

A Political Survey of the CMU Community

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Introduction

Research Question

- Survey designed to study political leaning of CMU students by measuring respondent's stance on:
 - social/ political/ economic
 - election issues
- Determine relationship to demographic information such as:
 - age/gender
 - major/ QPA
 - religious affiliation
- Can we predict a person's political leaning or election behavior given their demographic information?

Motivation

- Election year
- Youth vote big factor in 2008
- Community feelings about:
 - political issues
 - their informedness/choices for the election
- If people not informed, more action can be taken to increase awareness of issues
- Some people worried that universities "corrupting" students into being liberals
- Results could influence campaigns or help find new strategies to cater to student voters

Sample Questions

- What political party do you most strongly associate with?
- How much do your religious views impact your daily life?
- How much have you been following the Republican primaries (anchoring vignettes)
- Rank the following candidates in the order you would vote for them in the 2012 presidential elections if given the chance...
- How would you rank the importance of each of the following issues
 - health care policy, immigration, same sex marriage, war in the middle east, alternative energy research, unemployment,...
- Where on the following scale would you place your
 - economic views (very pro-government regulation to very pro-unregulated private)
 - views on social issues (very liberal to very conservative)
 - political preferences (strong to weak central government)

Pavan

Sampling

Sample Size Goal/MOE

- From last time...
 - $N = 10,266$
 - MOE of $\sim .05$ was our goal; Requires sample of 370
 - decided to aim for about 300 to 400 responses to get in this range

Initial results yielded nearly 100 responses from a sample size of 400 that were used (Nearly 25% response rate!)

Unfortunately, this caused us to overestimate response rate, which dropped significantly

Sampling Methods

- Initial Sample: Selected 1102 people by randomly selecting one of the first 10 names and skipping 10 names.
- Recontacted these individuals after approximately a week (some variation occurred)
- Still too few responses to achieve our goal. Approximately 60 people short of 300
- Decided to sample another set of people same way we did the first time, but without recontacting these individuals
- Stopped all data collection at 11:59 pm Sunday, April 22

Sampling - Recontacting

- In order to recontact, each individual was given a randomly created unique ID number that they put into a blank space in the beginning of the survey.
- Any ID numbers that were not put into a survey response were linked back to the email they were linked to in order to recontact that person.
- Once an ID number was used in a survey, it was no longer linked to an email address

Actual Sample Size/Response Rate

- Our final sample size was about 1932 people
- Our final number of respondents was 308
- Our final response rate was approximately 16%, much lower than our initial sample seemed to predict
- Unfortunately about 19 of the responses were unusable since they were either entirely blank surveys or nearly so, bringing our actual responses down to 289 and our actual response rate down closer to 15%

Response/nonresponse patterns

- Response rates for faculty were much higher than those of students
- Among students, the highest response rates came from IS and Social Science Students
- Lowest response rates among students came from Business and Arts students

Dev

Progress

Progress - Coding

- 27 questions, dropped 1
- 7 required additional coding
 - Race, Religion
 - Departmental Affiliation, Academic Status
 - Voting History, Future
 - Party Affiliation, Informedness Vignettes

Coding - Departmental Affiliation

So many departments...group by area:

- CS/IS/HCI
- Psychology, SDS, Economics, Policy
- Business/Management
- Engineering
- Sciences
- English, History, Philosophy, other Arts
- Math/Statistics

