

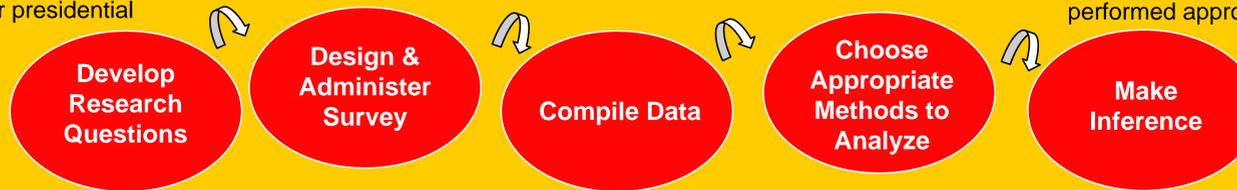


Cultural Exposure, Religion, and Voting Ideology

Rachel Brion, Molly Dieterich, Caitlin Olig, Dr. Jessica Kraker
 University of Wisconsin - Eau Claire
 Independent Study: *Survey Practicum*

Development of Research and Survey

Religion plays a large role in American politicians' campaigns. We have come to expect campaigners to make reference to their religious views and the media tends to emphasize religious differences in certain elections. Since religion is so much a part of a campaign, we were intrigued and wanted to discover whether a candidate's religion would be a deciding factor for students' votes. Likewise, we wished to explore if the ethnicity of a candidate would also play a role. In the last presidential election, the first non-Caucasian president, who campaigned with much student support, was elected. Holding all other variables constant, we wanted to see if knowing solely a candidate's religion or ethnicity would cause students to vote against said candidate. Upon beginning our project, we hypothesized that students who were more exposed to people of religions and ethnicities other than their own would be more likely to vote for presidential candidates of diverse religions or ethnicities. Since society generally expects young adults to have nondiscriminatory attitudes, we knew that there would be a potential cause for bias when asking students if they would vote against a candidate because of a particular religion or race.



Statistical Process

Taking these factors into careful consideration, we developed questions based on responses from a previous survey that we developed last year as part of a *Survey Sampling* class and discussions we had with several outside sources. A lot of our time was spent writing and rewriting questions to best fit our research goals, especially when it came to determining how to assess students' exposure to people of different religious and cultural backgrounds. We approached the questions from various viewpoints to iron out and eliminate any wording that could be offensive or misleading. After developing the questions, we put together the survey in Qualtrics (a software program for developing and distributing surveys), filled out Institutional Review Board (IRB) forms and sent out the survey via email to a random sample of 1500 undergraduate students at UW - Eau Claire. We then performed appropriate statistical tests on selected data sets and analyzed the collected data to make inference about our results and answer our original research questions. Our response rate was roughly 10% (9.53%) and the vast majority of respondents completed the entire survey, which allowed us to analyze full data sets.

Example Process

Research Question:

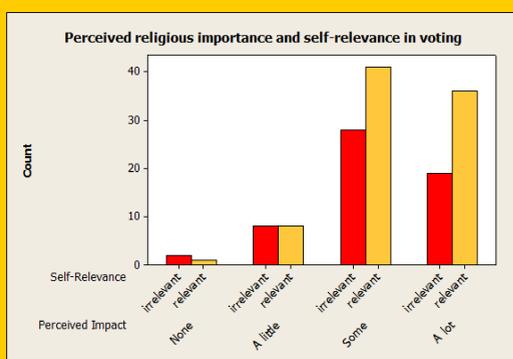
We are looking for evidence of a difference in distributions of perceived importance of religion to the typical American voter, between the groups of individuals for whom religion is relevant to voting decision and those for whom religion is not relevant to voting decision.

If all you know about a presidential candidate is that he/she is of a certain religious affiliation, indicate how likely you are to vote for such a candidate. Please make a selection for each religious affiliation.	How much of an impact do you believe that a presidential candidate's religious affiliation plays in a typical American voter's decision?				
	Unlikely	Somewhat Unlikely	Irrelevant to my decision	Somewhat Likely	Likely
Atheist	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Catholic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Jewish	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Mormon	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Muslim	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Protestant	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The figures above show the questions from the survey that were then used to address this research question. Note: In the test below and in all tests referencing relevance, if responses across the religions were homogenous, we summarized the individual's total relevance of religion as 'irrelevant' whereas if there was a difference in response across the religions, we labeled the total relevance as 'relevant'.

Hypothesis Test: (Mann-Whitney nonparametric test)

- Assumptions: Two independent random variables, measurement scale is ratio
- H_0 : the distribution of perceived importance of religion to the typical American voter is the same between the "irrelevant" and "relevant" groups.
 H_1 : the distribution of perceived importance of religion to the typical American voter is over lower values for those in the "irrelevant" group than for those in the "relevant" group.
- Test statistic: $t = 3687$
- P-value = 0.0734 (after adjustment for ties)
- There is marginally significant evidence that the distribution for perceived importance of religion to the typical American voter for those in the "irrelevant" group is lower than the distribution for perceived importance of religion to the typical American voter for those in the "relevant" group. The more striking visual difference in the plot below is due (in part) to the larger number of people who answered "relevant".



