

Project Work

Attitude Towards Immigration

Brader, Valentino and Suhay (2008) Framing Experiment Data

Dataset

- a 2008 survey study looking at attitude to migration in US citizens
- Demographic data: age, income, education, gender
- Measuring **attitude to immigration** on a 4 point scale & other related variables:
 - Perceived harm caused by immigration
 - Anxiety about immigration
 - Emotional state during the experiment etc.
 - Action taken or info requested about immigration
- 2 manipulated study conditions
 - **Tone of the news article:** Positive or Negative
 - **Ethnicity clues about immigrants:** European or Latino

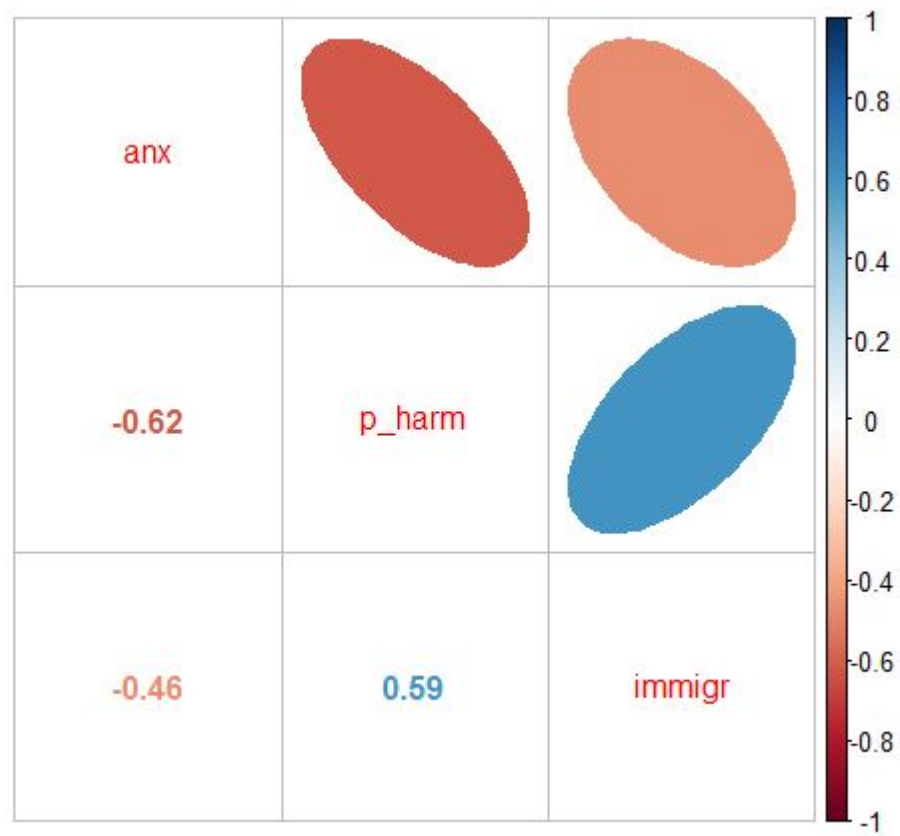
Prediction task

Predict an **individual's attitude towards immigration** with the data available.

