

Homework #5  
Econ 120B, Econometrics  
UC San Diego

This homework assignment is based on Episode 22 (January 27, 2022) of the Freakonomics, M.D. podcast, which you can listen to here:

<https://freakonomics.com/podcast/what-if-tv-isnt-bad-for-us/>

1. Does TV viewing affect academic achievement? (Gentzkow and Shapiro, 2008)
  - a. Why would a regression of academic test scores on hours spent watching TV be unlikely to estimate a causal effect?
  - b. How do Gentzkow and Shapiro answer the question of whether TV viewing affects academic achievement? In particular, what data do they use, and what is their natural experiment?
  - c. What are the key findings of their study?
  - d. Are their findings likely to be applicable today? Why or why not?
  
2. Do violent movies cause violent behavior? (Dahl and DellaVigna, 2009)
  - a. Laboratory experiments which randomly show some individuals violent film clips and others non-violent film clips find an increase in aggression immediately after exposure. Do these types of experiments capture a causal effect, or just a correlation? Explain.
  - b. How do Dahl and DellaVigna answer the question of whether violent movies cause violent crime? In particular, what data do they use, and what is the natural experiment?
  - c. What do they find during the evening hours? What is their explanation for this result?
  - d. What do they find in the early morning hours (i.e., after midnight)? What is their explanation for this result?
  - e. Why are the laboratory results not necessarily at odds with the findings of Dahl and DellaVigna?

Bonus: Which TV shows is Professor Dahl currently watching?