# Assignment 4 DCM - Voting Biden or Trump in the 2024 US Elections

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## Introduction

## Data and Methods

Table 1: Voting for Trump or Biden in the 2024 US Election: Descriptives Divided by Choice

| **Characteristic** | **Unchosen**, N = 1,733 | **Chosen**, N = 1,733 |
|---|---|---|
| Age (in years) | 60 (45, 68) | 52 (45, 68) |
| Gender | | |
| Female | 854 (49%) | 857 (49%) |
| Male | 879 (51%) | 876 (51%) |
| Education | | |
| Baptist college | 274 (16%) | 255 (15%) |
| Community college | 273 (16%) | 264 (15%) |
| Ivy League university | 243 (14%) | 397 (23%) |
| No BA | 379 (22%) | 195 (11%) |
| Small college | 282 (16%) | 306 (18%) |
| State university | 282 (16%) | 316 (18%) |
| Profession | | |
| Business owner | 250 (14%) | 330 (19%) |
| Car dealer | 385 (22%) | 190 (11%) |
| Doctor | 276 (16%) | 327 (19%) |
| Farmer | 289 (17%) | 266 (15%) |
| High school teacher | 278 (16%) | 313 (18%) |
| Lawyer | 255 (15%) | 307 (18%) |

[1] Median (IQR); n (%)

*Note:* Data from Hainmueller et al., 2014 (collected July 2012)

## Results

Table 2: Voting for Trump or Biden in the 2024 US Election: Conditional Logistic Regression Models

| | Model 1 | | | Model 2 | | | Model 3 | | |
|---|---|---|---|---|---|---|---|---|---|
| **Covariate** | **Odds** | **95% CI** | **p-value** | **Odds** | **95% CI** | **p-value** | **Odds** | **95% CI** | **p-value** |
| Age (in years) | 0.98 | 0.98, 0.99 | <0.001 | 1.10 | 1.05, 1.16 | <0.001 | 1.10 | 1.05, 1.16 | <0.001 |
| Age Squared | | | | 1.00 | 1.00, 1.00 | <0.001 | 1.00 | 1.00, 1.00 | <0.001 |
| Education | | | | | | | | | |
| No BA | | | | | | | — | — | |
| Baptist college | | | | | | | 1.83 | 1.41, 2.38 | <0.001 |
| Community college | | | | | | | 1.77 | 1.38, 2.27 | <0.001 |
| Ivy League university | | | | | | | 3.13 | 2.43, 4.03 | <0.001 |
| Small college | | | | | | | 2.06 | 1.60, 2.66 | <0.001 |
| State university | | | | | | | 2.25 | 1.75, 2.89 | <0.001 |
| Profession | | | | | | | | | |
| Car dealer | | | | | | | — | — | |
| Business owner | | | | | | | 2.60 | 2.01, 3.35 | <0.001 |
| Doctor | | | | | | | 2.42 | 1.89, 3.11 | <0.001 |
| Farmer | | | | | | | 1.80 | 1.40, 2.31 | <0.001 |
| High school teacher | | | | | | | 2.17 | 1.69, 2.80 | <0.001 |
| Lawyer | | | | | | | 2.27 | 1.77, 2.91 | <0.001 |

[1] CI = Confidence Interval

*Note:* Data from Hainmueller et al., 2014 (collected July 2012). The units for the age term is years. The reference category for Education is No Bachelor's degree and Car Dealer for Profession.

