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Relationship Between Populist Sentiment and Misperceptions in the 2016 Election for U.S. President

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ABSTRACT

Despite widespread recognition of the pervasiveness of populist messages during the 2016 presidential campaign, the populist beliefs of voters are understudied, and what role these attitudes may play in accepting false assertions is unknown. Survey results post-election and one year later indicate that two aspects of populism that characterized voting for Donald Trump—mistrust of experts and national affiliation—persisted one year into the Trump presidency. These attitudes were associated with being misaligned with experts on the accuracy of various campaign and immediate post-election statements, as was reliance on a smaller number of news sources. Populist attitudes were a predictor of candidate vote in the 2016 election, even beyond the white, rural, lower education demographics. A contrasting finding between this study's results and a prior study's pre-election populism results suggests that populist feelings of voter disenfranchisement and disempowerment may change when a populist candidate is elected.

Relationship Between Populist Sentiment and False Beliefs in the 2016 Election for U.S. President

The results of the 2016 presidential election brought attention to the role of populism as well as belief in claims not supported by usual standards of evidence. Donald Trump became a viable candidate for the Republican presidential nomination on the strength of grass roots enthusiasm on the right for his populist-themed campaign where his speeches frequently included assertions disputed by experts (Altman 2016). Criticism of such statements from established candidates on the left and right, and fact-checking in the media, may have served to strengthen Trump's authenticity as outsider (Graham 2017) among certain groups of voters who perceived him as speaking for those who had no voice. Whether belief in disputed statements is more generally associated with populist attitudes, however, is unknown. Oliver and Rahn (2016) established the populist nature of Trump's rhetoric via semantic analysis and linked populist attitudes among voters in the 2016 election to support for Donald Trump's candidacy. However, we know less about potential effects of a successful populist candidacy on voters' subsequent attitudes. In this article, we contribute to the extant literature through reporting on populist attitudes measured over time in the days and months following the election, and investigating links between populist attitudes, preferred news sources, and beliefs in statements made by campaigns.

Populism

Support for populist candidates increases following an economic crisis, a pattern observed worldwide (Funke, Schularick, and Trebesch 2016). This pattern held in 2016, with higher than anticipated levels of support for populist candidates in both major U.S. political parties (Oliver and Rahn 2016). Populist rhetoric is characterized by placing blame on political

and economic elites, while appealing to the common wisdom of ordinary citizens, often through use of a small number of repetitive themes (Oliver and Rahn 2016).

On the left, presidential candidate Bernie Sanders challenged the ultimate Democratic party nominee Hillary Clinton with a campaign based largely on anti-elitist themes. Donald Trump won the Republican party nomination and ultimately the presidential election using rhetoric that resonates with discontented and disconnected voters.

Both Sanders and Trump may be characterized as populists based on their rhetoric (Aslanidis 2018) which employed themes of clear and angry demarcations of distrust between common people and the political elite (Bos, van der Brug, and de Vreese 2011). However, populism of the left tends to be anti-establishment, aligned against big business and the concentration of wealth in the hands of the few (Judis 2016) whileopulism of the right tends to have an authoritarian element, offering a leader who can solve all problems (Rohac, Kennedy, and Singh, May 10, 2018). Right-wing populists in particular defend the nation's identity and culture (Bos et al. 2011), while stoking feelings of resentment and displacement, likened to people's seeming to be "strangers in their own land" (Hochschild 2016). By extension these feelings include anger toward disadvantaged groups—racial minorities, immigrants, and non-working poor—who are viewed as undeserving of government assistance (Judis 2016). Hochschild described these disadvantaged groups as creating resentment through metaphorically cutting into line ahead of hard-working regular people.

Measuring populist attitudes requires defining them. Many researchers have focused on what constitutes populist rhetoric, using content analysis to analyze political speech (e.g. Hawkins 2009, Jagers and Walgrave 2007, Pauwels 2011, Rooduijn and Pauwels 2011). Others have created metrics to measure populist attitudes among the public, devising measures that may

be administered via surveys. For example, Akkerman, Mudde, and Zaslove's (2014) scale measured three distinct dimensions of populist attitudes which correlated with preference for populist parties in a sample of Dutch voters. In the United States, Oliver and Rahn's (2016) measure of populism, administered to a national survey sample, also loaded on three distinct dimensions of populism—(a) anti-elitism, which focuses on the sense of political marginalization or disenfranchisement and, relatedly, the feeling that a small group of wealthy and powerful people are in control of what government does; (b) mistrust of experts, which captures the idea that it makes more sense to put trust in ordinary people than in science when making important decisions; and (c) national affiliation, which represents the extent to which the respondent identifies with being American. Those supporting Donald Trump scored high on all three populism dimensions, while supporters of Ben Carson were high on mistrust of experts and national affiliation. Supporters of Ted Cruz were high on mistrust of experts, and Marco Rubio supporters were high on national affiliation, while both of these candidates' supporters were low on anti-elitism. In contrast, supporters of Bernie Sanders were high on anti-elitism, and lowest of all groups on the other two dimensions of populism. Supporters of Hillary Clinton were below average on both anti-elitism and mistrust of experts. The authors concluded that "the year 2016 is indeed the year of the populist, and Donald Trump is its apotheosis."(Oliver and Rahn 2016, 1).

Misperceptions

The 2016 election was also notable for the role of claims that were contradicted by accepted standards of evidence, in part promulgated through social media (Allcott and Gentzkow 2017), but also through statements made by candidates themselves. Flynn, Nyhan, and Reifler (2017) recommend the term "misperceptions" to describe belief in false and unsupported claims.

Several interrelated psychological processes describe how misperceptions arise and

persist, including people's tendency to trust and to seek out information that confirms their prior views (motivated reasoning; Kahan 2016) and people's tendency to have confidence in information to which they had previously been exposed (sheer repetition effect; Zajonc 1968). For example, Pennycook, Cannon, and Rand (2018) have experimentally demonstrated that repetition increases perceived accuracy of false news headlines they found on social media. Others have shown that even correcting misperceptions associated with support for a candidate may not affect that support (Nyhan, Porter, Reifler, and Wood 2017). One of the problems in debunking misinformation is that the act of debunking unavoidably increases people's exposure to the information, making the information sound more familiar, and paradoxically may increase belief (Schwarz, Sanna, Skurnik, and Yoon 2007).

