

University of North Carolina at Charlotte

Polls and Elections: Did Character Count? Candidate Traits and the
2016 Presidential Vote
Technical Report

Jessica Schatz, Anvi Tirunagari, Rachel Rozansky, William Chiappetta, Khushi Sabharwal, and
Jackson Stevens

DTSC 2301

Angela Berardinelli, PhD, and James Walsh, PhD
March 1, 2022

INTRODUCTION

The 2016 United States presidential election was one of the most surprising and impactful seasons of modern American history. Both Donald Trump (Republican) and Hillary Clinton (Democrat) were held to a low regard due to their poor character traits, though Trump was viewed as worse than Clinton in that regard. Despite this, Trump won the election through the electoral vote. This compelled David B. Hollian and Charles Prysby to question how much character traits really affect votes, specifically in the 2016 election. They divided this key hypothesis into four research questions: 1) how much did Trump face a disadvantage because of his character to voters? 2) did character traits affect/influence voters? 3) to voters, what factors affect personal assessments of candidates? 4) how much better would Trump have done in the popular vote if he had not had such a character disadvantage (Hollian, 668)?

The authors used data from the American National Election Study, also known as the ANES. The ANES started in 1948 as a database of responses from voters about voting, public opinion, and political participation. It is now considered one of the largest databases for the social science research community.

Holian and Prysby specifically look at the responses from the year 2016 to conduct their research. During this year, the ANES questionnaire asked six questions about how voters perceived each candidate. The first four questions stem from the four character dimensions coined by Kinder to group similar character traits together to analyze in an easier manner (Kinder 233-55). These four character dimensions are leadership, empathy, competence, and integrity. The questions voters were asked about each candidate and correlated with the character dimensions are as follows, 1) would provide strong leadership, 2) cares about people like you, 3)

is honest, and 4) speaks his or her mind. The last two questions were specifically written for this election cycle to determine how voters felt about Trump. The Republican candidate has been notoriously known throughout this campaign to lack experience and be narcissistic. These questions are, 5) speaks his or her mind, and 6) is even tempered. Though these questions were asked, they were not used greatly in Holian and Prysby's research, as this was the first time these questions were being asked, and there was not a qualified way to interpret and analyze the results of those questions. All questions were on a five-point scale, ranging from extremely well, very well, moderately well, slightly well, and not well (Holian, 668-669).

After conducting a series of statistical tests, the conclusion was that candidates' characters only slightly influenced voters. This is due to two reasons. The first reason is because character traits are largely associated with political parties. The results of these traits for each candidate only reflected the stereotypes of these parties, resulting in not much change in votes. Democrats tend to value empathy over any other trait, and republicans usually tend to lack empathy more in leadership. This makes democrats view republicans as lacking in compassion and republicans view democrats as weak leaders (Holian, 685). The second reason is because of the strong partisan polarization between the two parties. There are not as many persuadable voters now than years before for voters to switch their votes to another party. This is once again due to the fact that a lot of voters fall into a political party and have preexisting negative notions about the other party that they do not vote for (Holian, 686). Character traits did affect votes of independents, but there were not enough independent voters in 2016 to make significant changes.

As mentioned earlier, both Clinton and Trump were viewed negatively character wise. Trump was seen in a lower regard, but not as low as he could have been, especially compared to Clinton. While Clinton was seen higher, she was still put at a low regard. The media played an

important role in this election by negatively speaking against both candidates causing much polarization between the two candidates' traits. Hollian and Prysby infer that the reason Hillary Clinton lost to Donald Trump was because she was seen as a more moderate candidate, not as much of a radical like her opponent—which ended up winning the election. (Hollian, 685)

Many people question how and why Trump was elected, despite his lack of experience and blatant disregard for others. It is important to examine beyond the surface of the media and look into the raw data. Even though Clinton scored higher characteristic traits than Trump, she was still seen as unfavorable. It is important to discuss the trend of such a controversial election and use it to estimate how future elections may run. Depending on what media sites voters follow, it may be difficult to determine the positives and negatives of your candidate. Replicating this article may help voters understand why the 2016 election results turned out the way they did.

