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● Project Name

The Impact of Facial Attractiveness on Candidates' Vote Share: Case Study of U.S. House Elections

● Description

This project examines the influence of facial attractiveness on voting outcomes, using the 2018 and 2020[1] U.S. House[2] of Representatives elections in California as a case study. The research process involves:

1. Collecting facial photographs of candidates.

2. Evaluating facial attractiveness by the "Three Forehead and Five Eyes[3]" standard, where faces closer to this standard receive higher scores.

3. Problem: Analyzing the relationship between a candidate's attractiveness score and their vote share[4].

● Data Analysis Process

First, examine the relationships between demographic characteristics and facial attractiveness scores. Then, investigate the relationship between facial attractiveness and the natural logarithm[5] of vote share using OLS regression, while controlling for demographic characteristics such as gender, age, education level, political party, and incumbent status. Besides, analyze whether this relationship differs across political parties or between different types of electoral districts (urban vs. rural).

● Data Collection

1. Election Result: web-scrape from Wikipedia

2. Candidate Data: Due to missing candidate photos on Wikipedia, consider web scraping from Ballotpedia.org to gather candidate photos along with other personal characteristics (however, it is uncertain whether all relevant information can be found).

3. District Demographics: Collect from Census Reporter or U.S. Census Bureau Website

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[1] Using 2018 and 2020 data due to redistricting in 2022. The number of California electoral districts decreased from 53 to 52.

[2] Using house elections because: (1) they provide a larger sample size compared to Senate elections, and (2) they are less influenced by national issues than presidential elections, making it easier to isolate the effect of facial attractiveness. The goal is to determine whether and to what extent facial attractiveness impacts a candidate's electoral performance in these congressional races.

[3] "Three Forehead and Five Eyes" is primarily an Asian aesthetic standard, and its applicability to Western countries is uncertain. However, using this standard might help eliminate subjective aesthetic preferences in human ratings and mitigate the impact of raters potentially recognizing the candidates.

[4] Previous literature suggests that beauty has a significant impact on labor and marriage markets. This project focuses solely on facial attractiveness, excluding factors such as BMI, height, and weight, to observe its influence on political achievement.

[5] The natural logarithm of vote share is used to avoid difficulties in interpretation. The number of candidates varies across districts, leading to differences in vote share scales. The importance of percentage changes in vote share also varies.