## ps2 basic statistics (due in 3 weeks+presentations)

[version: Tuesday 8<sup>th</sup> October, 2024 12:24]

- 1. Use your own data, and descibe it briefly what it is and why you use it. Either give me a link to it or upload to canvas, if it's big, subset/take random sample. If you dont have it, find it asap, dont hesitate to ask for help. The data should be of substantive interest to you and ideally serve you for the capstone [2]
- 2. Calculate mean, median, and mode; and produce a histogram [4].
- 3. Do a scatterplot and crosstabs [4]; if no continuous data can do 2 crosstabs or tab stat such as median or mode.
- 4. Can and should use software for calculations. Ideally Python, R, Stata, etc; worse case scenario Excel. If not too many numbers like around 10, can even do it by hand. If data are too big, eg 500k obs in brfss, find some report, paper, book, that has a small table summarizing it, say avg for NJ counties and use that.

## fa24 general comments

- some of you had technically not a crosstab, not freq; but summary stats by group, thats just fine
- always provide source of the original data, eg url, dataset name and brief description
- make sure people can see it: eg do have bigger labels
- good to study sth job related
- do interpret!! do make sure to make sense of the stats you've produced
- as we were saying over and over-no relationship is just about 2 variables-there is always more to the relationship-think about other variables and use them!
- read the instructions eg i dont see mean median mode crosstabs scatterplot
- bigger fonts on presentations! less text; if you need more space use document or spreadsheet

## general directions (always the same):

- ps is due in Canvass by the beginning of the class
- keep it short; max: 5 single spaced pages; typically way less, say 1 or 2
- if you are stuck, email me early! also email if you want some feedback and make sure you are on the right track, etc
- show your work, a "naked" number won't do! unless indicated otherwise, always do calculations by hand
- likewise, numbers should be interpreted—we are not only interested in calculating values of interest, but we are interested in their meaning! whenever you calculate your final quantity if interest, interpret it! do interpret!! do make sure to make sense of the stats you've produced!!
- if your handwriting is bad, please type
- i may want to discuss your assignment in class, which should be beneficial to you and give you more feedback; if however, you'd like to keep it private, let me know!
- numbers in brackets are relative importance of each item for grading; adds up to 10
- always provide source of the original data, eg url, dataset name and brief description