Suspicion of authority and mistrusting government—aspects of populism—may predispose to endorsing misinformation consistent with one's pre-existing views. Enbers and Smallpage (2018) found that presenting official information countering partisan conspiracy theories increased conspiracy beliefs among Republicans, especially when the information was party-consistent. Debunking may also generalize to skepticism about all news (Pennycook et al. 2018). An exacerbating factor is the extent to which individuals can and do exist within information "silos" in which they only interact with media and people who confirm their worldview, and thus reduce exposure to information that differs from their established opinions (Flynn et al. 2017). No studies that we are aware of have directly investigated the relationships between populist beliefs and misinformation provided in the course of an election campaign.

Present Study

We were interested in studying the role that populist beliefs may have played in the 2016 U.S. presidential election and in the association between populist attitudes and belief in various

claims made during the campaign. For this reason, we chose to use a slightly modified version of Oliver and Rahn's (2016) measure, which had mapped well to populist candidates in their pre-election survey.

As described in more detail later, we examined these phenomena in a series of surveys, using the nationally representative Understanding America Study (UAS). The first survey was administered directly after the U.S. presidential election in November 2016, to collect self-reported vote in the election. We administered populism items in February 2017 and again one year later. The February 2017 survey included items measuring respondents' attitudes toward populist themes, and a set of questions assessing their agreement with claims made by the campaigns. We developed a set of statements to measure respondents' endorsement of misperceptions as well as rejection of assertions generally supported by evidence. We used these metrics to evaluate how misperceptions related to populist views, sociodemographic factors, and preferred sources of news. Specifically we tested two hypotheses:

Hypothesis 1: Trump voters should score higher on the populism subscales and more often disagree with expert opinion compared to Clinton voters.

Hypothesis 2: Preference for media sources that promulgate misperceptions should be associated with misperceptions and with mistrust of experts.

Methods

Participants

Participants in the study are members of the UAS – a probability-based internet panel of adult U.S. residents. The UAS is an ongoing national research panel that started in 2014. Panel members were recruited in waves, from Marketing Systems Group frames of all household addresses in the United States. To ensure full coverage of the U.S. population, we provide internet-connected tablets to individuals who were not already online. The panel thus includes

U.S. residents who have cell phones, landlines, or no phone at all. UAS recruitment procedures, weighting procedures, detailed response rates for all recruitment waves, survey instruments, and microdata are available online at https:\\uasdata.usc.edu.

Sample

This study is based on a nationally representative sample of 3,746 eligible voters. Included are UAS panel members recruited using probability-based methods, who are U.S. citizens, and who completed relevant measures in three UAS surveys of U.S. adult residents. The surveys were conducted by the USC Center for Economic and Social Research in collaboration with the USC Center for the Political Future, with the approval of the USC IRB. The UAS is a member of the American Association for Public Opinion research (AAPOR) transparency initiative.

The three national surveys were: (1) UAS71, 5,703 respondents, fielded November to December, 2016, with a response rate of 78.1%. UAS 71 provided the initial self-reported measure of 2016 presidential vote to this study. Missing data in the vote metric were updated in the two subsequent surveys. (2) UAS88 (https://uasdata.usc.edu/survey/UAS+88), 4785 respondents, fielded February to April 2017, with a response rate of 77.3%. (3) UAS117 (https://uasdata.usc.edu/survey/UAS+117), 4,279 respondents fielded December 2017 to February 2018 with a response rate of 76.9%. Response rates were calculated as simple proportions of participants to invited panel members; AAPOR response rate calculations are not applicable to surveys conducted on existing research panels.

A total of 4,095 respondents completed surveys 2 and 3. One hundred fifty-two of these respondents did not meet eligibility criteria and were excluded: 61 non-citizens and 105 respondents who had been separately recruited for special projects. These exclusions resulted in

a sample of 3,853 eligible participants. To create our final analytic file, we excluded 107 respondents (2.8%) who were missing items in the populism, facts, news and 2016 presidential vote measures, resulting in the final analytic sample of 3,746 respondents.

The final sample was adjusted, in a two-stage process, to account for design effect and differential non-response; benchmarked against demographic characteristics (race, gender, age, household size, education, income, U.S. regions) from the U.S. Census Current Population Survey (Center for Economic and Social Research, 2017, September 1). Considering these effects, overall results have a margin of error of plus or minus 2 percentage points at the 98% confidence level.

A demographic comparison of the full eligible sample and the final analytic sample is provided in Appendix A. The 107 eligible respondents excluded for non-response were significantly younger, less educated and more likely not to have voted in the 2016 presidential election compared to the remaining sample. However, demographic differences between the full sample and the analytic sample were not significant. Table 1 presents the demographic characteristics of the analytic sample.

Measures

Appendix B shows the wording of all items from each survey. Demographic information for all UAS respondents, including gender, race, age, education, and household income, is updated quarterly.

Vote in the 2016 Election. We measured 2016 presidential vote with a single question asked immediately after the election (November to December 2016). Order of candidate names was randomized. Missing data from this measure were updated by participants during subsequent surveys.

Populism. Populism was measured with a 9-item subset of the scale developed by Oliver and Rahn (2016), shown in Table 2, administered with item order randomized across participants. The scale was included in both surveys. Choice of items was guided by Oliver and Rahn's factor loadings. Using data collected in UAS88 and UAS117 surveys, we conducted an exploratory factor analysis, with varimax rotation, in order to maximize the independence of the resulting factors. Results recovered three factors that corresponded to the Oliver and Rahn dimensions at both the first and second administrations of the items. We standardized each item based on mean and standard deviation at first administration, then averaged items to create three subscale scores. Higher scores indicate greater endorsement of populist views.