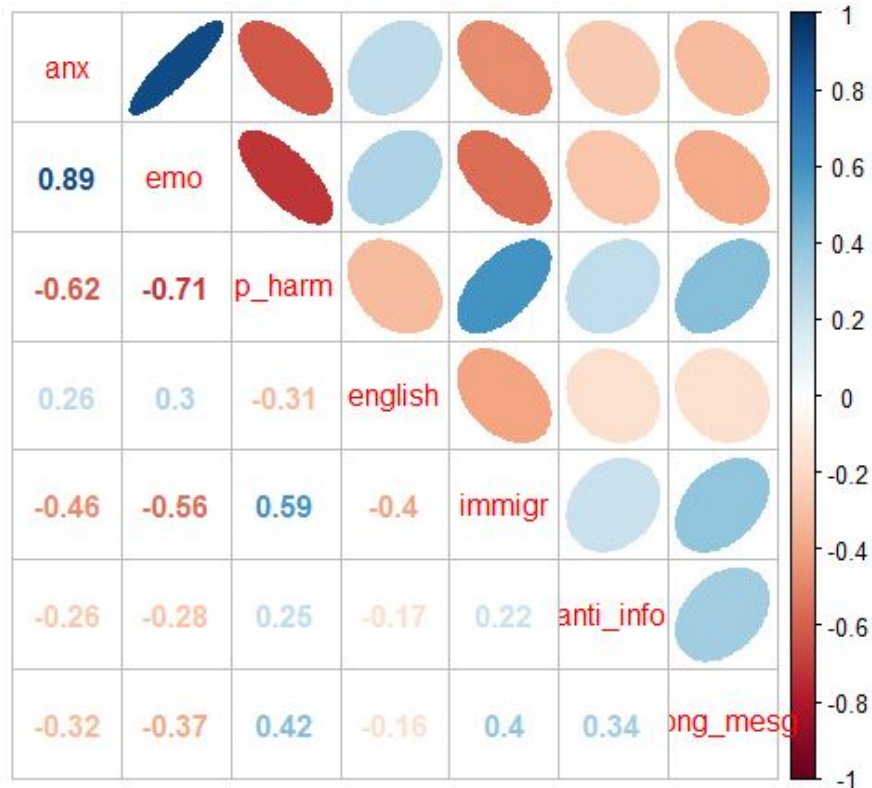
We converted the 4-scale factor `immigr` into a binary variable, where values 1 and 2 stand for “**rather positive**” attitude and values 3 and 4 for “**rather negative**” attitude.

Data problems

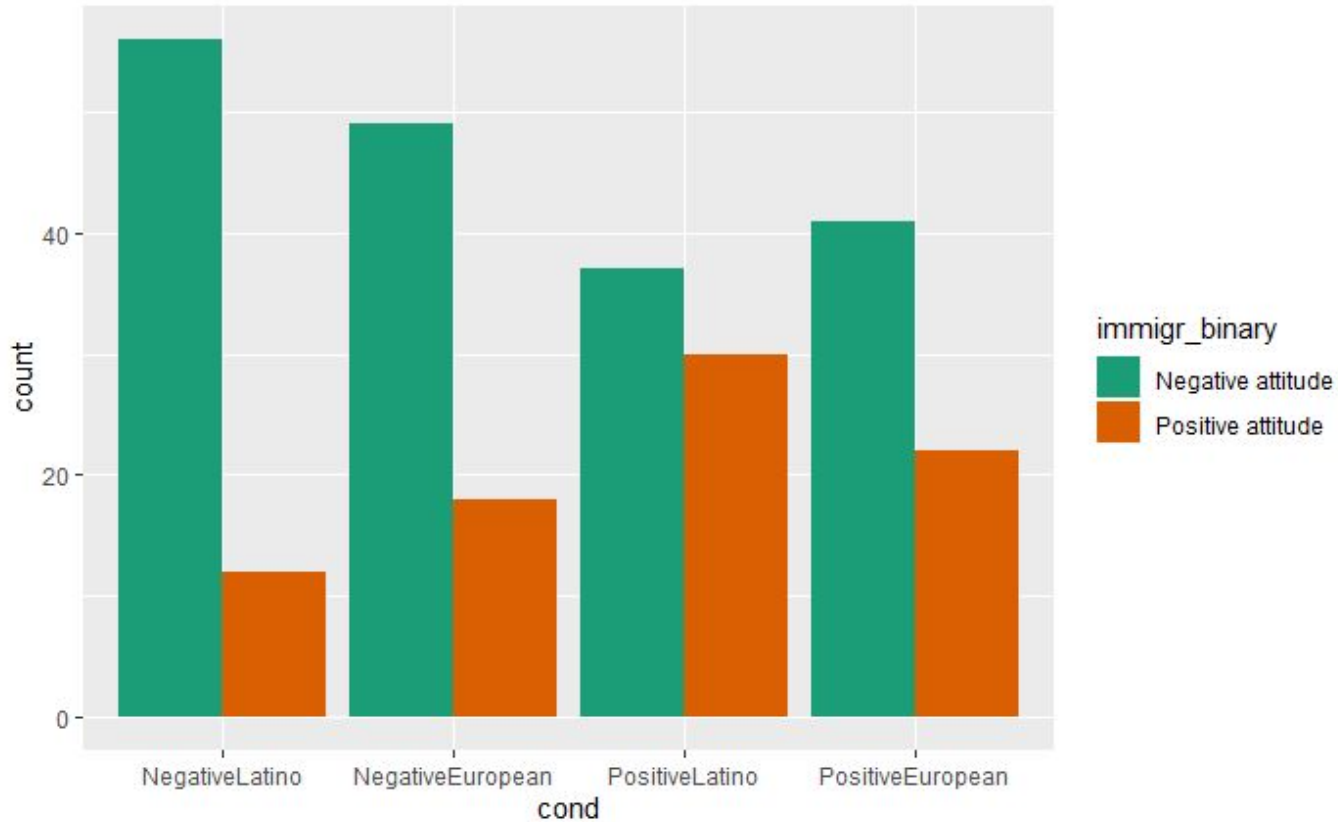
- No missing values or skewed distribution
- The study was well designed with the sample well representing the US population
- Just cleaned up, factorized variables
- But the description and dictionary where a little incomplete and we have a suspicion that some variables were coded or described incorrectly