DATA

The data used in our article to determine if character matters in the presidential vote were collected through the 2016 ANES. The data in the ANES is representative of a larger population. The ANES is a sample poll of all people who could vote in the US population. The data can be used to better understand how Americans feel about various topics.

The variables we used in our project are the same used in the table 7 from the original article. The dependent variable we used was for whom did the respondent vote for President. The way we analyzed this variable was whether they voted for Donald Trump or if they did not vote for Donald Trump. Using this dataset in our code, we were able to combine all the votes for people who did not vote for Donald Trump and compare them to those who did vote for Donald Trump. Then for our independent variables, we ran into the challenge of having to combine

multiple variables from the ANES dataset. We needed to combine the variables because in the article they combined multiple variables to categorize their independent variables. It was difficult to figure out how to compare our combined independent variables to our dependent variable to be able to duplicate the numbers from table 7 correctly. This is due to the authors being a little vague about their methodology.

For our independent variables, we used party identification which uses the variable party identification strong - Democrat-Republican from the ANES. This was measured on a 7-point scale from strong Democrat to strong Republican, and the high score with strong Republican. Assessment of the economy combined the indexes national economy better/worse in last year and economy better/worse since 2008. The scale runs from 1.0 to 4.0, with a high score representing a more negative assessment. For attitude toward trade policies, the authors use three surveys: whether imports should be limited to protect jobs, whether trade with other countries has been good for the United States, and whether the United States should make free trade agreements with other countries. The index is scaled from 1.0 to 4.0, with a high score representing a more negative attitude toward free trade. Attitudes on social welfare issues is measured by an index formed from four surveys: whether the government should provide more or fewer services, whether the government should see that everyone has a job and a good standard of living, whether the government should have a health insurance plan to cover everyone, and whether the government should take measures to reduce income inequality. The index is scaled from 1.0 to 4.0, with a high score representing a more conservative attitude. Attitudes towards moral issues combined the indexes abortion (from never to always) and position on gay marriage. This also runs on a 1.0 to 4.0 scale and also shows a high score representing a more conservative attitude. Attitudes toward immigration policy combine the

indexes of how likely immigration will take away jobs, U.S. government policy toward unauthorized immigrants, and what should immigration levels be. This scale was from 1.0 to 4.0 and with a high score representing a more negative attitude towards immigration. Attitudes toward blacks is measured by an index formed from four questions: whether blacks should be able to work their way up without special favors, whether past slavery and racial discrimination make it more difficult for blacks to work their way up, whether blacks have received less than they deserved, and whether blacks need to try harder to work their way up. The index is scaled from 1.0 to 4.0, with a high score representing a more negative attitude toward blacks. Attitudes toward women are measured by an index formed from four items: whether women interpret innocent remarks as sexist, whether women appreciate what men do for them, whether women try to gain control over men, and whether women try to put men on a tight leash. The index runs from 1.0 to 4.0, with a high score representing a more negative attitude toward women. The desire for a strong leader is an index formed from two surveys: whether the country needs a strong leader and whether a strong leader in government would be good for the country. The index is scaled from 1.0 to 4.0, with a high score representing a more positive attitude toward having a strong leader. Trust in politicians is an index constructed from three items: whether most politicians care about people, whether most politicians are trustworthy, and whether politicians are the main problem in the United States. The index runs from 1.0 to 4.0, with a high score representing a more negative attitude toward politicians.

The most crucial category in the table is ‘perceptions of candidate character traits’. This category combines indexes for both Republicans and Democrats perception of their party’s running candidate. The four indexes used in this category were: candidate really cares,

strong leadership, candidate's honesty, and candidate's knowledgeable. These indexes were combined to assess how each party viewed their presidential candidate's character. This index scale is from 1.0 to 5.0, with 1 being the most positive evaluation.