Misperceptions. In the early 2017 survey, respondents rated as true, probably true, probably false, or false a list of eight statements reflecting some of the claims made by campaigns during or immediately after the election, then followed up with those who rated a statement as false to assess the direction of disagreement, i.e., whether the number seemed too low or too high. We included statements both supported or refuted by governmental sources or peer-reviewed scientific reports, i.e., statements that had been attacked as false news and claims contradicted by evidence. We looked at the statements individually and created a Statements score summarizing level of disagreement with expert assessment of the statements' veracity, with each disagreement with expert assessment contributing 1 point. All items were positively correlated, and Cronbach's alpha for the combined Statements score was .51. The statements with percent disagreeing with expert judgment are shown in Figure 1 for all respondents and for Trump and Clinton voters. In the survey, the order of statements was randomized across participants. Appendix B lists each statement and supporting sources for the accuracy or falsity of each claim.

Media preferences. In the early 2017 survey, individuals were given a randomized list of media sources and asked to indicate how often they used each source—never, occasionally, often, always—or whether they had never heard of the source. This item documented exposure to information. Options included Fox News; MSNBC; CNN; public television; satirical or late night television shows; National Public Radio; talk radio; national newspapers (e.g., New York Times, Washington Post, Wall Street Journal, USA Today); regional, local or hometown newspapers; and online sources including Buzzfeed, Facebook, Twitter, Breitbart, Infowars, Reddit. Number of media sources was the sum of sources rated "often" or "always."

Analysis

We applied logistic regression with voting for Trump versus Clinton as the dependent variable, with demographic factors, populism subscales, misperception score, and number of media sources as predictors of self-reported voting. In these regression models, the demographic factors are dummy coded either 0 or 1 so that the resulting odds ratio (OR) is intuitively interpretable. The intercept reflects the expected vote if all independent variables were equal to zero, with the estimates showing the effect of each factor's having a value of 1. The OR indicates effect size, specifically, the increased odds of voting for Trump associated with having a value of 1 on the predictor. An OR less than 1.00 indicates that the demographic was more associated with voting for Clinton. If the 95% confidence interval (CI) includes 1.0, then the factor is not significantly associated with voting for one candidate versus the other. For hypothesis 1, a series of models tests whether populism, endorsement of misperceptions, and number of media sources contribute significantly beyond the demographic factors. The difference between the -2 Log Likelihood for models being compared is distributed as a Chi Square with degrees of freedom (df) equal to the difference in df for the two models. We further compared Trump and Clinton

voters on populism scores directly after the election and a year later using repeated measures analysis of variance. To test hypothesis 2, we examined relationships between populism and misperceptions, and compared frequent to occasional viewers of the sources of news most often used by respondents.

Results

Demographic Differences between Trump and Clinton Voters

Those who reported voting for Donald Trump and those who reported voting for Hillary Clinton in the 2016 presidential election differed significantly from one another on each demographic factor (Table 1), with Trump voters more likely than Clinton voters to be male, white, middle-aged, non-poor, not college educated, and from rural or mixed urban/rural areas. Results were similar using dummy coded variables, although in a logistic repression simultaneously including all demographic factors, age did not contribute significantly (Model 1 in Table 3).

Populism Scores

Mean populism scores are shown in Figure 2. We conducted repeated measures analyses of variance to determine how self-reported Trump and Clinton voters differed on the three populism subscales, using Bonferroni correction for multiple comparisons. For anti-elitism, there were significant main effects for candidate, $F(1,2971) = 46.93$, $p < .0001$, and time, $F(1,2971) = 16.41$, $p < .0001$, and a significant Candidate X Time interaction, $F(1,2971) = 18.76$, $p < .0001$. Directly after the election, those who reported having voted for Clinton were significantly more likely than were Trump voters to endorse anti-elitism sentiments. The interaction reflected an increase in Trump voters' anti-elitism over time, while remaining significantly lower than Clinton voters both directly after the election and one year later. This post-election finding runs

counter to Oliver and Rahn's (2016) pre-election results, where Trump supporters scored higher than Clinton voters on anti-elitism.

For mistrust of experts, there were significant main effects for candidate, $F(1,2971) = 338.16$, $p < .0001$, and time, $F(1,2971) = 17.29$, $p < .0001$, and a significant Candidate X Time interaction, $F(1,2971) = 5.50$, $p < .05$. Trump voters were strikingly higher than Clinton voters on mistrust of experts, at both times of measurement. The interaction reflects a small further decrease among Clinton voters over time in their mistrust of experts.

For nationalism, there was a significant main effect for candidate, $F(1,2971) = 222.13$, $p < .0001$ with those who reported voting for Trump scoring higher than Clinton voters at both times, but no effects for time and no interaction.

Further analyses compared to those who voted for third party candidates or who did not vote at all. All of these groups, especially Jill Stein voters, were high on anti-elitism and low on nationalism. Stein voters were especially low on mistrust of experts, while Johnson voters and non-voters were between Trump and Clinton voters in mistrust of experts.

Finally we tested, with logistic regression, whether the combined populism subscales measured in 2016 contributed significantly to predicting the outcome of the election beyond the demographic predictors. We evaluated this issue by considering the difference in model fit (using negative two times the log-likelihood) between a model with only demographic predictors and a model adding the populism subscales, with the difference in model fit evaluated by chi square with degrees of freedom representing the number of additional predictors. Each individual populism subscale contributed significantly (chi square difference ranged from 64.5 to 200.3, with df = 1), as did the combination of the three subscales. In the combined model (Model 2 in Table 3), all demographic factors except age remained significant predictors, while anti-elitism

significantly predicted having voted for Clinton, and mistrust of experts and national affiliation significantly predicted having voted for Trump. Thus, for hypothesis 1, some but not all dimensions of the populism measure were associated with voting for the presumptively more populist candidate.

Misperceptions

Percentages disagreeing with consensus opinion on each item are shown in Figure 1 for the total sample and for self-reported Trump and Clinton voters. Using independent groups t-tests, with Bonferroni correction, there was a significant difference between self-reported Trump and Clinton voters on seven of the eight misperception items, $t(2971)$ ranged from 5.97 to 51.79. Trump voters were in less agreement with consensus opinion on all seven items. Neither Trump nor Clinton voters disagreed with consensus opinion regarding the number of unauthorized immigrants in the U.S. The mean statements score, that is, number of statements on which the respondent disagreed with consensus opinion, was also significantly different for the two candidates, $t(2971) = 36.91$, $p < .0001$. Trump voters disagreed with consensus opinion on 4.5 statements (SD = 1.3) while Clinton voters disagreed with consensus opinion on 2.5 statements (SD = 1.6). The most striking differences were on whether there was Russian interference in the election and job creation under the Obama administration. While Clinton voters generally were in greater agreement with expert opinion, at the same time, one-third of self-reported Clinton voters agreed that two million fraudulent votes had been cast in the 2016 election.