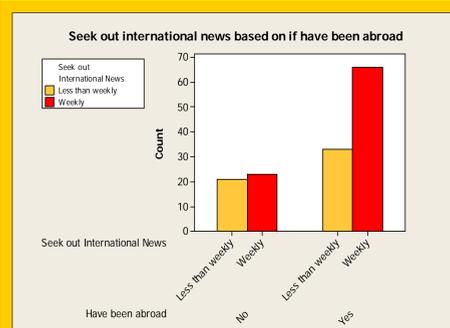
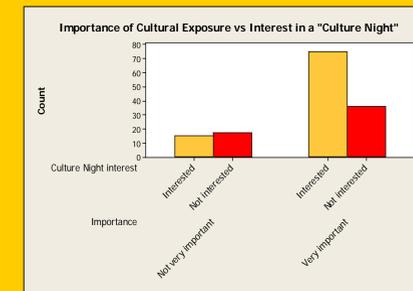
Additional comment: There was a slightly larger number of students who thought that religious affiliation of a presidential candidate had a "bigger" impact on the typical American voter than does ethnicity, this did not turn out to be a significant result.

Difference between responses	No Difference	Religion has a bigger impact	Ethnicity has a bigger impact
Number of responses	69	41	33

Conclusions

Research Question: Are students who assess cultural exposure as very important more interested in a "Culture Night" on campus than students who assess cultural exposure as not very important?

Conclusion: (Chi-square test, P-value = 0.033) Students who deem cultural exposure to be important are more interested in "Culture Night" events offered on campus.

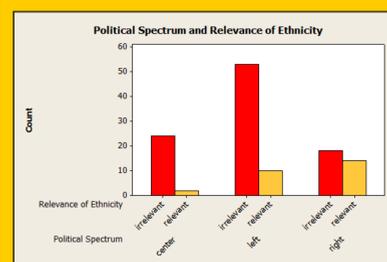


Research Question: Do students who travel outside of the US tend to read or watch international news more often than students who have never been outside of the US?

Conclusion: (Chi-square test, P-value = 0.049) Students who travel outside of the US tend to seek out international news more often than students who have not traveled outside of the US.

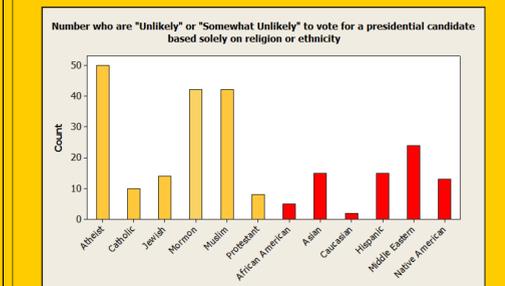
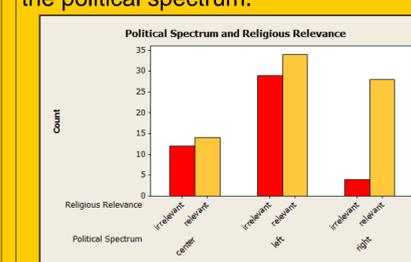
Research Question: Are personal placement on the political spectrum and the relevance of a presidential candidate's ethnicity on a voter's decision dependent?

Conclusion: (Chi-square test, P-value = 0.001) The relevance of a presidential candidate's ethnicity is dependent on a students' placement on the political spectrum.



Research Question: Are personal placement on the political spectrum and the relevance of a presidential candidate's religious affiliation on a voter's decision dependent?

Conclusion: (Chi-square test, P-value = 0.003) The relevance of a presidential candidate's religious affiliation is dependent on a students' placement on the political spectrum.



Research Question: Is there a difference between the true proportions of students who say they would be unlikely or somewhat unlikely to vote for an Atheist candidate and those who would be unlikely or somewhat unlikely to vote for a Catholic candidate?

Conclusion: (2PropZtest, P-value = 3.04×10^{-9}) Since the P-value is so small, there is significant evidence that the true proportion of students who say they would be unlikely or somewhat unlikely to vote for an Atheist candidate is greater than the proportion who would be unlikely or somewhat unlikely to vote for a Catholic candidate.

Comments (Grouping Responses): In many of the tests that we performed, we grouped data from the responses in such a way so that the appropriate statistical analysis tests could be used (perhaps by ensuring that the expected counts would be large enough). For example, one of the questions we used is: "You see a poster in the hallway on the way to class advertising a "Culture Night" on campus. Do you:
 •Hardly notice the poster.
 •Notice the poster but aren't interested in going.
 •Read the poster and consider going, you may or may not go.
 •Read the poster to get all the details, you will go.

We combined responses to create two groups out of four groups in the following way:
 •"Hardly notice the poster" + "Notice but aren't interested" → "Not interested"
 •"Read the poster and consider" + "Get the details, you will go" → "Interested"
 Regarding the political spectrum (a scale from 0-120), responses within 10 points on either side of the middle value (60) are considered 'center', those lower than 50 are considered 'left' and those higher than 70 are considered 'right'.