All of the indexes mentioned above were combined and used to duplicate table 7 for our project. The table below is table 7 from the article and is the table we used to replicate. Table 7 shows all of the results the authors of the article got in their analysis.

TABLE 7
Logistic Regression Analysis of the Presidential Vote, 2016

<i>Independent variable</i>	<i>All voters</i>	<i>Democrats</i>	<i>Republicans</i>
Party identification	.555** (.070)		
Assessment of the economy	.248 (.159)	.454* (.249)	.094 (.278)
Attitudes on trade policy	.294* (.144)	.460* (.248)	.222 (.218)
Attitudes on social welfare issues	.401* (.217)	-.034 (.377)	.928** (.365)
Attitudes on moral issues	.528** (.142)	-.348 (.269)	1.175** (.236)
Attitudes on immigration policy	.243 (.254)	1.002** (.420)	-.055 (.413)
Attitudes toward blacks	.719** (.198)	.638* (.328)	.514* (.303)
Attitudes toward women	-.057 (.202)	.268 (.338)	-.066 (.322)
Desire for a strong leader	.448* (.191)	.706* (.337)	.502* (.297)
Trust in politicians	.047 (.214)	-.245 (.396)	.203 (.336)
Perceptions of candidate character traits	1.510** (.122)	1.703** (.216)	1.430** (.191)
	Nagelkerke R^2 = .75 % correct prediction = 96.0 N = 2,197	Nagelkerke R^2 = .75 % correct prediction = 97.5 N = 1,093	Nagelkerke R^2 = .69 % correct prediction = 95.3 N = 969

Note: Positive coefficients indicate that a vote for Trump is associated with a Republican identification, a more conservative or pro-Republican view on policy issues, more negative attitudes toward blacks and women, a greater desire for a strong leader, higher distrust in politicians, and a more favorable view of Trump's character traits relative to Clinton's.

* p < .05; ** p < .01.

Source: 2016 American National Election Study. Only major-party voters are included in the analysis.

COMPARISON: OUR ANALYSIS VS. THEIRS

The authors ran logistic regressions for Democrats and Republicans. The results support the conclusion that Republicans were somewhat less influenced by perceptions of the character traits of the candidates, but these perceptions still had a substantial effect on their votes. Their independent variables were categorized in ten different variables. These were: party identification, assessment of the economy, attitudes on trade policy, attitudes on social welfare issues, attitudes towards moral issues, attitudes toward immigration policy, attitudes toward Blacks, attitudes toward women, desire for a strong leader, trust in politicians. These variables were constituted of several different surveys from the ANES 2016 Time Series Studies.

For our analysis, we used the same independent and dependent variables as the authors, but we got different results as it is shown in the logistic regression table below.

```
Call:
glm(formula = voting ~ party + econ + social + trade + moral +
     immigration + black + woman + strong + trust, family = binomial,
     data = data5)
```

Deviance Residuals:

Min	1Q	Median	3Q	Max
-3.2304	-0.3026	-0.0825	0.3603	3.1394

Coefficients:

	Estimate	Std. Error	z value	Pr(> z)	
(Intercept)	-4.834736	0.906092	-5.336	9.51e-08	***
party	0.899368	0.042618	21.103	< 2e-16	***
econ	0.680436	0.055737	12.208	< 2e-16	***
social	0.019254	0.025794	0.746	0.45539	
trade	0.225789	0.051667	4.370	1.24e-05	***
moral	0.061572	0.069226	0.889	0.37377	
immigration	-0.119711	0.055617	-2.152	0.03136	*
black	0.089967	0.032942	2.731	0.00631	**
woman	-0.100661	0.022451	-4.484	7.34e-06	***
strong	-0.343936	0.039260	-8.760	< 2e-16	***
trust	0.009169	0.042635	0.215	0.82972	

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

(Dispersion parameter for binomial family taken to be 1)

Null deviance: 3368.3 on 2452 degrees of freedom
Residual deviance: 1317.7 on 2442 degrees of freedom
(206 observations deleted due to missingness)
AIC: 1339.7

Although both of our p-values and Z-scores differ from the authors' original table, our values remained mostly aligned with the original table—that is, we still rejected the null hypothesis for most of our values, supporting, still the authors' final conclusion. For the original table, Holian and Prysby had values for the Republican, Democrats, and all voters—which included both Republicans and Democrats. For our table, we decided not to separate these categories and to just analyze all voters' perception on the candidates instead of separating voters into political parties.

