# wrapping up

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# **outline**

conclusion (p.240-254 Wheelan, 2013)

# reg ps commentssome confuse IV and DV!

- big mistake
- remember that DV is usually in the header of the table
  and IVs are always in the rows: if you talk about IV that is
- not in one of the rows with its coeffs, it doesnt't make sense
- and note the dummies and omitted/baseline/ref
   cat—always the omitted one
- standardized or 'beta' coefficient—can compare magnitude across apples and oranges; and interpretation is one std dev increase in x leads to  $\beta$  std dev change in Y

## outline

conclusion (p.240-254 Wheelan, 2013)

### data, data everywhere

- eg goog timeline https://support.google.com/maps/answer/6258979
  - again see: www.economist.com/node/15557443
- Wheelan (2013) discusses uses of data, eg:
- Target predicts better pregnancy of your daughter
- she buys unscented lotions, vitamins, etc (Wheelan, 2013, p252-3)
- one study analyzed closness of faces of same gender on facebook and predicted well whether a person is gay
- pub adm application: geolocated tweets in same loction about potholes, or food making you sick
- Since Obama all govt data must be made public unless a good reason not to

#### so what?

- use data! (do stats)
- or read about using it (lit rev)
- AND ALWAYS think about it! (critique research)
- this is \*important\* for final project in this class
- o and use stat software (Python, etc): a job skill!

# remember stats is positive, not normative

- it says what it is
- not what it should be
- for the latter we need something like philosophy or religion
- https://en.wikipedia.org/wiki/Positive\_statement
- dog fighting used to be socially acceptable, but not anymore
- o same thing may happen to football (p242-244)
- simlarly, research can help evaluate damage from say cigars v cigarettes
- o but cannot tell us what to do about it

# be skeptical

- eg correlation ≠ causation
- o MMR vaccine, autism (p245,246)
- also: measurement
- o many ways to measure the same thing
- o no measure is perfect
- o all measures oversimplify
- eg: teacher ratings, school ratings (p246-249)

# do experiments!

- again, experiment is the gold standard
- (superb internal validity, but usually poor external)
- eg: force Indian teachers to show up by recording them
- o randomly assign cameras (p250)

#### the end!

- let's keep in touch
- keep me posted about your research endavours!
- email me, stop by
- let's have a coffee

- MOHR, L. B. (1995): Impact Analysis for Program Evaluation, Sage, Beverly Hills CA, second edition ed. SHADISH, W. R., T. D. COOK, AND D. T. CAMPBELL (2002): Experimental and quasi-experimental
  - designs for generalized causal inference, Wadsworth Cengage learning.