Overall, greater endorsement of misperceptions was associated with less than college education (standardized beta = -0.28, $p < .0001$) and being white (standardized beta = .09, $p < .0001$), rural (standardized beta = .08, $p < .0001$), and older (standardized beta = .05, $p < .001$), but was not associated with gender or with income. As specified by hypothesis 1, logistic

regression results indicated that more misperceptions significantly predicted voting for Donald Trump (Table 3, Model 3). The various demographic factors moderated endorsement of misperceptions to a greater degree for Clinton than for Trump voters; e.g., for Clinton voters, having a college education was strongly associated with lower endorsement of misperceptions, but less so for Trump voters.

Preferred Source of News

Self-reported Trump voters indicated relying on an average of 2.6 (SD = 2.0) sources for their news, while self-reported Clinton voters indicated relying on an average of 3.9 (SD=2.9) sources for their news. This difference is statistically significant, $t(2971) = -15.08$, $p<.0001$. Among Trump voters, 52% reported often or always using Fox News. The next two most used sources were public television (36%) and local or regional newspapers (34%). For Clinton voters, the top sources were public television (53%), local or regional newspapers (47%), CNN (47%), and national newspapers such as the New York Times (39%), followed by MSNBC (35%). Twitter, Breitbart, Buzzfeed, Reddit, and Infowars were cited as a source of information by very few overall and played little role for either candidate. Facebook was mentioned as a source by 27% of Trump and 33% of Clinton voters, and talk radio by 28% of Trump and 30% of Clinton voters.

Logistic regression results showed that the number of different news sources to which one was exposed significantly predicted the vote in the election beyond the demographic predictors (Table 3, Model 4), with more news sources associated with not voting for Trump.

Associations among Populism, Misperceptions, and News Sources

Hypothesis 2 specified that misperceptions should be associated with mistrust of experts and with preference for right-wing media. The statements score was significantly correlated with

both mistrust of experts (r = .37) and national affiliation (r = .24), but not with anti-elitism (r = -.01). This correlation was not the same across candidates, however. For Trump voters, only 1.6% of the variance in the statements score correlated .13 with mistrust of experts and .02 with nationalism; whereas, for Clinton voters, the statements score correlated .43 with mistrust of experts and .25 with nationalism.

Consistent with hypothesis 2, Fox News viewers scored higher on mistrust of experts, $t(3737)=-11.36$, $p<.0001$, and endorsement of misperceptions, $t(3737)=-21.33$, $p<.0001$, compared to those who viewed Fox News only occasionally or never. In contrast, public television viewers, CNN viewers, MSNBC viewers, readers of national newspapers, and readers of regional newspapers were all significantly lower on endorsement of misperceptions when compared to non-users of the respective source, $t(3737)$ ranged from 2.47 to 19.07. Users of these sources, except for PBS, were also lower on mistrust of experts compared to those who used the source occasionally or never.

Discussion

One of the challenges of studying the results of the 2016 presidential election has been to understand the point of view of voters who backed Donald Trump's unconventional candidacy. Here we have reported on one feature of the electorate, the extent to which voters resonated with Trump's invocation of populist themes of nationalism, mistrust of experts, and anti-elitism, including the relationship between populist attitudes and voter belief in statements made during and immediately after the campaign that are not supported by usual standards of evidence. The results more generally have implications for understanding how populist themes may contribute to susceptibility to political misinformation.

Similar to findings in a sample of pre-election voters (Oliver and Rahn 2016), our post-

election study indicated that those who voted for Trump in 2016 were significantly more likely than other voters to endorse items indicating mistrust of experts and strong national affiliation. However, our results departed from the prior findings along the dimension of anti-elitism. The previous study's pre-election Trump supporters were higher in all three dimensions, while in our study, Trump voters scored lowest on anti-elitism. Voters supporting third party candidates Jill Stein and Gary Johnson scored highest, with Clinton voters also significantly higher than Trump voters. This difference from the pre-election result may reflect an effect of Trump's upset win on his supporters, suggesting that the election outcome may have softened their sense of living in a system that is rigged against them. Indeed, when measured again one year later, the difference between Trump and Clinton voters continued. Future work might refine the measurement of anti-elitism to capture those who feel politically disenfranchised from those who feel disenfranchised from the American dream. Feeling that one's political views are not being heard may be different from feeling that there is no way to get ahead because the government is rigged against you.

Our findings indicate deep divisions in both perceptions and attitudes between Trump and Clinton voters. The populism measures contributed significantly to predicting the outcome of the election, beyond demographics, and also predicted misalignment with expert opinion on the veracity of campaign and immediate post-election statements. Clinton voters were significantly more likely than Trump voters to align with expert opinion on all but one of eight tested statements. The statements that divided Trump and Clinton voters most deeply regarded Russian attempts to influence the election, and whether or not nine million jobs were created between 2008 and 2016 (years immediately following the great recession, when Barack Obama served as president). However, misperceptions were not limited to one candidate's supporters. For example, while Trump voters were divided 50-50 on his claim that 2 million fraudulent votes

were cast in the election, one third of Clinton voters held the claim to be true. Expert consensus has determined this statement to be incorrect.

Perhaps not surprisingly, voters who tended to rate higher on the mistrust of experts subscale were also more likely to hold beliefs that were not in accord with expert opinion. However, this association was more marked for Clinton than for Trump voters, leading to a new research question about whether partisan motivations may be non-symmetric (Enders and Smallpage 2019), with conspiratorial beliefs or misinformation simply more endemic among Trump supporters.

