

March 8, 2018

Fake News May Have Contributed to Trump's 2016 Victory¹

By Richard Gunther, Paul A. Beck, and Erik C. Nisbet

Ohio State University

Could “fake news” have helped determine the outcome of the 2016 election?

A massive number of political messages was disseminated through social media and news broadcasts during the 2016 election campaign. Many of them demonized candidates and seriously distorted the facts presented to voters. Among those dealing with the presidential race, the vast majority were pro-conservative comments hostile to Hillary Clinton.²

What has not been clear, however, is how much of an impact, if any, these false “news” items had on the outcome of the election. To our knowledge, there have been no empirically based studies that have systematically assessed the extent to which believing fake news stories actually influenced voting decisions in 2016. So we have used data from our nationwide post-election survey to address this crucial question.³

Our analysis leads us to the conclusion that fake news most likely did have a substantial impact on the voting decisions of a strategically important set of voters—those who voted for Barack Obama in 2012. Indeed, given the very narrow margins of victory by Donald Trump in key battleground states, this impact may have been sufficient to deprive Hillary Clinton of a victory in the Electoral College.

We focus our analysis on the 2016 voting behavior of 585 respondents (of a total sample of 1,600) who had voted for Barack Obama in 2012. This strategic subset of the electorate was selected for two reasons. First, restricting our analysis to former Obama supporters provides a form of control for other potentially confounding factors. It could not be argued, for example, that those who abandoned the Democratic candidate in 2016 were hostile to Democratic candidates, *per se*, or were implacable conservatives

More importantly, if Hillary Clinton had retained the support of these voters, she would most likely have won the 2016 election. Instead, just 77 percent of those Obama voters supported Clinton. Our survey data show that 10 percent of them cast ballots for Trump in 2016, 4 percent switched to minor parties, and 8 percent did not vote. Thus, our key research question is, what accounts for these defections?

1 An earlier report on this study was published online in *The Conversation*, February 15, 2018. [<http://theconversation.com/study-suggests-trump-may-owe-his-2016-victory-to-fake-news-91538>]

2 One recent study of nearly 25,000 social media messages presented as political news and circulated in the key battleground state of Michigan identified nearly half as “unverified WikiLeaks content and Russian-origin news stories” that fall “under the definition of propaganda based on its use of language and emotional appeals.” (Philip N. Howard, Gillian Bolsover, Bence Kollanyi, Samantha Bradshaw and Lisa-Maria Neudert, “Junk News and Bots During the U.S. Election: What Were Michigan Voters Sharing over Twitter?” *COMPROP Data Memo*, 2017.1, March 26, 2017.) Another study of over 43 million elections-related posts shared on Twitter by about 5.7 million distinct users found that “Conservatives retweeted Russian trolls about 31 times more often than liberals and produced 36 times more tweets.” (Adam Badawy, Emilio Ferrara and Kristina Lerman, “Analyzing the Digital Traces of Political Manipulation: The 2016 Russian Interference Twitter Campaign,” in *Proceedings of The Web Conference (WWW’18)*. ACM, New York. <https://doi.org/10.1145/nnnnnnn.nnnnnnn>.)

3 A more detailed description of this YouGov survey is presented in the Methodological Appendix.

Findings from Our Post-Election Survey

Our post-election survey asked our respondents 281 questions that included, in addition to the standard election-survey items, three fake news statements. Two of these were negative statements about Hillary Clinton and one was a positive statement involving Donald Trump. All three were widely disseminated through the internet, twitter, and other devices and were picked up by the broadcast media as well.

The first is the claim that “Hillary Clinton is in very poor health due to a serious illness.” Twenty-five percent of all respondents in our nationally representative sample believed that this was “definitely true” or “probably true,” as did 12 percent of our former Obama supporters. The second is a statement that “Pope Francis endorsed Donald Trump for president prior to the election.” About 10 percent of our national sample and 8 percent of Obama supporters thought this statement was true. Finally, we asked our respondents if they believed that “During her time as U.S. Secretary of State, Hillary Clinton approved weapon sales to Islamic jihadists, including ISIS.” 35 percent of our national sample believed that Clinton had approved weapons sales to ISIS, as did 20 percent of former Obama voters.

Belief in these fake news stories is very strongly linked to defection from the Democratic ticket by 2012 Obama voters. Among those who didn’t believe any of the three fake news stories, 89 percent cast ballots for Hillary Clinton in 2016; 61 percent of those who believed one fake news item voted for Clinton; but only 17 percent of those who believed 2 or all 3 of these false assertions voted for Clinton (Tau-b correlation=.50).

