

# Measures of Education Inequality

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# Problem

- Are socioeconomic factors connected with measures of academic performance?

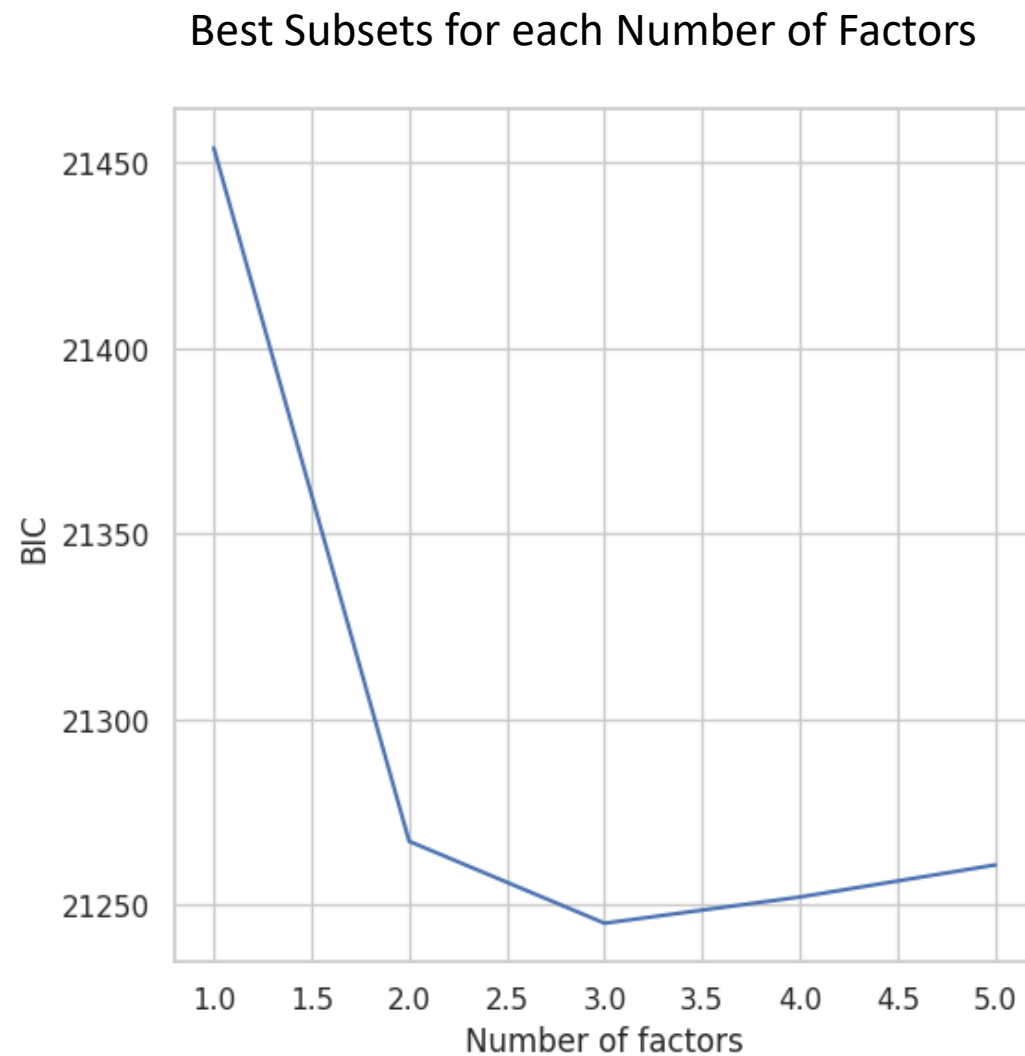
# Data

- School data was gathered from EdGap.org
- School area data was gathered from National Center for Education Statistics, or NCES