Media likely contribute to purveying and supporting people's views; in our data, exposure to Fox News in particular was associated with greater mistrust of experts and with endorsement of more misperceptions. Fox News viewers were very likely to rely on Fox News with little or no reference to other sources, while those who relied on sources such as national newspapers and CNN averaged twice as many news referents.

Many of the tested misperceptions concern drivers of populism, emphasizing various threats including economic problems, crime, and illegal immigration. A recent study of more than 800 general elections in 20 advanced economies around the world found that, in general, voters tend to polarize and shift toward supporting populist candidates after a serious economic crisis (Funke et al. 2016). By the time the 2016 election was underway, the United States was well into a varied recovery that left many behind, particularly those in blue collar, low-income areas hit by loss of jobs to other countries and to automation. Consistent with this picture, the demographic profile of the Trump voter in our survey shows that the president's base tended to include males, whites, middle class earners but not those in poverty, those without higher education, and rural and suburban residents.

Indeed, Trump was not the only presidential candidate for the 2016 nomination for whom populist rhetoric resulted in levels of support that surprised pundits and more established candidates. Bernie Sanders very nearly upended Hillary Clinton's bid for the Democratic nomination from the left side of the political spectrum with his own brand of ordinary-people populism. Populism on the left and the right share elements, including a sense of an unfair, rigged system, but differ in other ways. In Oliver and Rahn's (2016) pre-election results, Sanders was the lowest of all candidates on mistrust of experts and on national affiliation, while Trump was the highest on both dimensions, while Sanders and Trump were the two candidates with the highest scores on anti-elitism.

There are limitations to these results including the fact that we did not administer a populism scale before the election, and must rely on results reported by Oliver and Rahn (2016). Our assessments may not sufficiently capture the importance of racial identity or anti-immigrant aspects of populism. Sides, Tesler, and Vavreck (2016), for example, describe racialization of public opinion as crucial to understanding the 2016 election. Also not captured by the populism items is the extent to which the country is viewed to be in a crisis that can only be solved by the populist candidate. In the reported results, we are unable to infer causal direction from observed associations. Nonetheless, we suggest an important relationship between populism and holding beliefs not supported by expert opinion. Moreover, our findings are suggestive that one element of populism – the aggrieved sense that the system is rigged against the individual and little can be done to affect the way that government runs – may be mutable, and may flip when a populist candidate is elected.

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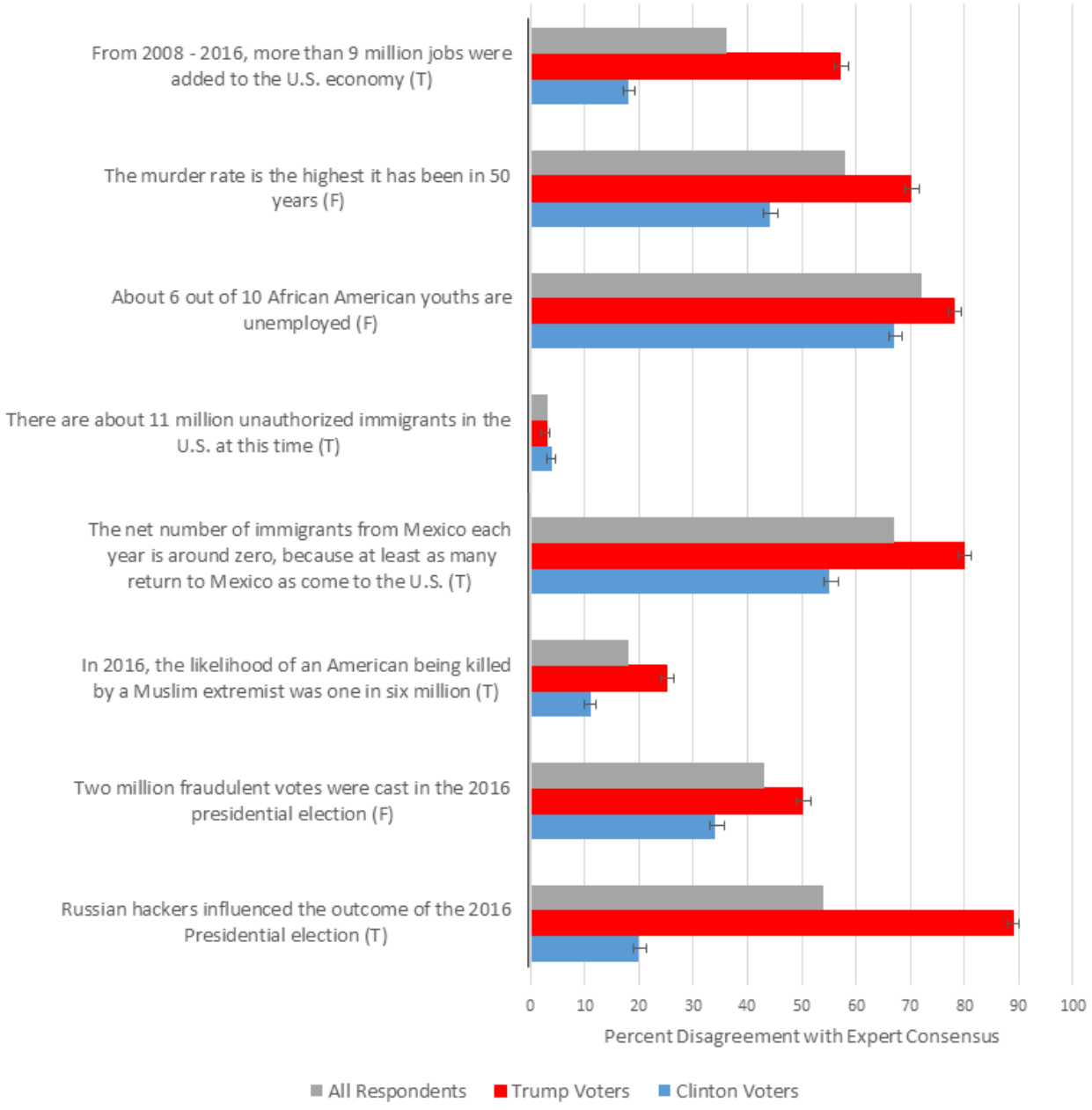
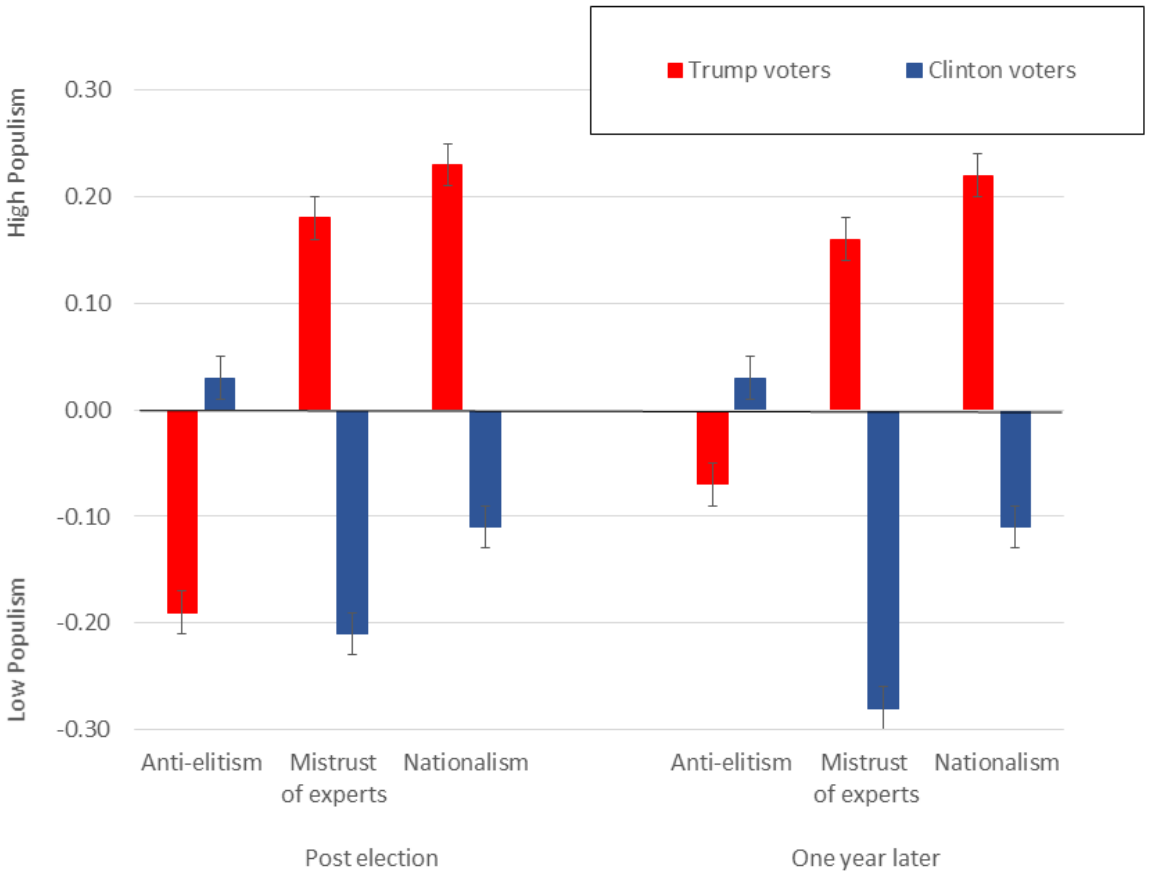
Figure 1. Percentage of Trump and Clinton Voters Who Disagreed with Expert Consensus on Statements Reflecting Campaign Claims (source: UAS 88)



