abused (in either direction)! 1.356 is better than 1.4 and also better than 1.356777234. Please be consistent so that all numbers in your tables have the **same** number of decimal places.
 - c. Use histograms to compare cross-section or over-time differences in multiple categories.
 - d. Use scatter plot charts to demonstrate the relationship between two variables.
 - e. It is often helpful/recommended to include two lines of text below each table and chart: one line that indicates the source of the data (*e.g.*, Source: National Longitudinal Survey), and one line for notes (*e.g.*, Notes: SAT score is the composite score on critical reading, mathematics and writing components.).
 - f. Your discussion should address whether the parameter estimates on each of your independent variables have the sign you expect. You should also demonstrate that you know how to interpret the parameter estimates (both the sign and the magnitude).
 - g. **SPELL AND GRAMMAR CHECK BEFORE PRINTING!** Submit in your binder.

NOTE: I am around during Spring Break. Please email me for an appointment if you need help.