

## Homework #2: Center and Spread

### Instructions

Work should be submitted in hardcopy, preferably typed. Be as complete as possible in your answers. On this and all assignments, put all answers in prose (sentence/paragraph) form; single-word or phrase answers are not sufficient. Where appropriate, show all work done, including any calculations, and explain all of the steps involved and all of the parts of each calculation.

### Book Problems

From the Agresti & Finlay text, do these 8 problems from Chapter 3:

3.4, 3.16, 3.18, 3.26, 3.36, 3.63, 3.72\*, and 3.74\* (\*multiple choice, as indicated in the text)

### Computer Problems

Using SPSS and the gss84.sav data file (provided via the course Canvas site).

Select one variable of each level of measurement. You may *not* use any variable used in a lecture or lab demonstration, if there were any, but may pick any others *from this dataset*.

For each variable:

- a) Produce a frequency distribution and histogram..
- b) Describe the shape of the distribution, to the extent you can.
- c) Request and interpret appropriate measures of *central tendency and dispersion*.
- d) Using your answers above, describe the sample (in terms of its central tendency on each variable) and identify which elements of that description are more or less pronounced (i.e. which have lower or higher dispersion)?