Note: Consensus expert opinion indicated in parentheses after each statement.

Figure 2. Mean Scores on Populism Subscales by Candidate



Note: Populism scores based on standardizing to mean and standard deviation in 2017 survey

Table 1. Descriptive Statistics for Sample Demographics

Variable		Total sample: %	Trump voters: %	Clinton voters: %	
Gender	Female	52	45	61	****
	Male	48	55	39	
Race/ Ethnicity	Non Hispanic White	69	86	55	****
	Non Hispanic Black	12	1	24	
	Hispanic/Latinx	12	8	13	
	Non-Hispanic Other Race	7	4	8	
Age	Age 18-44	45	37	42	**
	Age 45-64	37	42	36	
	Age 65+	18	21	22	
Annual household Income	<$25K	20	13	20	****
	$25-49K	22	22	21	
	$50-74K	19	24	16	
	$75-100K	15	14	17	
	100k+	24	27	25	
Education	High School degree or less	38	43	29	****
	Some College (includes AA)	30	32	28	
	Bachelor's degree or higher	32	25	42	
Census Division	New England	4	4	5	****
	Mid Atlantic	14	14	15	
	East/North Central	16	18	14	
	West/North Central	6	8	4	
	South Atlantic	22	22	23	
	East South Central	6	8	6	
	West South Central	9	9	8	
	Mountain	7	7	6	
	Pacific	16	11	20	
Urban/rural	Rural	9	12	5	****
	Mixed	55	61	48	
	Urban	36	27	46	

Notes: Percentages based on weighted sample. New England = CT, ME, MA, NH, RI, VT; Middle Atlantic = NJ, NY, PA; East North Central = IL, IN, MI, OH, WI; West North Central = IA, KS, MN, MO, NE, ND, SD; South Atlantic = DE, DC, FL, GA, MD, NC, SC, VA, WV; East South Central = AL, KY, MI, TN; West South Central = AR, LA, OK, TX; Mountain = AZ, CO, ID, MT, NV, NM; Pacific = AK, CA, HI, OR, WA. For subsequent analyses, dummy variables were created for male, non-hispanic white, age 45+, income <$25K, college degree, and rural. Chi square results: **** p<.0001, ** p<.01

Table 2. Populism Items: Loadings from Principal Components Analysis

	2016			2017		
Item	Anti-elitism	Mistrust of experts	National affiliation	Anti-elitism	Mistrust of experts	National affiliation
People like me don't have much say in what government does	.73			.75		
The system is stacked against people like me	.72			.71		
It doesn't really matter who you vote for because the rich control both political parties	.77			.76		
I'd rather put my trust in the wisdom of ordinary people than the opinions of experts and intellectuals		.65			.73	
When it comes to really important questions, scientific facts don't help very much *		.67			.66	
Ordinary people can really use the help of experts to understand complicated things like science and health		.77			.76	
I generally trust the collective judgments of the American people even for complex political issues			.76			.75
I generally consider myself to be like most Americans			.78			.77
How important is being an American to who you are? *			.58			.55

Notes: Items from Oliver and Rahn (2016). Items 1-8 answered on 5-point Likert scale from Disagree strongly to Agree strongly. Item 9 answered on 7-point Likert scale from The most important to Not important at all. * item was reverse-scored.