To be sure, data from a single-wave survey cannot “prove” that these fake news items caused former Obama voters to defect from the Democratic ticket. It is possible, for example, that someone who disliked Clinton and chose not to vote for her might endorse these false statements after the fact in order to rationalize their voting decision.

We shall therefore explore a number of rival hypotheses to try to assess the possibility that abandonment of the Democratic presidential ticket might have been motivated by other factors, and then include all of these variables in a multivariate equation in which it is possible to control for these alternatives.

What Else Could Explain These Defections?

The Clinton campaign heavily emphasized gender-related issues in an attempt to mobilize female voters. Could this have alienated men to the extent that they abandoned their 2012 support for the Democratic presidential candidate? Our data provide no support for such a claim: an identical 23 percent of both male and female Obama voters defected from the Democratic ticket.

Did the absence of an African-American presidential candidate from the top of the Democratic ticket lead black voters to waiver in their commitment to the Democratic candidate? No. Indeed, fewer African-American voters (20 percent) defected from Clinton than did white voters (23 percent).

Age is weakly related to defection from the Democratic ticket in 2016. While 20 percent of voters over age 35 abandoned the Democratic ticket in 2016, 30 percent of younger voters did so (Tau-b = .10).

Education is also weakly associated with defection. Among college-educated former Obama voters, just 16 percent did not vote for Clinton, while 27 percent of those with lower educational attainment defected (Tau-b = .12).

More overtly political variables had a stronger relationship with defection. Half of those who placed themselves near the conservative end of the ideological scale defected from the Democratic candidate, while only 14 percent of those on the left did so (Tau-b = .22).

Similarly, dissatisfaction with the condition of the economy also contributed to defection from the Democratic camp: just 12 percent of those who thought that the current economic situation was “good” or “very good” abandoned Hillary Clinton, while 39 percent who regarded the economy as “poor” or “very poor” defected from the Democratic ticket (Tau-b = .24).

Party identification had a more significant impact. Among former Obama voters who identified themselves as Democrats, 7 percent did not vote for Clinton. This rose to 40 percent among independents and to 68 percent among those who identified with the Republican, Libertarian or Green parties (Tau-b = .47).

Controlling for Alternative Explanations

How can we separate the unique impact of belief in fake news from the influence of these other potential alternative explanations? Fortunately, multiple regression analysis is a tool that allows us to compare the separate influence of various factors in attempting to account for defections from the Democratic ticket in 2016.

We first used this method to estimate the joint impact on the vote of all of these alternative explanatory factors. The first equation included gender, race, age, education, ideological orientation, dissatisfaction with the condition of the economy and party identification. All together, these variables “explained” only 38 percent of the likelihood of defection.

We then added the fake news variable (analyzing the vote those who believed none of these false stories vs. those believing one or more fake news item) to the equation to measure their impact. The fake news scale explained an additional 11 percent of the likelihood of Obama voters defecting after the influence of all of the other variables had been taken into consideration.

We then subjected this finding to an even more powerful test. Could defection simply have been the product of disliking Hillary Clinton or liking Donald Trump? If so, then the introduction of these like/dislike variables into the equation should make the link with fake news disappear.

Instead, while the independent impact of fake news is reduced by the inclusion of the Clinton and Trump favorability scores, the fake news variable retains a significant impact (explaining an additional 2.5% of the variance) and emerges as one of the four strongest

predictor variables (along with attitudes towards Clinton and Trump, and party identification). Former Obama voters who believed one or more of these fake news stories were 3.9 times more likely to defect from the Democratic ticket in 2016 than those who believed none of these false claims, after taking into account all of these other factors.

Finally, we explored the possibility that the impact of our fake news variable is the result of “false remembering”⁴—that is, that the respondent was not actually exposed to the fake news item, but agreed with the statements as a *post hoc* rationalization of a vote against Hillary Clinton that was motivated by something else that we are not capturing in our regression analysis. While we do not have a direct measure of exposure to these specific fake news items, we can separate out of the analysis those who could not have been exposed due to the fact that they “never” received campaign information through computers, cell phones, tablets, e-mail, social networking sites or applications (Facebook, Twitter, Instagram, WhatsApp, etc.). We reran the last two steps in our regression equation among individuals who did use these sources as a source of political information (77 percent of Obama voters), and found that the impact of fake news variables was strengthened. The percentage of explained variance increased to 2.6 percent with the inclusion of the fake news variable, and (as measured by the odds ratio) those who agreed with one or more of the fake news items were *4.5 times more likely* to have defected from Clinton than those who agreed with none of these three items (see Appendix).