Coding - Informedness Vignettes

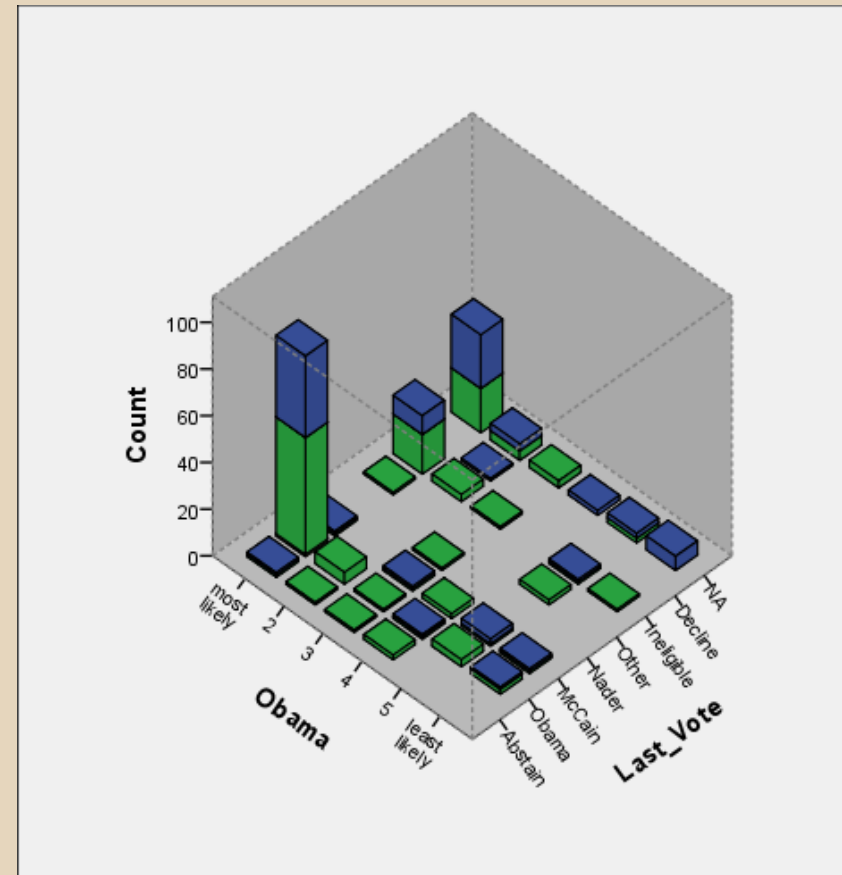
Most people filled it out as we intended

- if ranked correctly (1234) then their rank
- otherwise, shift by half depending on the skew
 - 1233, 3 -> 3.5
 - 1244, 3 -> 2.5

Progress - Analysis

So many factors...
decide based on:

- EDA for each individual question
 - distribution of political party affiliation
- 2 factor visualizations
 - Religion split by Major
- 3 factor visualizations
 - Party vs. Voting split by Gender



Crystal

Interesting Results

Interesting Results

- Overall very liberal
 - 40% for TSB vs ~60% for other
 - Faculty 65.1%, Fre 50%, Sop 44%, Jun 52.4%, Sen 44%, PhD 60%
- Catholics and Protestants - more likely to be Republican (31%, 26%)
- Atheists and Agnostics are much less likely (3.33%)
- Social views – 2.2 out of 7
- No significant difference between majors

Interesting Results

- Females more likely to be Democrats (67% vs 53%)
- Men more likely to be Independents (21%, 15%) and Libertarian (9% vs 3%)
- Finances and employment - women avg 5 vs men avg 4
- Concerns about health care not strongly correlated with financial concerns

Interesting Results

- In general, strongly favor Obama
- Romney second
- Santorum is least favorite
- Romney and Gingrich stronger with Tepper
- CS/IS favor Ron Paul
- Student like Ron Paul more than faculty
 - 3.1 vs 3.7 (lower = more favorable)
- Faculty favor Romney more than students
 - 2.7 for faculty vs 3.1 for students

Interesting Results

- Faculty more likely to follow primaries - 3 vs 2.5
- No difference between a person's year and watching the primaries.
- No difference between Undergraduates and Graduates.
- No difference between majors

Interesting Results

- Hispanic and Mixed more likely to care about immigration
- Asian least likely to care about abortion
- Women much more likely to care about abortion
- Strong correlation between importance of abortion and same sex marriage
- Arts student care most about Web censorship

Will

Conclusion

Problems

- Staying within sampling frame
- Low response rate
- Questions too sensitive?
- Coding
- Stratification with Students and Faculty difficult
- Santorum pulled out

Successes

- Reached desired number of respondents
- Anchoring Vignettes
- Confidentiality
- Free
- Representative

What's Left

- Finalize weighting
- Match analysis with hypotheses
- Calculate margins of Error
- Finish report
- Make and Present Poster

Advice for Future 36-303ers

- You can achieve a pretty good sample size without a reward
- Faculty seem to respond at a higher rate
 - Both to the survey and with feedback
- Anchoring Vignettes are doable/useful
- Need to be very intentional with the wording of political questions