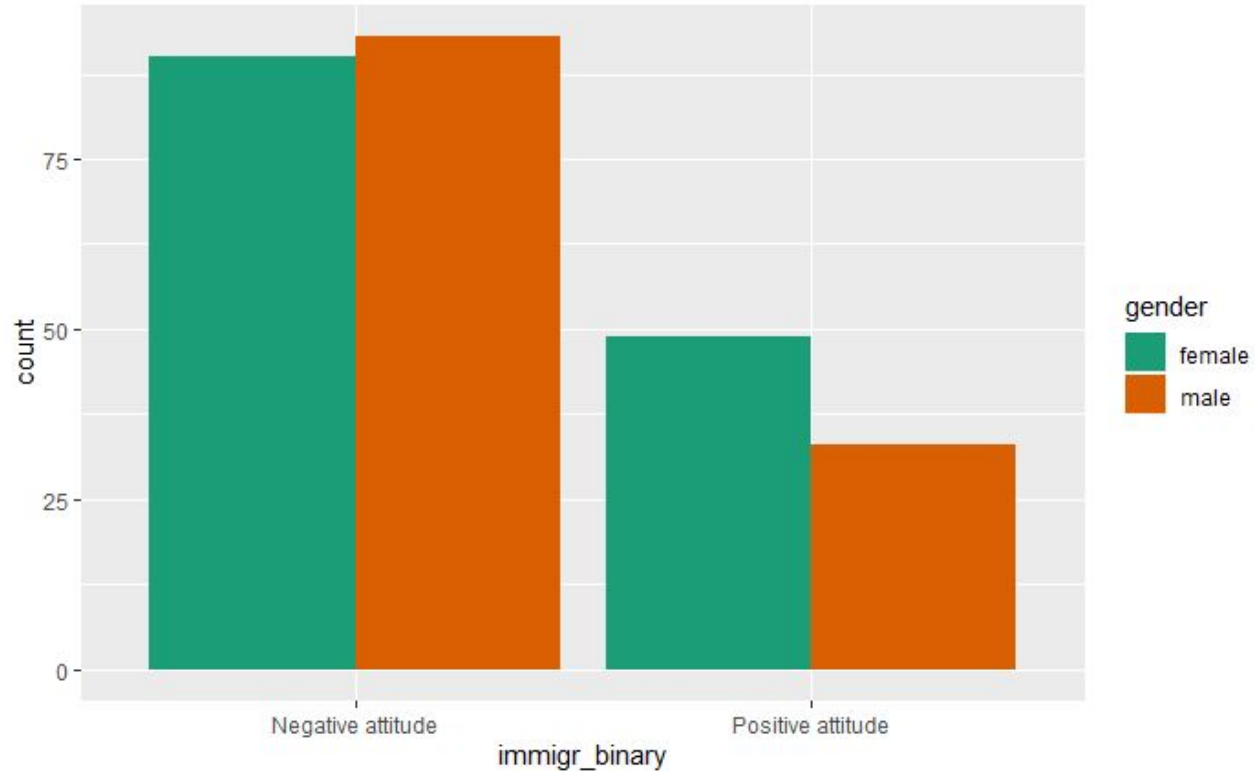
This should all be blue, but isn't



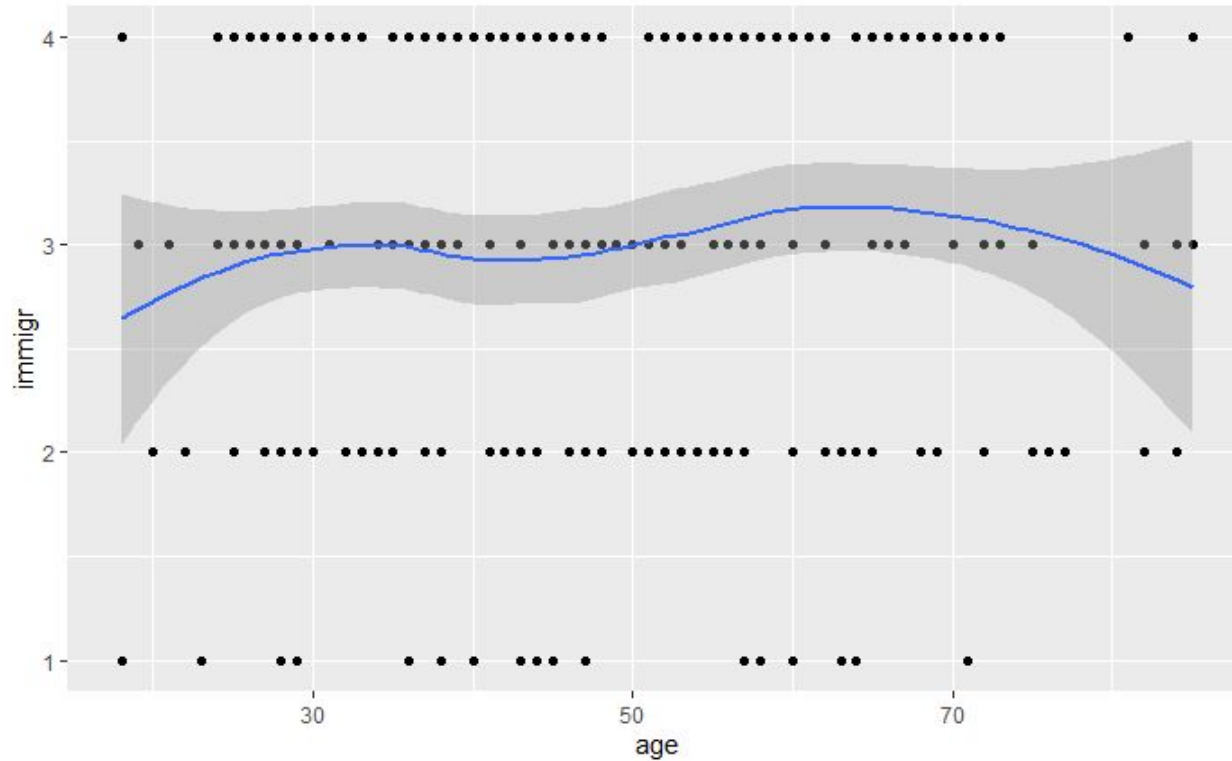
Study conditions x Immigration attitude