We must reiterate that, given the inability to determine temporal order in a single-wave cross-sectional survey, we cannot prove that belief in fake news “caused” these former Obama voters to defect from the Democratic candidate in 2016. These data strongly suggest, however, that exposure to fake news did have a significant impact on voting decisions. What is not clear is if this influence was sufficient to have determined the outcome of this election. That determination would require a much larger survey sample (enabling us to undertake a state-by-state analysis) and an analytical scope that would have included its impact on the behavior of independents and new voters. But since Clinton lost the Presidency by 77,744 votes cast in the key battleground states of Pennsylvania, Michigan and Wisconsin—just 0.6 percent of the votes cast in those states—even a modest impact of fake news might have been decisive.

Methodological Appendix

The data for this article came from an Internet survey conducted for the authors by YouGov, a prominent Internet survey organization, from December 5, 2016 through January 6, 2017. Initial contacts were matched down to a final sample of 1600 respondents on the basis of gender, age, race, education, ideology, and political interest. The sampling frame was constructed by stratified sampling from the full 2010 American Community Survey (ACS) sample with selection within strata by weighted sampling with replacements (using the person weights on the public use file). Data on voter registration status and turnout were matched to this frame using the November 2010 Current Population Survey. Data on interest in politics and party identification were then matched to this frame from the 2007 Pew Religious Life Survey. The matched cases were weighted to the sampling frame using propensity scores. The matched cases and the frame were combined and a logistic regression was estimated for inclusion in the frame. The propensity score function included age, gender, race/ethnicity, years of education, political

⁴ Neil Irwin, “Fake News? Welcome to ‘False Remembering’,” *The New York Times*, January 26, 2017.

interest, ideology, and census region. The propensity scores were grouped into deciles of the estimated propensity score in the frame and post-stratified according to these deciles. This well-established propensity-score-matching technique yielded a nationally representative sample.

Most of the data presented in this article are frequencies that are self-explanatory (e.g., the percentage of former Obama voters who voted for Hillary Clinton). Tau-b is a commonly used measure of the strength of the association between two variables. The final five paragraphs present the results of stepwise multivariate regression analyses of these data in which the dependent variable is defection by former Obama voters to Donald Trump, to another party, or to abstention—and the fake-news measure is entered as the final step. The full model of the final step in this analysis is presented below. The strength of the relationship between each independent variable and defection from Clinton after controlling for the impact of the other variables in the equation is measured by the t, Odds Ratio and Wald statistics. S.E. is the standard error of the b coefficient.

Binary Logit Regression Analysis of the Impact of Fake News on Defection from Clinton⁵

	b	(s.e.)	t	Wald	Odds Ratio
Female	-.04	(.46)	.1	0	1.0
White	.71	(.56)	1.3	1.6	.5
Over Age 35	.01	(.24)	0	0	1.0
College Educated	-.42	(.51)	.8	.7	.7
Economy: Poor/Very	.58	(.68)	.8	.7	1.8
Economy: Average	.50	(.66)	.8	.6	1.6
Left-right: Right	.79	(.93)	.8	.7	2.2
Left-right; Center	-.72	(.52)	1.4	1.9	.5
Party ID: None	1.51	(.56)**	2.7	7.3	4.5
Party ID: Republican	2.78	(.83)**	3.4	11.3	16.0
Trump: Neutral	-1.93	(.96)*	2.0	4.1	.1
Trump: Unfavorable	-2.67	(.81)**	3.3	10.8	.1
Clinton: Neutral	1.09	(.58)	1.9	3.5	3.0
Clinton: Unfavorable	2.05	(.64)**	3.2	10.3	7.8
Believes Fake News	1.51	(.48)**	3.1	9.8	4.5

Nagelkerke R² = .684

* Sig. @ .05 ** Sig @ 0.01

⁵ The dependent variable in this analysis is vote (by former Obama supporters who used the internet or social media as an information source) for Hillary Clinton in 2016 or defection to Trump, another candidate, or abstention. In order to satisfy the assumptions underlying the regression analysis, all variables were dichotomized. The fake-news scale was dichotomized into those who believed none of the false news items vs. those who believed one, two or three. For other predictor variables in the model that had more than two categories, “dummy” variables were created for each category of substantive interest vs. all other categories, leaving one category out of the model to serve as the baseline. For example, the dummy variables for Party ID are independents vs. all others and Republicans versus all others, with Democrats as the base category.