Table 3: Voting Trump or Biden in the 2024 US Elections: Model Fit Statistics

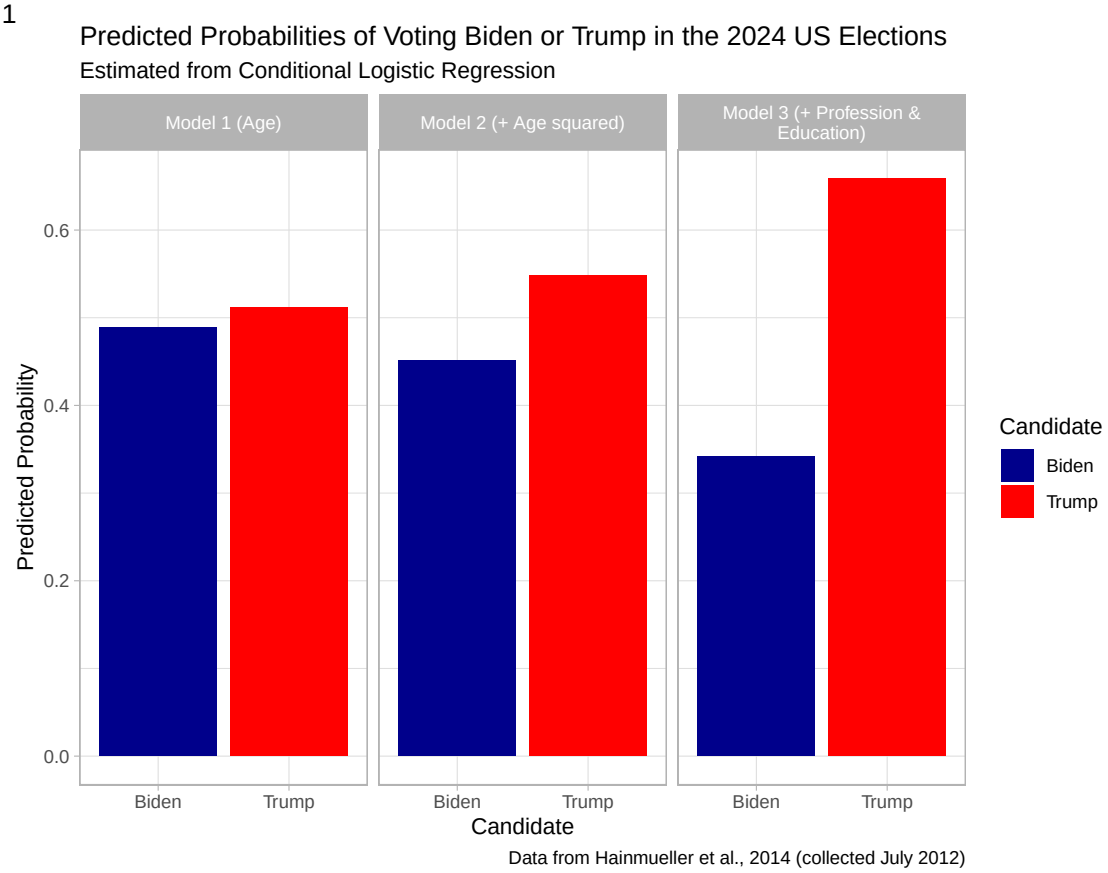
| | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| Log Likelihood | -1183.11 | -1172.74 | -1084.6 |
| AIC | 2368.23 | 2349.49 | 2193.19 |
| BIC | 2373.69 | 2360.41 | 2258.69 |
| Likelihood Ratio | | 20.74 | 176.3 |
| Likelihood Ratio (Df) | | 1 | 10 |
| Likelihood Ratio (p-value) | | 5.27e-06 | 1.38e-32 |

*Note:* The Likelihood ratio is always calculated with the nested model to the left. Data from Hainmueller et al., 2014 (collected July 2012)

## Conclusions

please tell me this works

Fig. 1


Predicted Probabilities of Voting Biden or Trump in the 2024 US Elections
Estimated from Conditional Logistic Regression
Model 1 (Age)
Model 2 (+ Age squared)
Model 3 (+ Profession & Education)
Predicted Probability
0.0
0.2
0.4
0.6
Biden
Trump
Candidate
Candidate
Biden
Trump
Data from Hainmueller et al., 2014 (collected July 2012)