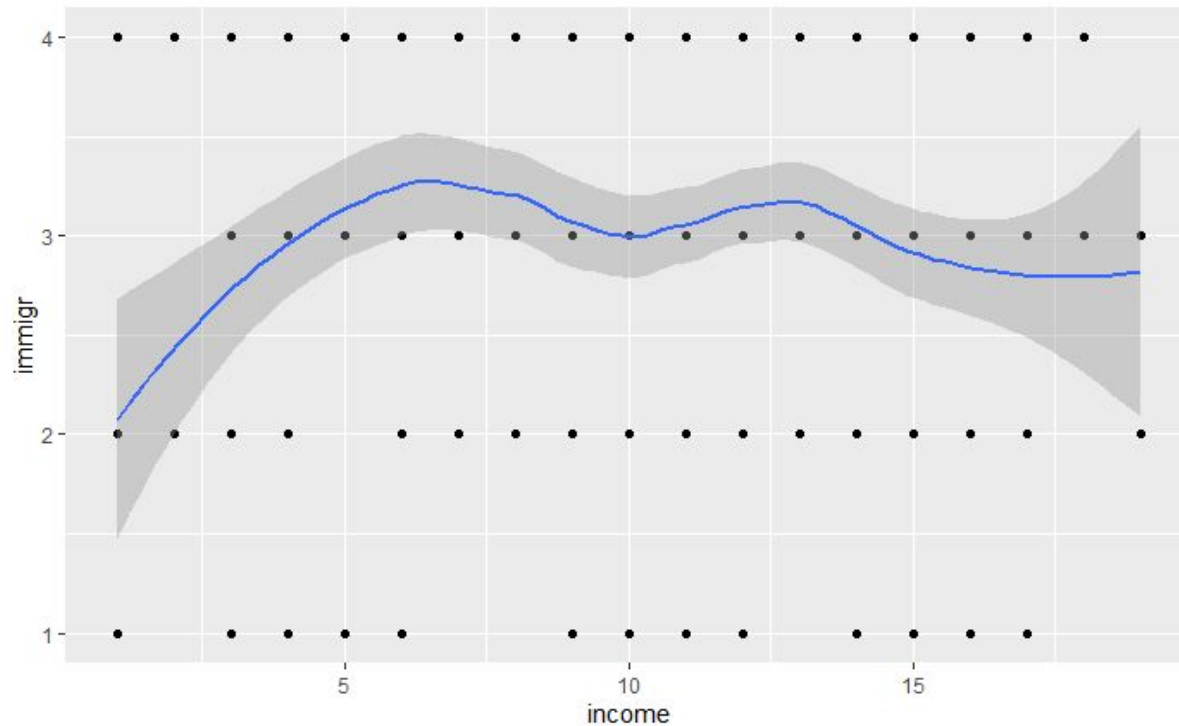
Gender x Immigration attitude



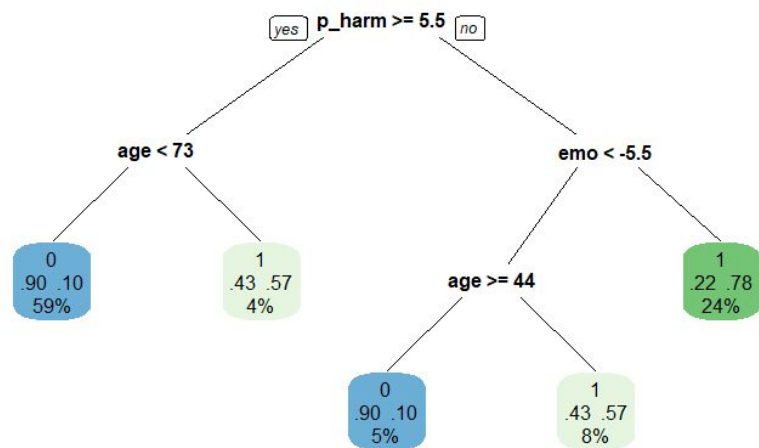
Age x Immigration attitude



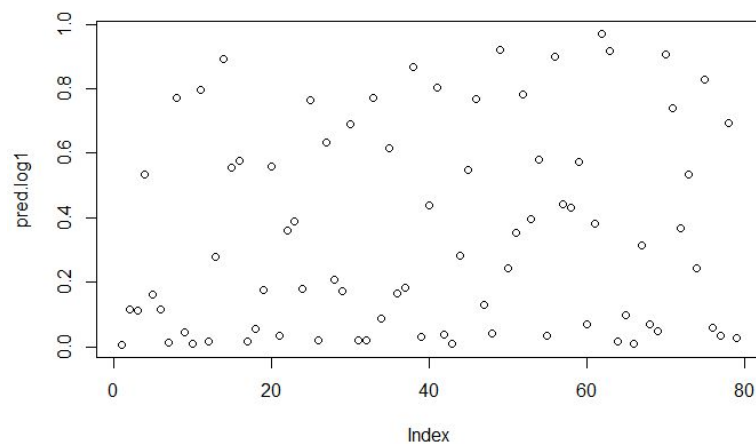
Income x Immigration attitude



Models



vs



Models

	Naive baseline	Decision Tree model	Logistic regression model
AUC	0.5	0.76	0.89
RMSE	0.46	0.41	0.35



Thanks!