For the last variable in the authors' original table, and perhaps the most important in the paper, 'perceptions of candidate character traits', we used the same methodology as the authors. We got slightly different numbers, which we believe might just be because of a difference in sample size. For the mean of the republican party's perception of candidate character traits, we got the value of 3.680, and for the democratic party, we got 3.316. For the 'all voter category', we took the difference between the two mean scores, and we got 0.364. The author's original values were, 1.703 for democrats and 1.430 for republicans. Their score for 'all voters' was 1.510.

METHODS

To measure the impact that character had on the 2016 presidential election, Holian & Prysby polled respondents on four primary traits: leadership, empathy, competence, and integrity. The participants were asked to evaluate the two candidates and give them a grade from 1 to 5 for each trait with 1 being the most positive rating and 5 being the most negative; the four scores for each candidate were averaged together for each respondent. For example, a test subject gives Hillary Clinton the following scores: leadership - 2, empathy - 4, competence - 3, integrity - 3. The total of the scores (12) is

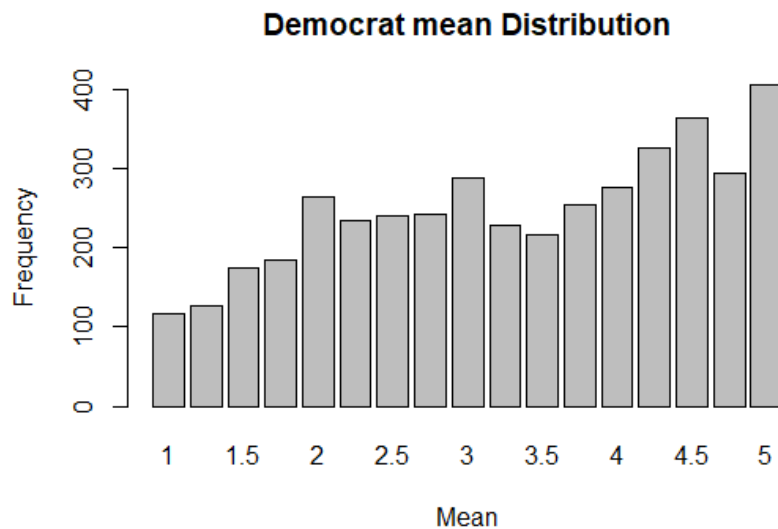
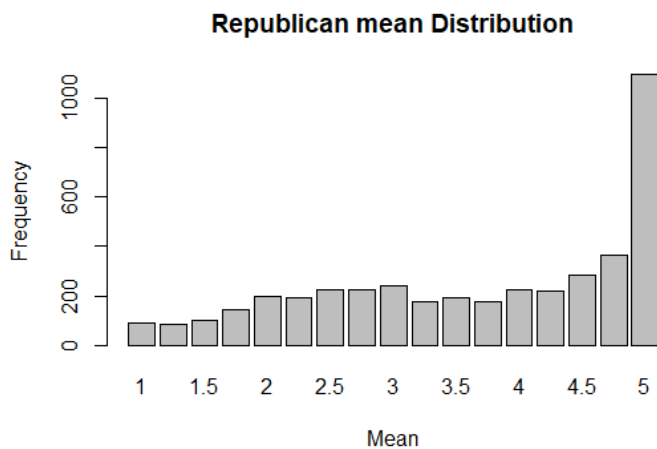
divided by the number of traits (4) to find the mean score (3); once again, it's important to note when examining the dataset that a lower score denotes a more favorable view of a candidate. Elsewhere in the study, participants were asked about personal information such as party affiliation, assessment of the economy, and attitudes toward trade policy among other topics to forecast their political leanings. This data was collected in order to examine the relationship (if there is one) between political beliefs and the importance of character. Thus, if Trump receives negative ratings from Republican voters (or Clinton with Democratic voters), this might indicate that this group generally doesn't prioritize character in their presidential candidate of choice.