Table 3. Logistic regression predicting vote for Trump versus Clinton by demographic factors, populism, misperceptions, and number of media sources

Variable	Model 1		Model 2		Model 3		Model 4		Model 5	
	B (SE B)	OR (95% CI)	B	OR (95% CI)	B	OR (95% CI)	B	OR (95% CI)	B	OR (95% CI)
Male	0.61 (0.08)****	1.84 (1.56, 2.17)	0.78 (0.09)****	2.19 (1.83, 2.61)	0.92 (0.10)****	2.51 (2.05, 3.07)	0.64 (.09)****	1.90 (1.60, 2.24)	1.12 (0.12)****	3.07 (2.43, 3.86)
Low income	-0.54 (0.12)****	0.58 (0.46, 0.73)	-0.67 (0.13)****	0.51 (0.40, 0.65)	-0.72 (0.14)****	0.49 (0.37, 0.64)	-0.52 (0.12)****	0.59 (0.47, 0.75)	-0.89 (0.16)****	0.41 (0.30, 0.56)
College	-1.12 (0.09)****	0.33 (0.27, 0.39)	-0.71 (0.10)****	0.49 (0.40, 0.60)	-0.46 (0.11)***	0.63 (0.50, 0.78)	-1.12 (0.09)****	0.32 (0.27, 0.39)	-0.37 (0.13)****	0.69 (0.51, 0.89)
White	1.65 (0.10)****	5.25 (4.32, 6.38)	1.95 (0.11)****	7.01 (5.65, 8.71)	1.82 (0.12)****	6.18 (4.89, 7.81)	1.54 (0.10)****	4.71 (3.85, 5.75)	1.77 (0.14)****	5.88 (4.50, 7.67)
Rural	0.73 (0.15)****	2.07 (1.53, 2.79)	0.63 (0.16)***	1.86 (1.35, 2.57)	0.50 (0.18)**	1.64 (1.15, 2.34)	0.71 (0.16)****	2.04 (1.50, 2.77)	0.50 (0.20)*	1.65 (1.10, 2.45)
Age≥45	-0.05 (0.09)	0.95 (0.80, 1.13)	-0.31 (0.09)**	0.74 (0.61, 0.89)	-0.18 (0.10)	0.83 (0.68, 1.02)	-0.10 (0.09)	0.91 0.76, 01.8)	-0.52 (0.12)****	0.59 (0.47, 0.75)
Anti-elitism			-0.75 (.06)****	0.47 (0.42, 0.53)					-0.71 (0.08)****	0.49 (0.42, 0.57)
Mistrust of experts			1.09 (0.08)****	2.99 (2.58, 3.47)					0.69 (0.09)****	1.99 (1.66, 2.40)
National affiliation			0.46 (0.07)****	1.59 (1,39, 1,82)					0.30 (0.09)***	1.35 (1.14, 1.60)
Misperception score					0.94 (0.04)****	2.58 (2.39, 2.78)			0.93 (0.05)****	2.54 (2.33, 2.78)
Number of media sources							-0.21 (0.02)****	0.81 0.78, 0.84)	-0.19 (0.02)****	0.82 (0.79, 0.86)
Intercept	-1.12 (0.11)****		-1.44 (0.12)****		-4.77 (0.21)****		-0. 35 (0.13)**		-4.10 (0.23)****	
Wald Chi Square for model (df)	455.86 (6)****		627.52 (9)****		785.89 (7)****		519.28 (7)****		772.55 (11)****	
-2LogL	3395.14		2981.82		2473.43		3252.12		2223.56	
Δ Chi Square			413.32 (3)****		929.71 (1)****		143.02 (1)****		249.87 (4)****	

Notes: The dependent variable is self-reported vote coded so that 1=Trump and 0=Clinton. Predictors are named for the category that is coded 1. B are unstandardized regression coefficients. The odds ratio is the exponentiated B. Model comparison is the difference between the -2 Log Likelihoods of the models being compared, tested as a chi square with df = difference in number of parameters. Models 2, 3, and 4 are each compared to Model 1. Model 5 is compared with Model 3. **** $p < .0001$, ***$p < .001$, ** $p < .01$, * $p < .05$

Supplementary Data

Appendix A. Unweighted comparison of full sample to final sample and cases removed for item non-response

Appendix B. Wording of the 2017 and 2018 Panel Survey items

Appendix C. Sources for scoring accuracy of statements for measure of misperceptions

Supplementary Data

A. Unweighted comparison of full sample to final sample and cases removed for item non-response

	All Eligible N=3853	Analytic Sample N=3746	Cases Removed N=107	tests of significance for final sample vs. removed cases
Age categories				p<0.001
18 to 44	37%	37%	51%	
45 to 64	44%	44%	39%	
65 or older	19%	19%	9%	
Gender				p=0.67
Female	56%	56%	58%	
Male	44%	44%	42%	
Educational attainment				p<0.001
High School or less	25%	24%	36%	
Some college	38%	38%	40%	
Four year college degree or more	37%	38%	23%	
Race/Ethnicity				p=0.13
Non-Hispanic White	77%	78%	69%	
Non-Hispanic Black	8%	8%	14%	
Hispanic	7%	7%	7%	
Non-Hispanic Other race	8%	7%	9%	
U.S. Census Division				p=0.17
New England	3%	3%	3%	
Mid Atlantic	12%	12%	10%	
East North Central	20%	20%	19%	
West North Central	11%	11%	9%	
South Atlantic	17%	17%	21%	
East South Central	7%	7%	6%	
West South Central	10%	9%	11%	
Mountain	7%	7%	7%	
Paciific	14%	13%	15%	
Urbanicity from Zip Code				p=0.17
rural	30%	30%	35%	
mixed	45%	46%	36%	
urban	25%	24%	29%	
Household income, 5 categories				p<0.001
<$25K	22%	21%	39%	
$25-49K	23%	23%	24%	
$50-74K	20%	20%	13%	
$75-100K	14%	14%	11%	
100k+	22%	22%	12%	

