Project Outline

* Question
  + Estimate Independence of a simple two-level study through a simple Decomposed Model and the effect of varying ICC, sample size, and level 2 units.
  + We well estimate the model based on HLM, standard Linear Modeling, and Cluster-Robust modeling
* Data Generating Model
  + Assign a 1 or 0 as a treatment or control for half of the participants in the model

* Conditions
  + Same Sample Size
  + Vary ICC [ .10, .25]
  + Vary L2 Units
* Replications
  + 500 per condition
* Statistical Models
  + HLM, Robust Cluster, LM
* Evaluation
  + The simulation will be evaluated through Percent Bias as well as Mean Squared Error through the jackknife technique