To duplicate the paper, we ran a logistic regression model. This decision was simple for us to make because it is the same method Holian & Prysby used in the initial analysis. Also, of all the statistical methods we've learned in DTSC 2301, logistic regression makes the most sense in this scenario because the dataset contains several categorical, independent variables.

To make these independent variables, we needed to combine variables in the ANES dataset to make one variable that we can use in our regression analysis. We used the `glm` function to do this, which returned a logistic regression table with z scores and p-values. To obtain the data we needed, we had to replace the negative values, which were characterized as did not answer or could not answer or was not provided this question, with NA's. We also had to reevaluate which variable values had to be recoded as, as they were not consistent with one another. Using all of these methods to manipulate the dataset to our liking, we then used the regression function to achieve our data.

RESULTS

The graph below represents the Republican assessment of their party's presidential candidate regarding their 'perceived character traits'. These characteristics are whether the candidate really cares about voters, has strong leadership, whether they're honest, and if they're knowledgeable. This index scale is from 1.0 to 5.0, with 1 being the most positive evaluation. The numbers on the x-axis represent the means of the respondents' view of their respective party candidate. From this graph we can observe that the respondents perceived their running presidential candidate (Donald Trump) character traits in a low regard.



For the perceived candidate traits graph for the Democratic party, we can observe that the responses were much more ‘spread out’ than the Republican responses. However, Hillary Clinton was still scoring high on the negative side of the spectrum. It is clearly seen that Republicans were more extreme in their answers than their Democratic counterparts. This seems a bit off putting because usually Republicans are perceived as more devoted to their candidates and receive more praise. However, we see that they don’t exactly see eye to eye with Trump in regard to some of his characteristics.

CONCLUSION

The 2016 presidential election was certainly an atypical election where both candidates, in general, displayed poor character traits. While Donald Trump won through the highest number of electoral votes, it was also perceived that traits did affect votes which was carefully studied by the ANES research through a questionnaire that was served to several million voters. These questions were around influence of traits for a voter’s decision, their personal assessment, and what should the candidates have done differently. The majority of the questions that the ANES questionnaire had were around several character dimensions and literally had two specific questions around the voters' feeling for Trump to be a presidential candidate especially given his lack of experience in politics let alone running the country.

Surprisingly, the ANES study results concluded that characters only slightly influenced voters' decisions. The data collected from the duplication of the study supports the conclusion that Republicans were somewhat less influenced by perceptions of the character traits of the candidates, but these perceptions still had a substantial effect on their votes. As shown and explained above in our analysis, we used the same variables as in the study but got different

results. While running the models in attempts of duplication, we came across challenges that in the combining of multiple variables showed our numbers to be different where some were too low, and others were exceptionally high compared to those of the survey conducted.

What actually influenced the decisions of voters were two extremely important factors and aspects that were a) character traits associated with parties and b) pre-existing negative notions also known as partisan polarization that existed for these parties. Many Republicans believed that with Trump's character deficiencies, the likelihood of a Republican presidential victory was low. Voters perceived Hilary Clinton to be knowledgeable, but dishonest, and assessments of Donald Trump were historically poor across the board. Due to this, both characters suffered from low voter rates, and the media perceived both the candidate's traits as "poor characters." While the Democrats were looked at as empathy bearers with lower leadership skills versus the republicans who were looked at as having strong leadership qualities and traits but no heart or soul in their perspectives.

In a nutshell, both were perceived negatively across several parameters that have been highlighted in the report and conclusion above. Mainly some influence of personal traits but heavily around negative notions and party association and identification.