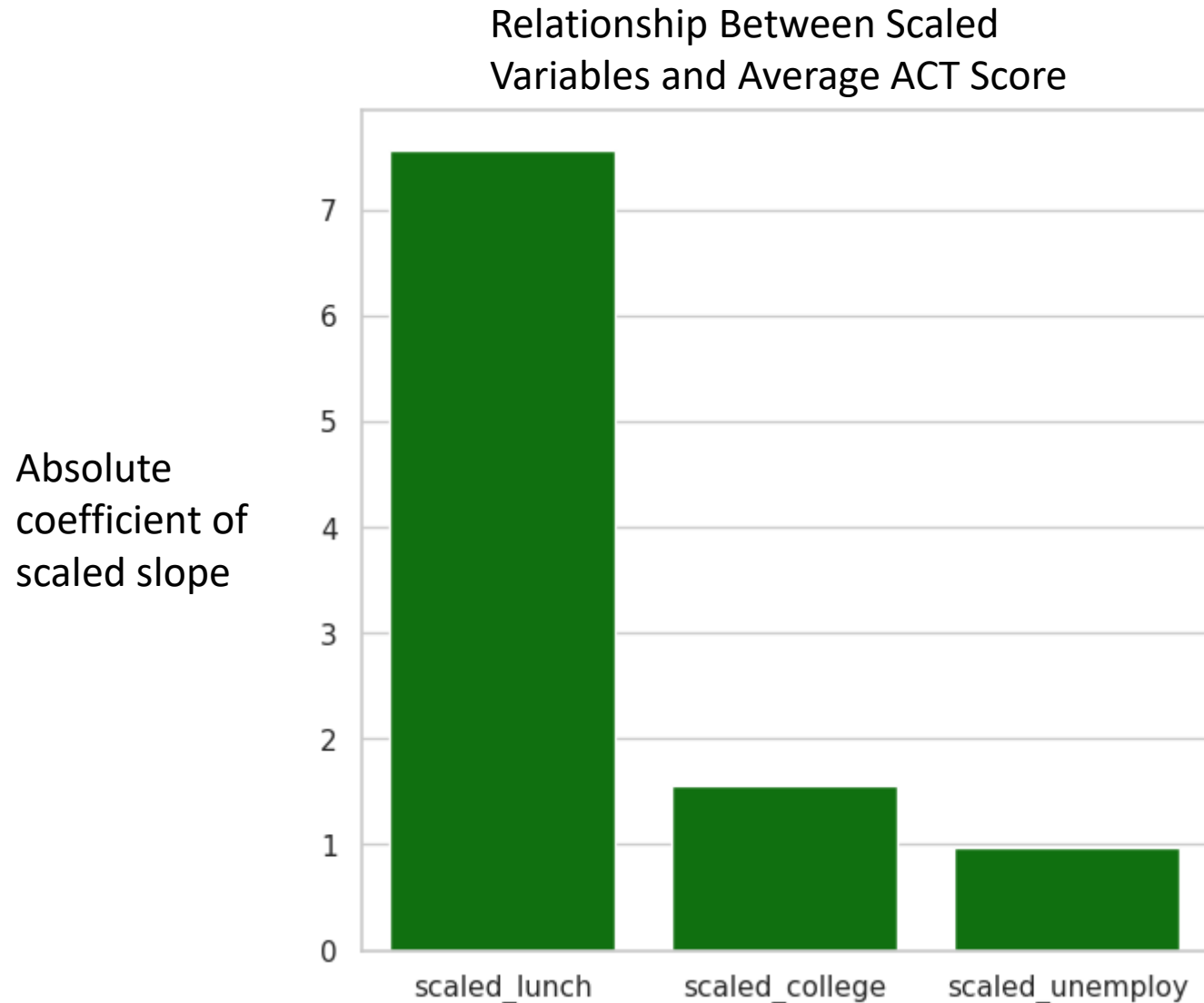
# Analysis Methods

- Using average ACT scores as measure of academic performance
- Try to predict ACT score based on given factors
  - Determine which factors are the most important in that prediction
  - Do those factors imply socioeconomic inequality?

