

Chapter 6-1 Practice

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College GPAs

Estimate the following models using the `gpa2` dataset:

$$\text{College GPA} = \beta_0 + \beta_1 \text{Athlete} + \beta_2 \text{Female} + \beta_3 \text{HS Size} + \beta_4 \text{HS Size}^2 + \beta_5 \text{HS Percentile} + \beta_6 \text{SAT} + \beta_7 \text{Nonwhite} : (\text{gpa.lm1})$$

$$\text{College GPA} = \beta_0 + \beta_1 \text{Athlete} + \beta_2 \text{Female} + \beta_3 \text{HS Size} + \beta_4 \text{HS Size}^2 + \beta_5 \text{HS Percentile} + \beta_6 \text{SAT} + \beta_7 \text{Nonwhite} + \beta_1 \text{Athlete} \times \text{Female} : (\text{gpa.lm1})$$

$$\text{College GPA} = \beta_0 + \beta_1 \text{Athlete} + \beta_2 \text{Female} + \beta_3 \text{HS Size} + \beta_4 \text{HS Size}^2 + \beta_5 \text{HS Percentile} + \beta_6 \text{SAT} + \beta_7 \text{Nonwhite} + \beta_1 \text{Athlete} \times \text{HS Percentile} : (\text{gpa.lm1})$$

Present your results side-by-side using `stargazer()`.

Demand for Eco-Friendly Apples

Estimate the following model using the `apple` dataset:

$$\text{Buy Eco-Freindly} = \beta_0 + \beta_1 \text{Price}_{\text{Eco}} + \beta_2 \text{Price}_{\text{Reg}} + \beta_3 \text{Income} + \beta_4 \text{HH Size} + \beta_5 \text{Education} + \beta_6 \text{Age} + u$$

Summarize this estimation using the `summary()` function.

Interpret the coefficient on the price of eco-friendly apples.