

this time: interpreting corr. & regression | 31 (1) May

next time: final exam review | res: (FDP ch 11, 12) | ANS 5

Ethan make-up discussion sections & office hr:

- Wed 1 June 8-9:10 AM (disc. sec G) Barkin 165
- Wed 1 June 12:30-1:40 pm (disc. sec H) Barkin 165
- Wed 1 June 2-3 pm (office hr.) Barkin 142

overflow time for final exam review: (in our usual classroom) Sat June 4 noon-2pm

no new disc. sec. this week after tonight, but of. hrs. will continue as usual

on Thu I will tell you EXACTLY what's on final: how many problems about each topic (material since midterm)

hwk 6 due on Thu 2 Jun
Final 8-11 AM Mon 6 June (usual classroom)

Interpreting correlation & regression

CSIS | cross-sectional data: snapshots of a sample of the pop. at one moment in time

longitudinal data: following people along at multiple time points

AMS
5

Case Study 19 (public health): The Health Examination Survey

As we saw in case study 18, in 1960-1962 the U.S. Public Health Service examined a representative cross section of 6672 Americans aged 18 to 79 in what was called Cycle I of the *Health Examination Survey* (HES). The objective was to take a snapshot of the country's health status, by getting baseline data about physiological variables like height, weight, and blood pressure, psychological variables like anxiety, demographic variables like age, education, and income, and prevalence of diseases, especially various kinds of heart disease.

The plots below show the graphs of averages from four scatter diagrams: height versus age for men and women, and weight versus age for the two genders. The plot on the left shows that the average height of the men in the sample decreased after age 30, dropping about 3 inches in 50 years. Does this mean that if you followed the typical American man along in time through his life, he would get shorter at that rate? Similarly, the graph on the right shows that on average the weight of women in the sample went up steadily from age 20 to 60 and then dropped. Does this mean that this is what happens to the average American woman's weight over time? Explain briefly.