# The best numerical subset has 3 factors

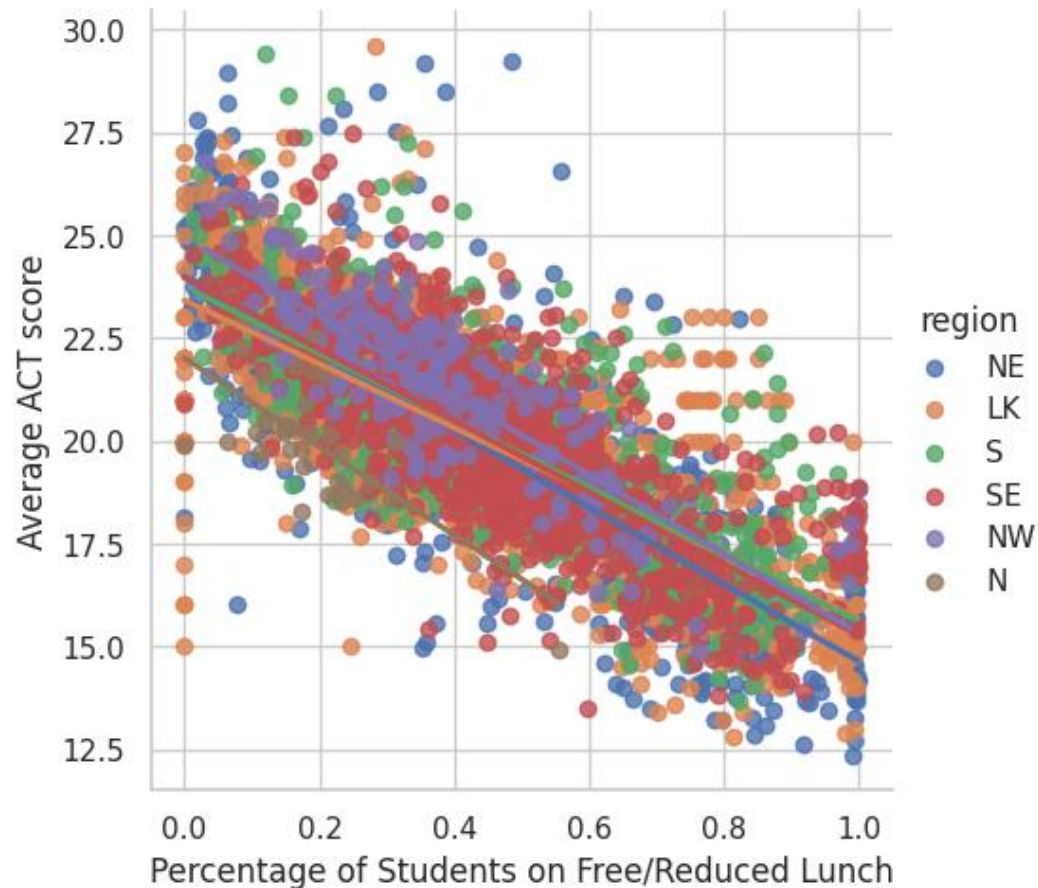


# Percentage of students on free/reduced lunch is the most important factor

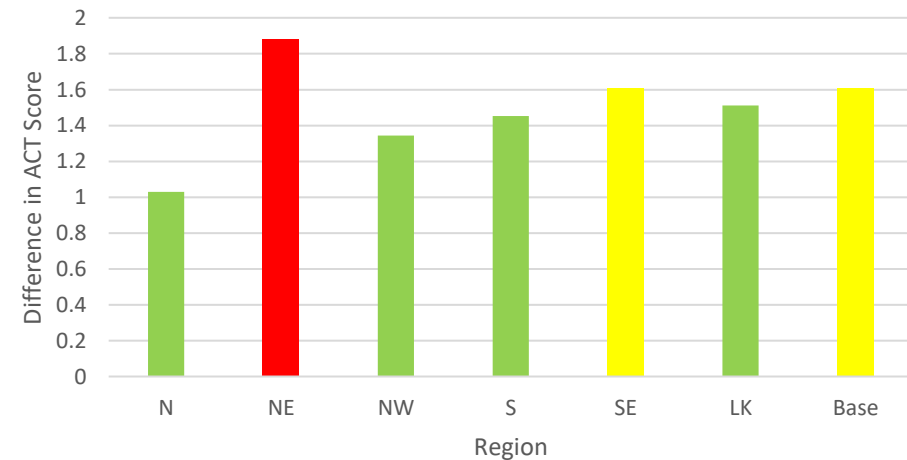


# Using “region” as a predictor could help improve the model’s accuracy

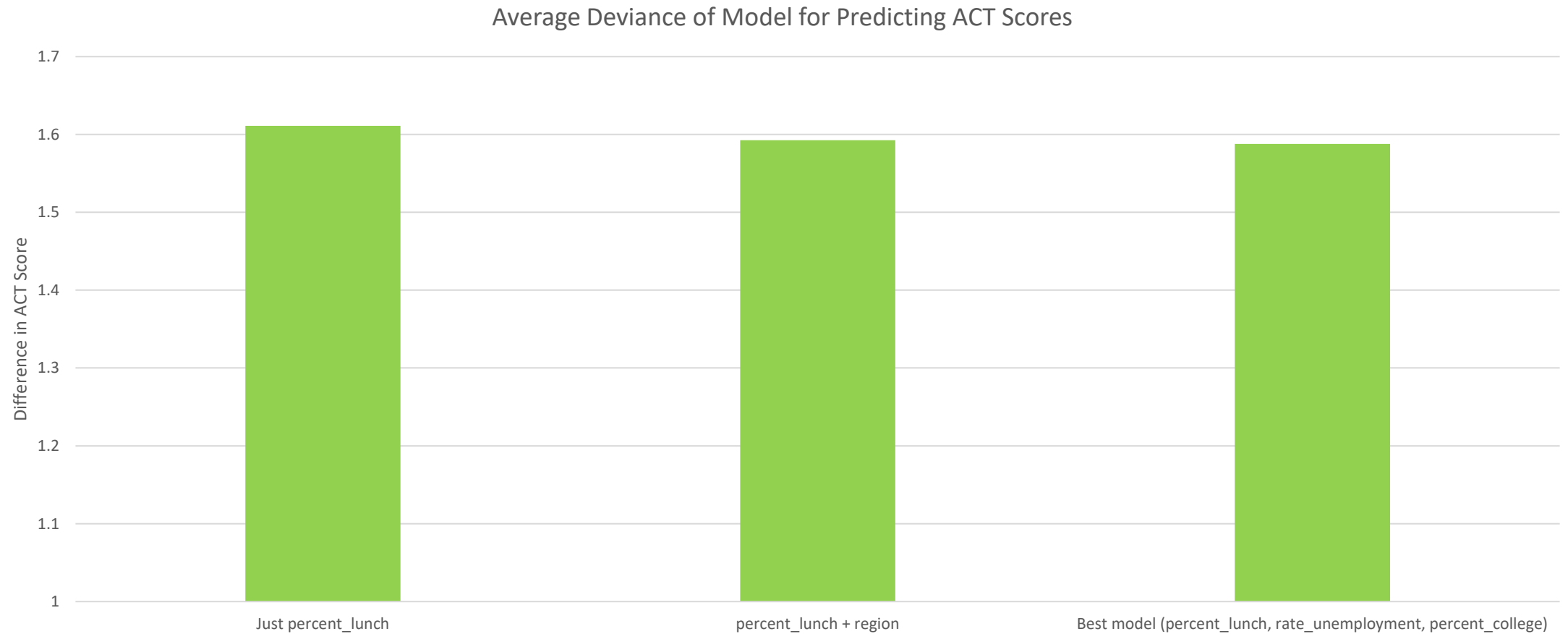
Average ACT Scores Split by Region



Average Deviance of Predictions Per Region



# ...but it doesn't improve it by much





# Conclusion

- Percentage of students on Free/Reduced Lunch is the most important factor of the factors we studied
  - This suggests socioeconomic factors may affect academic performance
- Factoring in region does not improve the model