PSC 400 SYRACUSE UNIVERSITY

DATA ANALYTICS FOR POLITICAL SCIENCE

PREDICTION

ASSIGNMENTS

- Problem Set 4 due on Friday
- Prompt for Data Analysis Memo 4 uploaded

SURVEY

cces_week9.csv

- age
- female (1 if female, 0 otherwise)
- nohighschool (1 if no high school degree, 0 otherwise)
- collegeorhigher (1 if college attendance, 0 otherwise)
- nonwhite (1 if not white, 0 if white)
- married (1 if married, 0 otherwise)
- employed (1 if employed full-time or part-time, 0 otherwise)
- republican (1 if R, 0 if not)
- democrat (1 if D, 0 if not)
- Independent (1 if I, 0 if not)
- partisanship (factor variable)
- impeach (1 if supports Trump impeachment, 0 if not)
- votereg (1 if registered to vote, 0 otherwise)

EXAMPLE

- What is the effect of partisanship on whether respondents supports impeachment or not?
 - ie. what is the predicted probability of supporting impeachment for a Democrat, a Republican, and an Independent (all else equal)?

EXAMPLE

- What is the effect of age among Democrats, among Republicans, and among Independents?
 - ie. interaction of partisanship with age

RECAP

- You can now run regressions
 - With binary or continuous dependent variables
 - With binary or continuous independent variables
 - Including non-linear effects (squared term)
 - Estimating separate effects depending on values of another variable (interaction effects)

RECAP

- You can display results of regressions
 - Predicted values of dependent variable (graphs)
 - Including confidence intervals

PREDICTION

- How good are polls at predicting election outcomes?
 - How well do state-level polls from shortly before the election predict who will win each state?
 - How accurately can national polls predict eventual election outcome over the course of the campaign?

PREDICTION

 Table 4.1.
 2008 US Presidential Election Data.

Variable	Description
state	abbreviated name of the state
state.name	unabbreviated name of the state
Obama	Obama's vote share (percentage)
McCain	McCain's vote share (percentage)
EV	number of Electoral College votes for the state

 Table 4.2.
 2008 US Presidential Election Polling Data.

Variable	Description
state	abbreviated name of the state in which the poll was conducted
Obama	predicted support for Obama (percentage)
McCain	predicted support for McCain (percentage)
Pollster	name of the organization conducting the poll
middate	middate of the period when the poll was conducted