B. Text of Questions asked in UAS 88 and UAS 117

9 –item version of 14-item Oliver and Rahn populism scale
Please indicate the extent to which you agree or disagree with each of the following statements*

	Disagree strongly	Disagree somewhat	Neither Agree nor disagree	Agree strongly	Agree somewhat
AE1. People like me don't have much say in what government does					
AE2. The system is stacked against people like me					
AE3. It doesn't really matter who you vote for because the rich control both political parties					
ME1. I'd rather put my trust in the wisdom of ordinary people than the opinions of experts and intellectuals					
ME2. When it comes to really important questions, scientific facts don't help very much					
ME3. Ordinary people can really use the help of experts to understand complicated things like science and health					
NA1. I generally trust the collective judgment of the American people, even for complex political issues					
NA2. I generally consider myself to be like most other Americans					

NA3. (item in population scale) How important is being an American to who you are?*

1. The most important
2. Extremely important
3. Very important
4. Important
5. Somewhat important
6. Not very important
7. Not important at all

* Questions asked in UAS 88 and 117. All others asked only in UAS 88.

Randomized order of sources (Summary of questions, each was asked as a separate question)

For each of the following public sources of news or information, please indicate how often you use that source. If you never use that source, or have not heard of it, you can tell us that, too.

	1. Never	2. Occasionally	3. Often	4. Always	5.Haven't heard of it
Fox News					
MSNBC					
CNN					
National newspapers (e.g. New York Times, Washington Post, Wall Street Journal USA Today)					
Regional, local or hometown newspapers					
National Public Radio (NPR)					
Public television					
Buzzfeed					
Facebook					
Twitter					
Breitbart					
Infowars					
Reddit					
Talk radio / talk shows					
Satirical or late night television shows					

Randomized order of statements

For each of the following statements, please indicate whether the statement is true or false. If you are not sure, just give your best guess. If you think a statement is false, please say if the number seems too low, or too high.

	A. If Definitely or probably false, ask too high/too low		→		B. If definitely or probably false, was that number	
	1. Definitely false	2. Probably false	3. Probably True	4. Definitely True	1. Too high	2. Too Low
From 2008 to 2016, more than 9 million jobs were added to the US economy						
The murder rate is the highest it has been in 50 years						
About six out of ten African American youths are unemployed						
There are about 11 million unauthorized immigrants in the U.S. at						

this time						
The net number of immigrants from Mexico each year is around zero, because as least as many return to Mexico as come to the U.S.						
In 2016, the likelihood of an American being killed by a Muslim extremist was one in six million						
Two million fraudulent votes were cast in the 2016 presidential election						
Russian hackers influenced the outcome of the 2016 presidential election						

Existing Post-election Vote asked in UAS 71 (11/8/2016 - 12/19/2016) with missing data updates from panelists provided in UAS 88 and UAS 117
Ask if voted in the election . *Randomized order of answer values 1-4*

In the election for U.S. President did you vote for:

1. Donald Trump
2. Hillary Clinton
3. Gary Johnson
4. Jill Stein
5. Some other candidate [write in name]
6. Did not vote for any presidential candidate

C. Sources for Statements used to measure Misperceptions

a) U.S. Bureau of Labor Statistics, All Employees: Total Nonfarm Payrolls [PAYEMS], retrieved from FRED, Federal Reserve Bank of St. Louis; https://fred.stlouisfed.org/series/PAYEMS, June 23, 2017.
b) https://fivethirtyeight.com/features/u-s-cities-experienced-another-big-rise-in-murder-in-2016/, which aggregates FBI reports through 2013 https://ucr.fbi.gov/crime-in-the-u.s/2013/crime-in-the-u.s.-2013/violent-crime/murder-topic-page/murdermain_final then adding 2014 and 2015 https://ucr.fbi.gov/crime-in-the-u.s/2015/crime-in-the-u.s.-2015/offenses-known-to-law-enforcement/violent-crime/violentcrimemain_final and the first half of 2016 https://ucr.fbi.gov/about-us/cjis/ucr/crime-in-the-u.s/2016/preliminary-semiannual-uniform-crime-report-januaryjune-2016
c) Bureau of Labor Statistics, U.S. Department of Labor, *The Economics Daily,* Unemployment rate and employment-population ratio vary by race and ethnicity on the Internet at https://www.bls.gov/opub/ted/2017/unemployment-rate-and-employment-population-ratio-vary-by-race-and-ethnicity.htm (visited *June 23, 2017).*
d) http://www.pewresearch.org/fact-tank/2017/04/27/5-facts-about-illegal-immigration-in-the-u-s/
e) http://www.pewhispanic.org/2015/11/19/more-mexicans-leaving-than-coming-to-the-u-s/
f) Triangle Center on Terrorism and Homeland Security, Charles Kurzman, Muslim-American Involvement with Violent Extremism, 2016, downloaded from http://kurzman.unc.edu/muslim-american-terrorism/ (June 23, 2017).
g) https://www.dartmouth.edu/~voterfraud/ . See also https://fivethirtyeight.com/features/trump-noncitizen-voters/ which discusses various academic studies
h) "Background to 'Assessing Russian Activities in Recent US Elections': The Analytic Process and Cyber Incident Attribution". *Office of the Director of National Intelligence and National Intelligence Council. January 6, 2016. p. 11.* Retrieved January 8, 2017 – *via* The New York Times. *[We assess with high confidence that Russian President Vladimir Putin ordered an influence campaign in 2016 aimed at the US presidential election, the consistent goals of which were to undermine public faith in the US democratic process, denigrate Secretary Clinton, and harm her electability and potential presidency. We further assess Putin and the Russian Government developed a clear preference for President-elect Trump.]*