Questions to answer in preparing for February 15 class and DARE #3

**The Kim et al paper**

1. Focus of the paper
   1. What is/are the authors’ central research question(s)? (again, think about the big, underlying question and the specific one the paper is able to answer)
   2. What is/are their answer(s)?
2. Data and Sample
   1. *What is the source of the Kim et al data?*
   2. *What are the characteristics of this sample?*
   3. Describe the structure of the data (what does a row consist of, at what level are the variables measured, etc.?). *How is the structure of Kim et al’s data similar to or different from that for DARE #3?*
   4. *What is/are the outcomes of interest in the Kim et al paper? To which outcome does this correspond in the DARE #3 dataset?*
   5. What is the endogenous question predictor in the Kim et al. paper? What is the exogenous instrument?
3. Methodology
   1. What is the authors’ identification strategy? Can you describe two different questions for which the authors have identified causal relationships in different ways?
   2. What is the “treatment” condition? What is the “control” condition?
   3. What was the process by which randomization to treatment and control occurred in the Kim et al study? Describe what the RBi indicator represents. There is an analogous variable in the DARE #3 data. What is it?
   4. How well did the experiment work? What evidence do the authors bring to bear on this? What evidence might you use in your DARE?
   5. What is the “treatment” that the Treatment on the Treated estimates seek to model? On what scale (what numerical range) is this defined?
   6. What assumptions do the authors make in interpreting their Treatment on the Treated estimates as unbiased causal estimates? To what extent are these assumptions met?
   7. Footnote 1 describes several ad hoc analyses in which Kim et al explore whether Read180 implementation fidelity predicts post-test reading scores. Why are these not presented as main results in the paper? Why should these not be interpreted causally?
4. Results
   1. If you were going to point someone who had taken an introductory statistics course (for those in the COE, think EDUC 614) to the simplest set of results in the Kim et al paper, to which table/numbers would you direct their attention? Can you interpret these results substantively for them?
   2. Describe the magnitude of Kim et al.’s preferred estimates. How big of an effect did being assigned to an after-school reading intervention have on students’ literacy outcomes? How big of an effect did fully attending a seven-month after-school literacy program have?
   3. Compare your results from DARE #3 to Kim et al.’s results in Tables 5 and 7. How are they similar? Different? From where do these similarities/differences come?
   4. Describe the results of the study as you might to Portland Public Schools Superintendent Guadalupe Guerrero. He is an expert in school district educational practices, has the charge of improving learning outcomes for students in the district, and is constrained by competing resource demands from various programmatic areas. He is not a researcher. What recommendations do/don’t you feel comfortable making?
5. Threats to validity
   1. What are the threats to internal validity in this study? How do the authors address these?
   2. What are the threats to external validity in this study? How do the authors address these?
   3. In your mind, which present the greater threats to the conclusions of this paper?